Environmental *Factishes*, Variation, and Emergent Ontologies among the Matsigenka of the Peruvian Amazon

By

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Dissertation

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Anthropology

January 31, 2019

Nashville, Tennessee

Approved:

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ACKNOWLEDGEMENTS

My deepest gratitude is for the members of the Matsigenka Native Community of Tayakome, for generously welcoming my husband and me, allowing a couple of foreigners like us to participate in their lives, and sharing their stories, experiences, and numerous good laughs. I am grateful for their patience during this work, and for their kindness, humor and friendship.

My committee members provided me with constant support and invaluable advice, making time to meet with me during my sporadic visits to Nashville during the last years of dissertation writing. Thank you Beth Conklin, Tom Dillehay, and Doug Medin. I am particularly indebted to my adviser Norbert Ross, for his continuous guidance, insightful criticism, and endless support during all stages of my doctoral studies. His incisive questioning of established theory has challenged me to become a better researcher and scholar. I thank him for his mentorship and friendship.

Field research for this dissertation was made possible by the generous support of the Wenner-Gren Foundation for Anthropological Research (Grant No. 8577), the Robert Lemelson Foundation and the Society for Psychological Anthropology, the Center for Latin American Studies and the College of Arts and Sciences at Vanderbilt University. Funding from the P.E.O. International Peace Scholarship Fund was also essential for my graduate formation at Vanderbilt University.

The support of many individuals in Peru made this research possible. The collaboration of the Jefatura of Manu National Park has been invaluable for the realization of this investigation, in particular, the constant support of John Florez and Nelson Anaya, and the hospitality, camaraderie, and valuable work of the numerous park guards posted at the Control Posts of Limonal and Pakitsa during my quick visits. I am grateful to Cecilio Huamantupa and his family for logistic and technical support in Manu, and for making us

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feel that we have a family in Atalaya and Pilcopata. The personnel of the Cocha Cashu Biological Station have been constant field companions since my first visits to Manu. In particular, I thank Verónica Chavez, César Flores, Roxana Arauco, Fortunato Rayan, and Juan Capeshi for their friendship and assistance in the field. I also thank Oscar Espinosa of the Pontificia Universidad Católica del Perú, whose support and advice have been instrumental for this research. Nancy Santullo and Caleb Matos of Casa de Los Niños Indígenas and Rainforest Flow provided invaluable technical support and companionship in the field. I am also grateful to Patricia Alvarez and Cecilia Carrasco for their friendship and logistical assistance.

After returning from field work, I was incredibly fortunate to be hosted and welcomed in several different academic institutions that provided me with the necessary facilities and resources to write this dissertation. My sincere thanks go to Richard McElreath and Christyann Darwent of the University of California, Davis; Andrea Wiley, Jeanne Sept, and Eduardo Brondizio of Indiana University; and Richard McElreath (again) at the Max Planck Institute for Evolutionary Anthropology. I am especially grateful to Richard McElreath and Eduardo Brondizio, who welcomed me into their respective lab groups as if I were another student member, and generously made time to meet and discuss different aspects of my research, providing invaluable advice. I would also like to thank all the wonderful people that I met and reencountered during this time, enriching not only my academic experience but also life in general through their friendship and generosity. Thank you Cody Ross, Zoila Mendoza, Chuck Walker, Lucia Guerra, Daniel Manrique, Anne Kandler, Silke Atmaca, and the research and administrative staff and doctoral students at the Max Planck Institute for Evolutionary Anthropology.

During these years, I have been lucky to have the company and friendship of fellow graduate students, with whom I shared the joys and frustrations of graduate student life.

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Thank you Marlon Escamilla, Werner Hertzog, Tatiana Paz, Carmelina Espantzay, Gabriela Oré, Carla Hernández, Catalina Fernandez, Rodrigo Chocano, Paulo Massoca, Andressa Manssur, Raul Arzua, Ana Lima, Jennifer Cullin, Carmen Cortez, Carmen Valdivia, David Tenorio, Alejandro Rossi, Cinthya Ammerman, Ana Varela, and Tania Lizarazo for intellectual and emotional support, stimulating discussions, writing dates, and fun times.

The long-distance company of friends who were always there for me along the way has also been invaluable for me. Thank you Pachi, Charlotte, Edgardo, Catherine, Carolina, Luis, and Nadia.

I especially want to thank to my undergraduate adviser, Maria de los Angeles La Torre, without whom my doctoral studies would never have been possible. Thank you for your continuous support, advice, and friendship, despite the distance.

Finally, without the constant encouragement, support, and love of my family, I would not have been able to study and conduct this research. Thank you Miriam, Oscar, Natalia, Gonzalo, Diane, Jim, Mike, Erika, and Toni, for always being with me. I am particularly grateful to my wonderful husband, John, who has been there during all stages, lows, and highs of this research, with encouragement, patience, trust, and love. You are not only an amazing colleague, fieldwork partner, and one-of-a-kind idea-challenger, but as a loving, confident, and generous life partner, you have made me believe that everything is possible.

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CHAPTER 1: EMERGENT ONTOLOGIES IN A CONTESTED ENVIRONMENT

During most of my time conducting field research for this dissertation in the Matsigenka community of Tayakome, located inside Manu National Park in the southeastern rainforest of Peru, I lived with Jacinta and Ignacio (both approximately in their mid-40s), who are the matriarch and patriarch of one of the eleven clans that comprise the community. One afternoon in August of 2013, I returned to their household after visiting a neighboring family. I found both of them sitting under the tall thatched platform of their house. They were relaxing after having weeded their nearby manioc field all morning. Ignacio was sitting on a palm-leave mat on the ground. He was making a *piamentsitsa*, the string for Matsigenka bows, constructed with *tamarotsa*, the dry fibers of the inner bark of the *cetico* tree (*Cecropia* sp.) that he had collected and dried in the sun some weeks ago. He was gathering long, thin fibers with one hand, and with the palm of the other he twisted them together, rubbing them against his thigh, first in one direction to simultaneously make two thin strings, and then twisting these two strings together by rolling them in the opposite direction. Jacinta was reclining on her side on a nearby long, wooden bench, watching Ignacio work. I sat by Jacinta's side on the bench and also watched Ignacio. We were talking for a while, and, at some point, the conversation turned to their early life together, when Jacinta and Ignacio had just gotten married, both at around 15 years-old, as is still common among some Matsigenka of Manu. They told me that, during those early years, they used to live downriver near the smaller Matsigenka community Maizal (see Figure 4, Chapter 3), because Jacinta's mom lived there. Jacinta said that their first two children were born in that house, a boy, who died when he was an infant, and then Micaela, their 25-year-old daughter, who was lending my husband and me her kitchen – a thatched, walled, ground-level room – in which to place our tent and live during most of our time in the community. I was surprised, because, after already having spent some months in Tayakome, this was the first time that Jacinta had

mentioned to me her first baby, so I tried to ask about him delicately. She did not seem eager to talk about him, but not out of sadness, or, at least she did not appear to be sad. She just let Ignacio speak. After a few minutes, while still working on his *piamentsitsa*, he said that sometime after his baby boy was born, someone invited him (Ignacio) to eat boiled *shakiriri*, the approximately 40cm-long yellow-footed tortoise that lives in the forest. As a result of this, Ignacio said, the *shakiriri*'s soul stole his baby's soul and took it far away, deep into the forest. It was apparent that this had happened, he affirmed, because the baby soon grew ill and cried all the time. "*Shakiriri* is very heavy," he added, "that is why it could smash my baby's soul, and he got sick and died." I had heard other people in the community say that other animals also were able to *puigatagantsi*, to steal children's souls, sometimes taking them far away into the forest or deep into the river (in the case of fish), causing children's illness and eventual death. Ignacio affirmed that, at the time, he did not know that *shakiriri* could harm babies in this manner, but after his firstborn died, he never ate *shakiriri* while his next nine children were infants. "When children are older, when they can walk, then it is ok to eat *shakiriri*, because they are stronger."

Several months later, after I had finished the extended field season of my research in Tayakome, I was invited by the Manu National Park (MNP) authorities to give a presentation about the preliminary results of my research at their headquarters in Cusco, one of the two cities nearest to the Manu region. At the meeting, in addition to some MNP administrators and park guards, there were representatives of conservationist organizations that, at the time, were working in the Manu region. During my presentation, I mentioned the diverse types of dietary restrictions practiced by the Matsigenka, especially by parents of infants or small children, as this was one of the most salient interactions that I observed between the Matsigenka and non-human beings (see more in Chapter 7). After my presentation I took questions from the attendees and one member of a conservationist organization asked

directly: "How can we teach these people that what they are doing is damaging their health?" The question took me by surprise, and I did not initially understand his meaning, so I asked him to clarify. He affirmed: "Yes, we know that the Matsigenka, like many other indigenous peoples, are malnourished. So, by not eating the protein that they should be eating, because they follow these taboos, they are harming themselves. What do you suggest we can do to change this?" In response, I explained that it is unlikely that these food restrictions have a large impact on Matsigenka health, because commonly-eaten food, such as most game animals and fish are not tabooed. In contrast, dietary restrictions seem, in general, to be imposed on animals and plants that the Matsigenka do not often eat, like the shakiriri tortoise that Ignacio mentioned. Finally, and this was the most difficult part, I explained to this NGO worker that dietary restrictions are manifestations of the manner in which the Matsigenka conceive of animals and other species, in the same way that we, non-Matsigenka researchers, functionaries and NGO members, who come from different regions and have different ideas about the world, have our own conceptions of these species. Thus, dietary practices are an integral part of Matsigenka interactions with non-human beings. This last clarification, from my long, two-part response, was completely overlooked by the audience, and my attempts to emphasize this point were ignored. This NGO worker, along with others in the room, were more open to discussing the first point that I made, however, they were all convinced that they had to look for a strategy to change such customs in order to "improve" Matsigenka living conditions.

This NGO worker's remark was revealing on several fronts. On the one hand, it was an expression of a common paternalistic and stereotyped conception held not only by MNP administrators and conservationists, but also by *colono* settlers of Andean origin who live in communities around MNP: the Matsigenka who live inside the protected area are poor because they are not integrated into the market economy, and are malnourished, because they

do not eat like "modern" people, that is, they eat manioc and a bit of fish and game meat (in their view, the Matsigenka do not eat enough proteins), instead of consuming rice, potatoes, beef, chicken, and vegetables. This person's proposed intervention to change the Matsigenka diet implied that Western people "know better" about eating healthy, and must therefore educate the Matsigenka, who, in their condition of "pre-modernity," are unaware or ignorant of this and many other aspects of living a good life.

At the same time, this person's remarks were puzzling because they seemed to be at odds with the belief, common among conservationists, that the presence of people who hunt within natural protected areas is detrimental to the preservation of biodiversity. This belief has, since the creation of MNP, been a source of continuous friction between the Matsigenka of Tayakome and the MNP administration, supported conservationist actors and NGOs (see Chapter 3). Therefore, suggesting that the Matsigenka should, indeed, consume "more" protein (i.e., hunt more) seemed contradictory. It is possible that this attendee's concern about Matsigenka nutrition was a response to the recent interest of politically powerful regional indigenous organizations regarding the well-being of the indigenous communities inside the Park. Such organizations' concern is partially the result of the somewhat "bad reputation" attributed to MNP as consequence of the proposal by internationally-renowned conservationists to "voluntary relocate" the Matsigenka, and other indigenous peoples living within its limits, outside the MNP in order to more effectively protect biodiversity (see below). While such relocation has never been the intention of the MNP administration, their relationship with the Matsigenka has been far from harmonious. In addition, the protected area's image has certainly been damaged in the public eye by local politicians who, in their attempt to undermine the establishment of MNP in order to advance their own illegal extractivist agenda (gold-mining and logging), hold the Park administration responsible for

the allegedly "impoverished" conditions of the Matsigenka who live within its limits (see Chapter 3).

However, what struck me most forcefully about this attendee's question was not only the stark contrast between his set of environmental conceptions (also shared among those involved in the management of Manu National Park) and those of the Matsigenka, but also how dismissive, neglectful, and patronizing his attitude, and those of the other bureaucrats in the meeting, was towards Matsigenka environmental conceptions. This was a classic example of a situation in which "difference is either made irrelevant or turned into a hierarchy" (Blaser in De la Cadena et al. 2015:453). In other words, it illustrates the condition of subalternity assigned to indigenous environmental conceptualizations in the face of those of the dominant society in which they are embedded. In the case of the Matsigenka of Manu, such conceptions have never been taken into account by the MNP administration and its allies when designing and implementing management strategies for the area's biodiversity that affect the Matsigenka. This is one of the fundamental problems of applied initiatives to design policies for the regulation of human interactions with the environment, particularly if such initiatives involve local or indigenous peoples. In these cases, dominant, "modern" conceptualizations of the world tend to be normalized and legitimized by scientific constructions of a reality that is assumed to be objective, without recognizing the usage of their own conceptual constructs (Latour 1993; Povinelli 1995).

In academia, things have not been so different. The existence of differing environmental conceptualizations tend to be problematized in terms of content and knowledge (e.g., through the study of Traditional Ecological knowledge), and the conflicts that arise as a consequence of them are often conceived as resulting *only* from power inequalities (e.g., through the study of political ecology). While power struggles are definitely a crucial factor that gives rise to this type of injustice, rarely does such research

entertain the possibility that these conceptualizations are cross-culturally-incompatible. In contrast, the relatively recent development of ontological approaches in anthropology address such differences by emphasizing the existence of alternative conceptions, or ontologies, that constitute alternative worlds or realities (de la Cadena 2010; Blaser 2009), and by attempting to understand people on their own terms (Henare, Holbraad, and Wastell 2007; Holbraad 2007; Carrithers et al. 2010). However, these academic developments also show a tendency to exoticize non-Westerners, and assume, a priori, an alterity that can hinder understanding and collaboration with indigenous peoples (Erazo and Jarrett 2017). This dissertation is an attempt to challenge both approaches, from an empirical, middle-ground position, by demonstrating that, while societies may have their own environmental *factishes* – things that are half material (fact), half ideological (fetish) hybrids (Latour 1999) -, their worlds are not as radically different as ontologists suggest. Partially following Ross (2004), I define ontology as the emergent configuration of shared *factishes* that are performed or enacted (Mol 2002) by individuals who belong to a specific social group. I view these configurations as emergent because of their fluid nature: Changing patterns of agreement and disagreement among individuals may be integrated into an overall concordance of conceptions at the level of a social group as a result of historical, social, and environmental influences (Ross 2004). As such, emergent ontologies are heuristic devices, constructed by anthropologists to make (their own) sense of people's conceptualizations and engagements with the world (Holbraad in Carrithers et al. 2010).

Ontology vs. Epistemology, Or, Why Apply an Ontological Approach?

One of the current international initiatives attempting to incorporate non-Western perspectives into policies for biological conservation and human-environment interactions is the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

(IPBES, Díaz et al. 2015), an independent inter-governmental organization representing all member countries of the United Nations. Its objective is to "strengthen knowledge foundations for better policy through science, for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development"

(https://www.ipbes.net 2018). For this purpose, IPBES designed and promotes a conceptual framework (Figure 2, Chapter 2) that seeks to combine scientific and indigenous or local knowledge in order to address environmental issues, in accordance with the objective of biological conservation (Díaz et al. 2015; Tengö et al. 2017). In this regard, the IPBES approach resembles that of researchers at the end of the last century, investigating traditional ecological knowledge or indigenous local knowledge (TEK, ILK, with all their variations) (Gadgil, Berkes, and Folke 1993; Berkes 1999; Berkes, Colding, and Folke 2000), who sought to highlight the importance of "bridging" alternative "knowledge systems" in order to improve biological conservation initiatives. At the time, there was pertinent criticism to this approach for its inappropriate epistemological treatment of TEK. For instance, for selectively focusing on pieces of knowledge that conveniently coincided with Western notions of conservation and sustainability, and validating it with scientific criteria, stripping such knowledge from the context in which it had been generated (Agrawal 2002b). Nevertheless, studies using TEK are still applied in attempts to address resource management issues without addressing these issues (Gagnon and Berteaux 2009; Gómez-Baggethun, Corbera, and Reyes-García 2013; Kettle et al. 2014; Rathwell, Armitage, and Berkes 2015; Fernández-Llamazares et al. 2016; Mistry et al. 2016; Fernández-Llamazares et al. 2017; Diver 2017).

The approach taken by IPBES, as well as other recent applied research that seeks to understand people's use of natural resources (such as the Socio-Ecological Systems Framework, see Chapter 2), builds on the conceptual frameworks developed by late Nobel Laurate Elinor Ostrom. The basis of these frameworks comprises her theories of rational

choice and the development of local institutions to solve environmental problems (Ostrom 2009; 2011). Ostrom's seminal research arose out of a critical examination of simplistic explanations for people's decision-making and behavior with regard to the use of open-access natural resources, historically explained using the theory of the Tragedy of the Commons (Hardin 1968) (see Chapter 2). Through her analysis of both ethnographic case studies and game theoretical models, Ostrom determined that groups of people can historically develop local institutions, understood as a set of rules governing individual behavior, to regulate the access and usage of common pool resources. Because she found that there is no single unique model, such as the Tragedy of the Commons, that invariably explains people's environmental behavior, Ostrom suggested that it is necessary to analyze the combination of different factors and contextual features that contribute to the development of such local institutions. This was her motivation for proposing conceptual frameworks that could be adapted to different ethnographic contexts by modifying the content of the variables used to represent a situation of conflict over the use of common pool resources.

Yet, the problem with such academic approaches to addressing environmental issues is that they assume that alternative "knowledge systems" are translatable from one to another, and that differences are purely epistemological, that is, they exist on the basis of different knowledge about objectively true phenomena (Latour 1999). Under this view, there is a reality "out there" that can be discovered through science, and, consequently, other types of knowledge regarding that same reality can be adapted to, and compared against, the framework of scientific knowledge. Therefore, for instance, in Ostrom's theories for solving conflicts over common-pool resources, negotiations over the use of these resources take place solely among human stakeholders. She does not consider that in other societies, for instance, those with animistic perspectives, animals and plants can also be agentive subjects, and therefore stakeholders. As a result, not only are Western constructs imposed on non-Western

conceptualizations of the world, but also precisely those broader frameworks, in which such indigenous knowledge and conceptions belong, are neglected. In addition, her approach never addressed environmental conflict between members of different communities, and consequently, overlooked situations in which communities' environmental conceptualizations differ. In sum, under current theories of natural resource management, such as those of Ostrom and IPBES, conceptual frameworks are assumed to facilitate the translation of content between similar "cultural" conceptualizations, without realizing that 1) alternative notions are "fitted" into Western ones (e.g., "mother earth" inside of "biodiversity," Figure 2, Chapter 2), 2) the manner in which these other conceptions are organized by non-Western peoples may necessitate a completely different, and potentially incompatible, framework, and 3) environmental misunderstandings may occur not only within communities, but also between different social groups with different frameworks, which can potentially be a source of conflict.

In this regard, it is crucial to critically examine the nature of such frameworks, and question whether differences – and consequently, potential solutions to solve environmental conflicts – should be considered in terms of alternative types of "knowledge," or, rather, whether it is necessary to take one step back and reconsider the origin and constitution of these differences. Therefore, instead of approaching people's environmental conceptions from an epistemological stand, an ontological approach contemplates the possibility of alternative "frameworks," or entirely distinct notions of the world. Its guiding question is not *what we know about this world*, but rather *what this world is*. In other words, rather than considering that the environment is the same for different social groups, and assuming that, for instance, people *know* different aspects of jaguars' demeanor as predators, we should first ask what a jaguar *is* for such people (e.g., a predator with animal-like consciousness, or an evil non-human person). Because the first endeavor of this method is to search for

conceptions of a particular world (and its inhabitants), rather than for knowledge about that world, the epistemological question comes after the ontological one (and not the other way around).

This method of inquiry partially coincides with current discussions of the Ontological Turn in Sociocultural Anthropology, which claims that such indigenous "frameworks" are more than just different perspectives of a single objective reality. In fact, a reality that exists "out there," and that is described differently by different "epistemologies" (e.g., scientific or Western versus non-Wester or local), is questioned. Rather, ontologists suggest that human existence is *multinatural* – a term coined by Viveiros de Castro (1998) to characterize Amerindian ontologies – in that different human societies inhabit different worlds or "natures" (Holbraad in Carrithers et al. 2010). As a result, ontologists contend that we actually inhabit a *pluriverse* composed of different worlds, historically linked by "partial connections" (de la Cadena 2010; Blaser 2010; 2013). In order to understand these alternative worlds, we, as anthropologists, must "take seriously" the statements of the people we study, and realize that our own concepts may not be sufficient to understand theirs. This implies that we must avoid interpreting people's statements as metaphors, and rather mold our conceptions in an attempt to comprehend how the world must be in order for those statements be literally true (Henare, Holbraad, and Wastell 2007).

In Chapter 2, I provide a more thorough discussion of the ontological turn, as well as my critiques of it. One such critique, that I want to briefly mention here, is the tendency of ontologists to essentialize non-Western peoples, ignoring the history of contact experienced by different social groups, as well as processes of cultural change. The result is a tendency to conceive of ontologies as atemporal, static, unique constructions, based on specific roots of thought that are endogenous to each member of a particular non-Western society (a problem also associated with the notion of "culture"), neglecting the fluid nature of ontological

configurations. After questioning this tendency, I contend that consideration of the fact that people have different conceptions of a particular world is an appropriate starting point to investigate engagements of humans with their environment. This is particularly important when considering application of theories such as those proposed by Ostrom and colleagues, because situated decision-making may indicate the existence of environmental conceptions that are not contemplated by these researchers, and are consequently incompatible with their proposed frameworks. Furthermore, as some authors assert, it is possible that many environmental conflicts may be the result of interaction among peoples with different ontologies, who are leveraging their political capabilities in negotiations over their own existence (e.g., Blaser 2009). However, in contrast to ontologists' assertions, I contend that difference, and incommensurability of conceptions, is a possibility that must be empirically explored, rather than assumed *a priori*. In this regard, the exploration of emergent ontologies, as I have defined them above, is also a methodological endeavor.

Methodological Implications of an Ontological Approach

The study of emergent ontologies has methodological ramifications. Ontologists suggest that the only justifiable way to approach the understandings of those whom we study is by taking their statements seriously. That is, "…instead of reducing their articulations to mere 'cultural perspectives' or 'beliefs' (i.e., 'worldviews'), we can conceive them as enunciations of different 'worlds' or 'natures', without having to concede that this is just shorthand for 'worldviews'" (Henare, Holbraad, and Wastell 2007:10). Henare and colleagues are criticizing the terms "cultural" and "worldview" under the prerogative that they imply the existence of a single "real" world. When using such terms, difference is conceived in terms of representations (i.e., interpretations of what exists "out there") or worldviews of the same world. Instead, these authors propose that we should attempt to

understand people's concepts as literal manifestations of alternative worlds. Thus, statements such as "twins are birds" should be treated as truth in themselves, instead of as metaphors, and we, as researchers, should ask ourselves how the world must be in order for claims like this can make sense. However, such an approach cannot account for cases in which the people whom we study actually use figures of speech and are not expressing literal meanings. Then, how can we know if people are referring to truths in themselves or to metaphors? I propose that one manner to address this issue is by comparing people's statements with the practical implication of such statements. In this manner, by examining if particular environmental practices, we can attempt to determine if their remarks about the world should be interpreted as truth or metaphor. Thus, shared *factishes* are ontologies when they are performed: Taking the case of the food restrictions mentioned at the beginning of this chapter, Matsigenkas' conceptions of certain species as agentive beings are *factishes* as long as these conceptions are enacted and dietary restrictions are practiced by Tayakome residents for this reason.

It is essential to point out an additional methodological consideration when investigating the existence of emergent ontologies. I have affirmed that the condition of emergence results from the shared *factishes* within a social group. In this regard, in order to determine the extent to which such factisches co-occur among its members, formal methods must be employed in addition to qualitative ones. Qualitative research, conducted through participant observation, allows for a nuanced, contextualized understanding of people's environmental conceptions, illustrating how and why they are performed, the dynamics and negotiations that take place in the social realm in which they are enacted, and features that remain outside of the individual's (and group's) consciousness or awareness. For their part, quantitative methods complement qualitative data in two important ways: 1) by determining

the distribution of ideas, opinions, conceptions, and practices within the population; and 2) by providing higher (i.e., individual-level) resolution than the broad initial ethnographic observations. For instance, experiments conducted in Guatemala among the indigenous Itza' (Atran et al. 2002) allowed researchers to establish that differences in knowledge exist within the population with regard to nearly 400 ecological relationships between animals and plants. Such information would have taken a considerable amount of time to gather through ethnography alone. Combining qualitative and quantitative experimental methods in the context of emergent ontologies is valuable because, once the conceptual maps of ideas within a population are determined through formal interviews, they can be interpreted in light of the qualitative data gathered. Thus, patterns of within-group similarities or differences in environmental perceptions determined through formal interviews may be explainable based on ethnographic observations, for instance, who talks to whom about these issues in informal contexts, or the extent to which particular people are interested (or not) in them. With a relatively rigorous account of the distribution of opinions, backed by sound ethnographic research, it is possible to evaluate the effects of intra-group variation, as well as external influences on the social group, that may contribute to changes in conceptions over time.

Using such combined methodology, this dissertation explores the extent to which ontological configurations, at different levels of organization, are shared among the Matsigenka residents of Tayakome. At a lower level of abstraction, comprising the sets of specific conceptions held by each individual, is where shared content, as well as conflicting opinions, are discernable. Patterns at this level can be indicative of "ontological" change or idiosyncratic variation within the population. Variation in conceptions at the individual level does not necessarily negate the possibility that, at a higher level, an all-encompassing folktheory of the world, as conceived by the anthropologist, may exist. For instance, studies among Menominee Native Americans and Euro-American fish experts (Wisconsin) show

that, although both groups share similar knowledge and values about fishing practices, perceptions are conceptually organized in different manners (Medin et al. 2006; Medin et al. 2007; N. O. Ross, Medin, and Cox 2007). Euro-Americans sort fish species into goal-related categories, while Menominee categorize fish based on ecological relations, suggesting the existence of an overarching folk-theory of "everything is interdependent and has a role to play in the environment." Because it is such a general conceptualization of the world, a high level of abstraction may seem too general to be useful in understanding the conception that an individual holds with respect to a particular aspect of the environment. However, at such a level, we can tentatively propose a general theory about how the world works, and thus, it may be useful for understanding how people generate explanations for novel phenomenon to which they are exposed. I illustrate these different levels in Chapter 9.

Ontologies in Action, or, Why Conduct Research among the Matsigenka of Tayakome?

The indigenous Matsigenka community of Tayakome, located within the limits of Manu National Park (MNP), in the southeastern Amazonian region of Peru (Figure 3, Chapter 3), is composed of 184 people divided into 11 clans. Their primary subsistence activities are horticulture, hunting, fishing, and the gathering of forest products for autoconsumption. While the majority of Tayakome residents are not integrated into the market economy, a few young men work seasonally as motor drivers or crew members in the tourism industry around MNP. Just outside the border of the Park are a series of non-Matsigenka indigenous communities, as well as "colono" towns populated primarily by Mestizos of Andean origin who emigrated into the lowlands starting in the 1970s. Many teenagers also seasonally leave Tayakome to attend boarding secondary schools in these colono towns, where they are in continuous contact with colonos as well as Dominican missionaries who run some of these schools. Therefore, despite the fact that Tayakome is relatively isolated

from broader Peruvian society due to its remote location within MNP, its residents have different degrees of experience with non-Matsigenka. The livelihood of the Matsigenka of Tayakome is conditioned by the authorities of Manu National Park, and is subjected to the imposition of these administrators' environmental conceptions, as well as those of international conservationist actors. Below I provide an illustration of the variety of ontologies held by various non-Matsigenka actors in the region in order to sketch a broader picture of the current political and ontological arena inhabited by the Matsigenka.

The Environment for Conservationists

Before starting work in 2010 in Tayakome, I first visited Manu National Park in 2004, as a biologist working with tropical plants at the Cocha Cashu Biological Station. Cocha Cashu had the reputation of being one of the few existing research stations located in a "remote" and "exuberant" forest. Many biologists arrived in Manu with the expectation of walking through forests of enormous trees and lianas, and spotting jaguars, a number of different monkey species, giant river otters and other extraordinary animals, threatened in many other regions of the Amazon, but still abundant in the Park. I, admittedly, shared this fascination, and after spending just a few months at the station, I also held the common (but implicit) notion behind these images of exoticism, namely, that Manu was a place historically "untouched" by humans. Currently, as I would come to discover, there is ample evidence demonstrating the opposite: the human presence in the Manu region has actually been continuous since pre-colonial times (see Chapter 3, and Shepard et al. 2010). In fact, there is mounting archaeological evidence that humans have been transforming nearly the entire Amazonian landscape for several millennia (Balée 1989; Heckenberger et al. 2003; Balée and Erickson 2006). I learned this only after my original biological work in Manu. While studying for my Master's degree in ethnobotany, I was formally exposed, for the first time, to the anthropological literature of Amazonia. In contrast, a number of biologists who worked in

Cocha Cashu at that time were oblivious to the history of human occupation in the area, and firmly believed that it was only recently populated by the Matsigenka of Tayakome and other communities, as well as other indigenous groups, who migrated into the Manu river system from the Urubamba region during the Rubber Boom. Furthermore, many shared a particular *factish* of "nature" that regarded Manu as the epitome of a "pristine ecosystem," one free of the human species, and therefore home of one of the world's highest levels of biodiversity.

Such a view was, perhaps, so pervasive among the majority of biologists of Cocha Cashu because most of them were students of, or familiar with, the renowned conservation biologist John Terborgh, one of the initial founders of the station, and one of the most forceful advocates of such a perspective. I remember Terborgh as a very engaging speaker, always willing to share his extensive knowledge of tropical ecology and the Manu forest. He had countless entertaining anecdotes from his, at the time, more than thirty years of experience in the region. I also recall having heard his arguments regarding the threats that the presence of people, especially indigenous people, pose for the conservation of protected areas. Such a position was popularized in his book "*Requiem for Nature*" (Terborgh 1999), where Terborgh famously advocated for the eviction or "voluntary relocation" of indigenous peoples who inhabit protected natural areas, arguing that such relocation is the only way to avoid the inevitable over-exploitation of "nature" resulting from the combination of human population growth and the acquisition of resource extraction technology (e.g., shotguns and chainsaws). Putting aside the political incorrectness and the colonialist tone of his remarks, underlying Terborgh's perspective is his conception of what nature is. In the same book, Terborgh asserts:

Perpetuating biodiversity over the long run requires [...] preserving intact those processes that have maintained the biodiversity of *undisturbed ecosystems* over past millennia. Predation, pollination, parasitism, seed dispersal, and herbivory [...] involve interactions among species: animals with animals, animals with plants, plants with plants. *It is this web of interactions among species that I define as nature*. [...] Disrupting or distorting these interactions leads to

imbalances in the functioning of the system, the inevitable result of which is species loss and simplification. (Terborgh 1999:14-15; emphasis added).

For Terborgh, nature is disturbed when humans "intrude" into the "web of interactions" of animals and plants, and nature itself consists of interactions only among those non-human species. This position ignores a number of studies that point to the fundamental influence that humans have in modifying the environment, and the Amazon, suggesting that apparently "natural" spaces, such as peach palm groves, Brazil nut patches, and the large grasslands or pampas ecosystems that harbor unique species, are actually all anthropogenic landscapes (Denevan 1992; Whitney 1994; Heckenberger et al. 2003; Erickson 2006; Clement, Rival, and Cole 2009; Shepard and Ramirez 2011; Ellis 2011; Clement et al. 2015). It could be argued that, at the time of Terborgh's publication, much of such research was still in its infancy. Nevertheless, his position has hardly changed in recent years (see Terborgh 2012). Thus, the particular *factish* that conservationists like Terborgh call "nature" refers to a "pristine," and physically separated domain from the human realm. This conception is similar to that of "wilderness" promoted in the model of US national parks (Cronon 1996), that has served to displace other local populations around the world (West, Igoe, and Brockington 2006; Igoe, Sullivan, and Brockington 2009). Despite the fact that John Terborgh's extreme conservationist ontology is not representative of current, more moderate versions of conservationism in MNP, his position has been influential in the history of the region, and it still represents a common model of the world as conceived by current conservationists, regionally and internationally.

The Environment for Manu National Park Employees

If Terborgh's position represents a rather extreme stance of a scientific conservationist with regard to the relationship between human beings and the environment, the perspective of the MNP administration reflects the stance of the governmental institution

charged with regulating that relationship. As such, this perspective is less scientific and more technical and political. Consequently, the official attitude of the MNP administration regarding the situation of the Matsigenka within the Park must, of necessity, be less extreme than Terborgh's, especially given the growing focus of public attention on issues of indigenous rights in recent decades. In particular, official MNP policy must (at least on paper) respect the International Labour Organization (ILO) Indigenous and Tribal Peoples Convention No.169 (International Labor Organization 1998), that provides a legal framework for the protection of indigenous rights for self-determination. In addition, the increasing presence in the region of indigenous organizations, such as the Federation of Native Communities of Madre de Dios and Tributaries (known by the acronym FENAMAD), over the last decade has placed more pressure on the Park to guarantee the well-being of the Matsigenka and other groups around Manu. This explains the shift in official discourse present in the Master Plans elaborated by the Park administration approximately every five years. For instance, the initial plan from 1985 presents guidelines for park policy that are closely aligned with the conservationist ethos of the time, and are focused exclusively on biodiversity (Universidad Nacional Agraria La Molina 1985). In contrast, the most recent plan from 2014 contains a more inclusive narrative, in which the interests of local communities (of people), not only those located inside the Park, but also those surrounding its boundary, are presented as worthy of the Park's attention (Jefatura del Parque Nacional del Manu 2002; SERNANP 2014).

The conceptions of current MNP staffers working in its offices in Cusco and stationed at control posts, some of whom I had the opportunity to talk with on several occasions, maintain the official position of the most recent Master Plan, highlighting the right of indigenous peoples to remain inside the Park, and recognizing that the presence of humans has been a constant in the Park's history. Thus, though the position of conservationists (like

Terborgh) clearly represents the "modernist" division between humans and non-humans or culture and nature (Latour 1993), such distinctions are not as sharply delineated in the position of the MNP administration. Many Park personnel described nature as that which encompasses all living beings, and the processes in which they are immersed, similar to Terborgh's definition above. However, when questioned about the position of human beings, many asserted that humans are part of nature as well. Gabriel, a Park employee stationed in Cusco, explained it to me in this manner:

In every place that there are living organisms, like plants and animals, there is nature. We ourselves are part of nature as well. As humans, we cannot exclude ourselves. [...] But the only aspect that makes us different from other organisms is our thinking capacity, our intelligence. Because we have this capacity, I believe that we abuse certain things. But we should [, rather,] have respect for other beings. I do not think we should have an important role [in natural ecosystems]. I think we should live in harmony.

Gabriel's position illustrates why human beings cannot, in his mind, be treated like any other animal. Our higher cognitive capacity, and the concomitant fact that we believe that nature is subordinated to us, makes the human species more dangerous than other species with regard to the welfare of all living beings, and, as such, we are apart from nature. Thus, he tries to resolve the paradox that humans can be both a part of, and destructive of, nature, by suggesting that we should "live in harmony" with it, a notion shared by many other MNP employees. Humans are part of nature as long as they do not "alter" it. The meaning of "alter" is what distinguishes the conception of nature held by extreme conservationists like Terborgh, from that held by the MNP administration. If Terborgh refers to MNP as "pristine" nature, meaning a place presumed to be untouched by humans, the position of Park staffers is more ambiguous, and they tend to use the term "pristine" in a slightly different sense when they refer to the Park. The reason for this ambiguity is twofold. On one hand, in order to maintain its prestige in the international conservation community as one of the most biodiverse places on earth, and to be considered a legitimate national park, great emphasis must be placed on the fact that the ecosystems of MNP have not been degraded by the extractive activities of humans. On the other hand, park authorities must justify, to the same international audience, the presence of indigenous peoples living within the Park. As a result, the conception of pristine is interpreted as explained by Horacio, a Park staffer in Cusco: "Human beings have always been here. The Park has always had people. [One] can understand that a pristine place, in many cases, is where the civilized people (as we - the majority society - are known) has not arrived yet. But absolutely all of the area, all of the Park, has had a relationship with people." In contrast to Terborgh's definition, "pristine nature," according to Horacio, is not the exclusive realm of non-human beings. Rather, humans are also part of such pristine nature, as long as such humans have not yet been touched by "civilization". For him, as for other Park employees, indigenous groups who live in the forest, in their condition of "pre-moderns," are actually perceived as *compatible with* or even part of that pristine non-human natural world, as long as they do not use Western technology. In fact, in the majority of the cases, Park employees justified the presence of the Matsigenka in the Park because they characterized these people as living in harmony with the forest, a view consistent with the classical Western myth of the ecological noble savage (Redford 1990).

The stereotyped and paternalistic idea that indigenous peoples should conduct only "natural" subsistence activities, meaning that they do not gain monetary benefits for their production (e.g., selling cash crops, or forest products such as lumber), is shared by many Park employees. Most know that the presence of people in the Park is a delicate subject, and, unlike Terborgh, they are not so quick to denounce it as a threat. By classifying them as "natural", and, therefore, unthreatening, the Park administration can come to terms with the presence of Matsigenka within the Park, and reconcile this presence with conservationist interests. Simultaneously, there is the implicit premise (or perhaps the warning) that if the

Matsigenka presume to continue living inside of the Park, they should remain "traditional" and "natural." Therefore, conceptualizing the Matsigenka in this manner facilitates validation of the economic and technological restrictions imposed on the indigenous communities.

Other Park personnel understand that the protection of biodiversity might potentially restrict the aspirations that Matsigenka individuals have for their own lives. Still, some of them appeal to Western environmental notions in order to attempt to resolve this dilemma, ultimately resorting to a top-down approach. The commentaries of Luzmila, a Park employee in Cusco, exemplify this common position:

The relationship between the Matsigenka and nature must be direct, harvesting the resources, but without causing an impact. [In other words,] if you are going to enter a forest, and can use something in that forest, you do, but you have to know that you cannot use it too much because you are going to damage it... That is the relationship that we should have. We should wisely and adequately exploit each resource that we have. [The Matsigenka] have their traditional ways. They have always been in direct contact with nature, and know how to use resources. What I would suggest is that they realize how they are using resources, [i.e.,] what changes they are making [to the resource]. Perhaps, they cannot obtain [sufficient] game [animals] nearby, or the fishing [yield] is decreasing. I do not know, but they must be aware of these things, because of their natural use of fish, of trees, of plants, of animals in general.

Here, Luzmila utilizes Western conceptions to objectify animals and plants as merely resources to be exploited by the Matsigenka. Thus, in her opinion, they should consider notions such as "sustainability" and "extinction," in order to preserve such resources, as if these concepts constitute the only way to interpret changes in abundance of a particular species in the forest. This situation exemplifies some positions in the well-known debate surrounding the question of whether indigenous peoples are conservationists or not (M. Alvard 1994; M. Alvard et al. 1995; Schwartzman, Moreira, and Nepstad 2000; Chicchón 2000; Colchester 2000; Terborgh 2000; Redford and Sanderson 2000) In such a context, Paul Nadasdy correctly pointed out the absurdity of imposing Western notions, such as "environmentalist" or "conservationist," on non-Western peoples, thereby neglecting these people's own conceptions regarding their relationships with non-human beings and their environment (Nadasdy 2005). While Luzmila seems to suggest that the Matsigenka are likely unfamiliar with these conceptions, she believes that they should act according to them, potentially ignoring their own ways of conceptualizing their engagements with non-human beings.

In sum, while good intentions underlie the arguments of MNP employees, these are nearly always accompanied by a condescending disposition towards the Matsigenka. Similar to my experience recounted at the beginning of this chapter, MNP staffers believe that they "know better" because they employ Western knowledge, obtained through conservation science approaches to ecological processes and population dynamics. Ironically, the few scientific studies regarding the effect of the Matsigenka on animal and plant populations inside the Park (Levi et al. 2009; Ohl et al. 2008; Ohl-Schacherer et al. 2007; Endo et al. 2009) seem to have been completely ignored by the Park administration. For instance, Ohl and collaborators measured the effects of Matsigenka hunting on the population of five of the most favored prey species, determining that there is no evidence that such activity is depleting these species within the Park, despite the fact that the Matsigenka population has doubled since 1988. These researchers suggest that the current Matsigenka hunting practices are sustainable, as long as current settlement patterns are maintained, because they are not negatively affecting the source-sink dynamics of these species' populations (Ohl-Schacherer et al. 2007; Ohl et al. 2008; Levi et al. 2009). These results themselves pose an ethical dilemma, because they suggest that biodiversity can be preserved by restricting Matsigenka autonomy in settlement behavior. Yet, in my observation, the MNP administration appears oblivious to the results of this investigation, as they have not been included in conservation efforts and the Park's management planning. In contrast, preconceptions regarding the supposed depletion of the Park's animal and plant populations predominate in the internal MNP deliberations at which I have been present, and are continually reproduced by MNP employees, including staff biologists, who would be expected to be more familiar with such

research.

Exploring Matsigenka Emergent Ontologies

As illustrated at the beginning of this chapter and in the previous section, Matsigenka environmental ontologies are absent from the dominant environmental narratives of Manu National Park authorities and conservationist stakeholders, all of whom hold distinct conceptions of "nature" and the environment. As mentioned above, studies evaluating the extent of the "impact" of Matsigenka subsistence activities on the forest (e.g., Ohl-Schacherer et al. 2007) have been conducted from a biological perspective, ignoring Matsigenka notions of the relationships that they maintain with the forest and its elements. Even so, these scientific results, like Matsigenka environmental conceptions, have not being taken into account in the development of management strategies by MNP authorities and their conservationist allies.

In this context, I consider it critical to investigate Matsigenka ontologies of the environment for two reasons: First, at the academic level, the results of this research will advance theories of natural resource management, as well as improve understanding of the dynamics of ontological configurations, and the role of such order in people's engagements with their environment. Second, at a more applied level, the results of this dissertation may assist the Matsigenka in voicing their own perspectives of the environment, so that they can be recognized as active stakeholders in the develop of management policy for the place they inhabit. Considering these aims, along with the conflicting theoretical approaches discussed above, the specific questions that guide this dissertation research are: 1) How are interactions between humans and the environment conceptualized, as demonstrated in current environmental ontologies held by the Matsigenka? 2) Do these ontological configurations inform environmental practice? 3) How do these ontologies compare with those ontologies upon which Western theories of natural resource management are constructed? Are they

really radically different and incommensurable with each other, as ontologists suggest? I address these questions by exploring the particular lived experience of the Matsigenka of Tayakome, attempting to see their world from their point of view through an exploration of their *factishes* or conceptions of their environment. I investigate these issues at the individual level, with the goal of determining how the variability of perceptions within a social group can contribute to the generation and change of shared emergent ontologies. In addition, I examine Matsigenka people's environmental practices, as a way to investigate whether their stated conceptions – what they say they believe – and their actions – what they actually do – are consistent.

Organization of the Dissertation

The Matsigenka world is populated by different types of subjects with varying degrees of agency, intentionality, and human-like consciousness. Some of these conceptions appear to be more widespread and stable than others within the population. In addition, processes of ontological change seem to be responsive to outside influence, as well as personal aspirations. This dissertation progressively explores the dynamic and contingent nature of emergent ontologies of the environment held by Matsigenka residents of Tayakome, through the following chapters:

Chapter 2 serves to theoretically contextualize my argument. I critically examine Western conceptions assumed to be universal in theories regarding human-environment interactions, particularly Elinor Ostrom's Institutional Approach. I contrast this with theoretical developments constituting the Ontological Turn (OT) in Cultural Anthropology, which claim that indigenous conceptions are not simply different perspectives of a single objective reality, but rather imply the existence of different worlds, or ontologies. In contrast to the essentialization of indigenous groups and their environmental conceptions by

proponents of the OT, I propose the possibility for the heterogeneity, dynamism, and convergence of ontologies often assumed to be radically different, and I develop my own theory of emergent ontologies, as an alternative to these approaches.

Chapter 3 presents a historical and ethnographic overview of the Matsigenka of the community of Tayakome inside Manu National Park, which lays the foundation for current Matsigenka ontological configurations, and the potential commensurability of Western and non-Western worlds. I explain how contact with non-Matsigenka people (e.g., protestant and catholic missionaries, Manu National Park staff, researchers from the Cocha Cashu Biological Station, *colono* settlers that surround the park) have influenced, and continue to influence, current Matsigenka environmental conceptualizations.

In Chapter 4 I elaborate on the methodological aspects of my epistemological approach, describing the field and analytical methods that I use to investigate Matsigenka *factishes*, and potential emergent ontologies. I emphasize the utility of employing mixed-methods, complementing ethnographic research with structured quantitative methods, as well as the use of the Cultural Consensus Model for analyzing population-level distributions of ideas. I describe the advantages and shortcomings of using mixed methods, based on my own research experience among the Matsigenka, attempting to develop a nuanced understanding of their ontologies.

Chapter 5 is an introduction to Matsigenka ontologies, where I present some broader environmental *factishes* that compose their world. Among these is *kipatsi*, an encompassing term for "world" or "earth," and also constitutes the realm inhabited by the Matsigenka. This, in turn, comprises the *factish* of the house, *pankotsi* – usually inseparable from, and conceived as a synonym of, the manioc field, or *magashipogo* –, where human identity is defined; and the *factish* of the forest, *inkenishi*, where beings that are ontologically different from the Matsigenka live, including neighboring non-Matsigenka indigenous groups who are

seen by some Matsigenka as "savages." I argue that several key aspects of these *factishes* may be the result of Matsigenka interactions with past and contemporary Christian missionaries, as well as with *colonos*.

In Chapter 6, I explore in detail specific Matsigenka *factishes* referencing animals, plants and other elements of the Matsigenka world, to which varying notions of humanity, agency and intentionality are attributed, using my own ethnographic observations and the results of formal quantitative methods. Here I examine Matsigenka notions of the soul, which, I argue, define different "ontological categories" of non-human beings, and, in turn, imply different forms of interaction with the Matsigenka. I also suggest that individual-level variance in conceptions of non-human beings may result from differential exposure to Christian ideas among Tayakome residents at different periods of their personal and collective histories, as well as variation among residents in their personal aspirations and dispositions towards common conceptions of the Matsigenka metaphysical world.

Chapter 7 explores the particular *factishes* of food and behavioral taboos, because they are, according to the Matsigenka, a fundamental context of interaction between Matsigenka and non-human beings, especially during the couvade (perinatal period). I also propose tentative explanations for the emergence of certain taboos, such as the case of species that are *some posteriori* associated with a recent incident of illness in the community, and are subsequently believed to possess a soul as a consequence of their demonstrated capacity to harm. I explore the linkages between differing conceptions of non-human beings and beliefs about their capacity to harm, and I argue that this conceptual configuration is rather fluid.

Chapter 8 presents potential behavioral implications of the Matsigenka environmental conceptions detailed in previous chapters, as a way of testing whether ontologies are, in fact, enacted, by relating people's conceptions with their actions. I integrate the results of a

valuation ranking interview, which may partially explain the motivations behind people's actions with respect to certain species, with the results of a self-reported behavioral task, as well as with results of the formal interviews presented in previous chapters, and my own ethnographic observations. I suggest that, in some cases, external influence, mostly from non-Matsigenka *colono* communities outside of MNP, where young men work in seasonal jobs, and some adolescents attend boarding high schools, may be causing an observed lack of correspondence between current environmental conceptions and practices.

In the final chapter I present the conclusions of the dissertation, directly addressing the questions posed in above in light of the evidence presented in the intervening chapters. I assert that some Matsigenka environmental *factishes* are similar, to a certain extent, to those of Western theoretical approaches to human-environment interactions. Others, however, diverge greatly. In this regard, I follow Strathern in considering that current ontological manifestations are linked by "partial connections," developed over long histories of intergroup contact in nearly all human societies. However, it is essential not to simply ignore fundamental conceptual differences, as current theories of environmental decision-making tend to do with non-Western ontologies. Instead, I argue that the environmental conceptions of any human social group can be assumed to be neither identical nor incommensurable with those of any other group. Rather, within each group, and even within each person, such conceptions are often heterogeneous, historically-contingent, dynamic, and are shaped by both individual engagements with the world, and with other members of one's social group. Thus, the integration of previously-neglected ontologies into strategies of environmental management, must begin with a recognition of this complexity.

CHAPTER 2: THEORETICAL APPROACHES TO ENVIRONMENTAL CONCEPTUALIZATIONS

In this chapter, I lay out the theoretical approaches to the interaction between humans and their environment that inform my research. I start by addressing the "modern constitution" as proposed by Latour, as a useful introduction to illustrate the hegemony of Western¹ ontologies (as defined in the previous chapter). After presenting this author's argument of the perceived differences between the so-called "moderns" and "non-moderns," I analyze current theories of resource management, the most influential of which is the Institutional Approach developed by the late Nobel Laureate Elinor Ostrom and her research team. In particular, I demonstrate how these theories are rooted in a particular ontology, that is, in a conceptualization of the world in which the domain of actors and of non-human beings, as well as the physical and social worlds, are separated. Then, I contrast such a perspective with ethnographic accounts that highlight the role of non-human beings as important agents in the daily engagements between non-Western peoples and their surroundings. In particular, I address the development of the "ontological turn" (OT) in anthropology, which criticizes the dominance of modernist dualisms (nature-culture, subjectobject, mind-body) as a hegemonic discourse, validated through science. I explain how, in contrast, ontologists tend to favor the position that non-Westerners live in realities (considered by ontologists to be synonymous with "ontologies") that are "radically different" from the reality created by the West. This discussion includes the critique made by these scholars of use of the term "culture" to reference the difference that they affirm exists between Western and non-Western worlds. For ontologists, "cultures" refer to alternative representations of the same reality that exists "out there." They argue, instead, for multiple

¹ The contrast between Westerners and non-Westerners is, admittedly an oversimplification of the diversity of positions and views that exist within each of these groupings. However, I use 'Western' specifically to refer to the ontological differentiation that Latour makes between moderns and non-moderns (explained below), rather than a geo-political manifestation of modernity.

realities, and so disfavor the term "culture". While I believe that some features of the OT provide useful tools to approach people's conceptualizations of, and engagements with, the environment, there are also important flaws in their argument, which I detail later. Finally, I present my contribution to the discussion on conceptualizations of realities and world-making, where I suggest my own approach to ontology as an individual endeavor, and, when concordance among individuals exists, as an emergent phenomenon.

Questioning the Moderns

The work of Bruno Latour, and other scholars of Science and Technology Studies (STS) who favor his Actor-Network Theory (Law 2004; Mol 1999; Mol 2002), has been instrumental in questioning the dominant status of the modernist paradigm, which, through the practice of science, characterizes reality as a dichotomy, either between nature and culture, subject and object, or material and ideational (Latour 1993). Modernism, according to these authors, is just one of many possible manners of approaching the world. In his book "We Have Never Been Modern" (1993), Latour reflects on the Western ontology, or "modern constitution," as he calls it, suggesting that it comprises two nested "great divides": The external divide establishes a fundamental difference between us, moderns or Westerners, and them, pre-modern societies. This divide is founded, in turn, on a second internal divide, in which the ontological separation between society (humans) and nature (non-humans), pursued through the process of *purification*, is carried out by moderns, but not by premoderns, through the practice of science. The validation of nature-culture dualism through the scientific method allows moderns to arrive at "truthful" statements about the world that exists out there. Because pre-moderns' knowledge is not based on science, they "cannot" make a differentiation between beliefs or representations and actual "reality." This view is evident, for instance, among early ethnographers when describing the "pre-logical

worldview" of "primitive people" (Lévy-Bruhl 1985), and also in my personal experience with conservationists and MNP representatives (mentioned in the previous chapter). Their concern for the Matsigenka is embedded in their view that, because these indigenous people do not have access to scientific knowledge or do not practice science, their "beliefs" that certain animals can spiritually damage their children or themselves are preventing them from knowing "the reality," namely, that animals cannot affect humans in that way. Moreover, these "superstitions" need to be overcome in order to improve these people's nourishment and well-being. Thus, as Latour affirms, "in Westerners' eyes the West, and the West alone, is not a culture" (Latour 1993:97). Instead, Westerners perceive their cultural constructions as a neutral context, and this authority is partially provided through the practice of science, where the existence of such conceptual dualisms is overlooked.

The argument for scientific knowledge, Latour asserts, is also at the heart of cultural relativism, allowing nature to exist independently from culture, and cultures, in plural, to be the socially constructed representations of the same nature (Latour 1993)². Yet, Latour's crucial argument is that, in addition to the modernist effort to establish such divides through purification, the modern ontology, without acknowledging it, also creates links between opposed realms through the process of *translation*. The result is a network of *hybrids*, things that are both social and natural but ontologically different from things that belong to either of these domains – what Latour calls *nature-cultures*. Examples of these could be domesticated animals or genetically modified seeds of crops, where it is difficult to establish the limit between where the "natural" entity ends and the product of human manipulation begins. A nature-culture is resembles but is different from a *factish*, a term that Latour coined in a later work (Latour 1999) and that I employ in the remaining of this dissertation: The former is

² A conception that is used by Viveiros de Castro in his formulation of "multiculturalism" (Viveiros de Castro 1998), explained in more detail below.

domain specific, and as such, it is a combination of what is conceived as "nature" and "culture" in the Western ontology. The latter, in turn, is a *thing* that also transcend the modernist conception of an objective world *out there*, but does so by combining the objective world (facts) and subjective constructions (fetishes). Therefore, factishes can be particular conceptions of animals, such as those considered pets, but also of non-"natural" objects, such as the house perceived as the domain for identity (see Chapter 5). Importantly, factishes are created through practice, and therefore, they are realities in themselves (Latour 1999).

Going back to the argument of the modern constitution, Latour affirms that moderns are similar to pre-moderns in that both create their own hybrids or nature-cultures, but moderns are not aware of such a process. A nature-culture for the Huaorani of Ecuador, who could be considered "pre-moderns," could be the staple tuber manioc, a soul-bearing subject, with whom the Huaorani maintain social relations (Rival 2014). For moderns, similar hybrid entities are pet dogs and cats that some people treat like children (e.g., taking them to the hairdresser and organizing birthday parties). Recognizing this fact, that the great divides do not represent reality, but rather the modern's perceived ontology, is, according to Latour, fundamental to the pursuit of a *symmetrical* anthropology (Latour 1993:103). This implies practicing an anthropology in which we realize that we, the moderns, also create hybrids (instead of clear-cut dichotomies), as pre-moderns do. Therefore, he concludes that we are, in fact, not moderns after all.

While these critiques are not recent, they are still relevant, primarily because they have not transcended the realm of academic debate, and thus have yet to be applied in other disciplines. Indeed, current theories investigating the interactions of people with their environment, such as the study of the management of natural resources, are based on Western conceptions, without problematizing this fact. Neglect of this issue may, in turn, generate further problems during attempts to apply these theories, using them to generate explanations

of environmental decision-making. Next, I discuss some of these theories, delineating their foundational ontological assumptions.

Theories of Resources Management

The Tragedy of the Commons and Some Definitions

People's interactions with the environment have been conceptualized and investigated using different approaches. Among those interested in environmental conservation, the "tragedy of the commons" has been, and is still, frequently invoked as a theory to explain the behavior of local peoples in relation to natural resources and, in general, to explain processes of environmental decision-making. During the 19th century, the economist William Forster Lloyd originally proposed the idea of a group of herders using a pasture for their cattle as a metaphor for the overexploitation of resources held in common (Lloyd 1833). According to this metaphor, the pasture can be maintained and used over the long-term as long as the populations of both humans and animals remain below the maximum amount that the pasture can support without being depleted, that is, under the carrying capacity of the commons. More than half a century later, the ecologist Garret Hardin (1968) recycled and popularized the analogy, arguing that the overexploitation of the resource is inevitable because the herders are rational beings, that is, they try to maximize their individual benefit. In this case, benefit is decided by weighting the individual positive and negative outcomes of adding one more animal to the pasture: On the one hand, the herder is the only beneficiary of all the profits of adding an animal. On the other, the detrimental effect to the pasture caused by this animal through overgrazing affects all the herders equally. Since the benefit is greater than the personal harm, the herder sees it as more profitable to keep adding more cattle to the grassland. Then, the tragedy occurs because every herder that has access to the pasture operates in the same selfish, rational manner. Solutions to this tragedy, according to Hardin,

can only be realized through external control of the herders, either by: 1) privatizing the commons and making each individual responsible for her individual sub-plot; or 2) establishing strict governmental regulations on the distribution of the commons (Hardin 1978).

Although Hardin's concerns were directed at overpopulation and its devastating effects on the use of resources and the environment, the fundamental mechanism leading to over-use of open access resources that he proposed is widely-referenced, and remains highly influential among conservationist actors, many of whom tend to conceptualize the effect of local or indigenous peoples' subsistence activities on biodiversity as a tragedy of the commons. A crucial element of Hardin's theory is the assumption that all the stakeholders act in the same rational manner, that is, by maximizing one's personal benefit. Here, benefit is understood in terms of economic gain, ignoring alternative conceptualizations of the term that may vary from one social context to the other. For instance, such alternative benefits could include the social capital that the stakeholder involved in the use of resources may also gain or lose (e.g., maintaining high social status or a good reputation within the social group), or the particular moral system in which these interactions take place. Furthermore, Hardin uses a particular notion of "resource," which can be defined as the agentless goods or objects over which stakeholders negotiate, a conception that would fit firmly within a Western or "modernist" ontology, in Latour's terms. As I show below, despite the fact that theories of commons management developed by other authors is more nuanced and elaborate, they all maintain this specific ontology.

Ostrom's Institutional Approach

While there have certainly been environmental "tragedies" that have taken place in the context of natural resource use, as predicted by Hardin's theory, such "tragedies" are, apparently, far from the rule. Feeney and collaborators suggest that the conditions implied by

the tragedy of the commons are just one particular combination of characteristics of the many possible management regimes (David Feeny et al. 1990). In fact, a number of studies show that, in multiple cases, people have self-organized – probably, through long-term processes – in order to develop long-standing management tools or institutions to regulate the use of common-pool resources (Berkes 1989; Berkes et al. 1989; National Research Council 2002; David Feeny et al. 1990; McCay and Acheson 1987; Ostrom 1990; Ostrom 2005; Ostrom et al. 1999). In particular, the work of Elinor Ostrom, late Nobel Laureate in Economics, has been crucial for understanding collective action to govern resources through the development of social institutions, that is, "enduring regularities of human action in situations structured by rules, norms, and shared strategies, as well as by the physical world" (Crawford and Ostrom 1995:582). Based on game theoretical analysis of hypothetical scenarios as well as (importantly) empirical case studies, she determined that those instances of successful resource governance do not share a unique model of institutions, that is, either privatization or strong central authority, as Hardin proposed. Instead, a variety of combinations of such types of institutions allow for more flexible solutions tailored to specific cases.

For instance, one of the case studies that Ostrom analyzed was that of the village Törbel, in southern Switzerland, comprising 600 residents in 1975, as recorded by Robert McC. Netting (1976, cited in Ostrom 1990), who collected the data for this case study. Törbel villagers had established rules and statutes for managing their communal resources since the 13th Century (Ostrom 1990). In addition to their individually-owned plots, that provided different types of produce and hay, village members owned, and depended economically on, the cheese that is produced by herders who take care of the cows owned by each member during the summer. During this season, cattle graze in the communally-owned meadow lands. One of the rules they have established is that each member of the community cannot send more cows to the meadows during the summer than he or she can feed by himself/herself

during the winter. In that manner, they control access to the grassland, available only to village members, which has clearly marked and registered boundaries. Whoever breaks this and others norms get an expensive fine. The members of the community have designated an authority who is responsible for enforcing these rules by charging a fine, half of which he can keep for himself. There are also designated herders who round up the cows and count them, so that they know what proportion of cheese is owed to each community member. Finally, every member has some say in modifications to these rules, because they all vote for their maintenance. Based on case studies like this one, Ostrom was able to identify important features, or *design principles*, that characterize enduring institutions which aid in the long-term utilization of common-pool resources (CPRs). These design principles include: 1) small size of the social group; 2) well-defined boundaries for both the authorized users of the CPR and the CPR itself; 3) agency of the users to modify the regulations; and importantly 4) the involvement of the users themselves in monitoring the use of resources, and for sanctioning those who violate the agreed-upon rules (Ostrom 1990).

The variety of strategies and institutions reviewed in Ostrom's work demonstrates that the tragedy proposed by Hardin was only one of many possible outcomes of commonproperty resource conflicts, and, as such, it has no broader predictive power (D Feeny et al. 1990; Ostrom 1990; Ostrom 2007)³. Furthermore, Hardin's approach only addressed cases of open access resources, while Ostrom determined that CPRs can belong to other property regimes, in addition to open access, such as individual property, group property (like the Törbel village case), and government property. Ostrom's research demonstrates that none of these types of property administration structures is free of problems with regard to the

³ In "Governing the Commons" Ostrom (1990) also critiques approaches such as the collective action approach developed by Olson (1971[1965]), and the Prisoner's Dilemma game, in addition to the Tragedy.

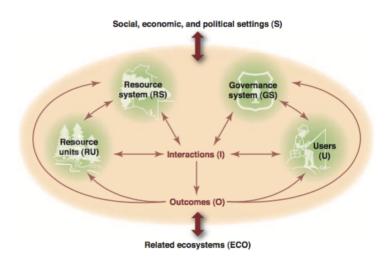
management of CPRs. Consequently, understanding the local use of CPRs, and, importantly, predicting the outcomes of their use, is more nuanced than Hardin suggested.

In order to avoid employing only unique, case-specific models as panaceas to explain environmental decision-making (such as the tragedy of the commons) (Ostrom 2007), Ostrom proposed the use of *frameworks*, in particular, the Institutional Analysis and Development framework (IAD). The IAD is presented as a series of multi-tier conceptual maps, in which the elements or variables pertinent for institutional analysis, and the relationships between these elements, are identified and can be adapted to different situations in order to understand human decision-making (Ostrom 2011). In addition, although she did not research them directly, Ostrom added other non-economic levels of analysis to the IAD, such as the biophysical structure of the environment and the individual's cognitive apparatus for processing information (Ostrom 2005:11).

Ecologists who collaborated with Ostrom critiqued the packing of all of the complexity of ecological systems into a single term "biophysical conditions", and such critiques produced subsequent changes to the IAD (Ostrom 2009; 2011)(Figure 1). It was nested within the broader Social-Ecological Systems (SES) framework (Berkes, Colding, and Folke 2003; Berkes and Folke 1998), in which complex feedback loops in which social, ecological and institutional variables are conceived separately as responsible for the outcomes of particular dynamic systems. Such an implementation has been further expanded and enhanced by Ostrom's collaborators after her passing (Basurto, Gelcich, and Ostrom 2013; Guevara et al. 2016; Mcginnis and Ostrom 2014; Partelow 2016; Vogt et al. 2015). This new framework is, in turn, embedded in broader social, political and economic conditions. However, at such a large scale, individual decision-making, affected by interactions across multiple levels, are not sufficiently problematized or addressed in the new AID. In addition, focus on the human component is underdeveloped and highly simplified,

neglecting the fundamental ontological assumptions foundational to the construction of this framework, such as the complete separation of the biophysical and social realms. I discuss this, and other critiques, in the following section.

Figure 1: Ostrom's Institutional Adaptive Framework embedded in broader Social-Ecological Systems. (From Ostrom 2009)



Frameworks, Translations, and Variability

While Ostrom's research has undoubtedly enhanced our understanding of management of the commons by local peoples, and of environmental decision-making, it is clear that she assumes an ontology similar to that used by Hardin regarding the mechanics of human-environment interactions, and the world in general. For a start, Ostrom, like other scholars who use game theory to explain decision-making, presumes that every individual is *rational* – i.e., interested in individual, short-term benefits –, but in a more nuanced manner than Hardin did. By using game theory, she emphasizes the role of information available to the agent about the particular context. She determined that communication with other agents allows the individual to make better-informed decisions. In this way, a *fully rational* individual is one who has "*complete* information" about the situation (including about other

individuals' possible actions) and the consequences of her actions (Ostrom, Gardner, and Walker 1994:34). Because, in most of the cases, it is impossible to acquire complete information about a situation, let alone act upon it, Ostrom uses the theory of "bounded rationality", which assumes that, in such instances, individuals use heuristics, or "rules of thumb" gained through experience, to make a decision (Ostrom, Gardner, and Walker 1994). Thus, homogenization of individual responses occurs when rational behavior is assumed to take place in a social vacuum, and is not linked to individually-variable conceptions of the context in which a decision occurs. For instance, for some Andean farming communities, the benefit accruing to each individual is perceived to be tightly linked to the benefit of the social group. The social unit called *ayllu* is composed of different families of farmers, who collaborate in communal tasks (Rengifo Vasquez 1998). One could argue that individuals in this type of society are still acting rationally (i.e., they are seeking personal gain) by acting according to what the community expects from them. However, rational behavior in this context no longer entails being selfish, or, better put, it is related to a different notion of selfishness that entails conformity to the conceptions and morals shared by the community. Such rules governing correct demeanor might represent institutions in Ostrom's approach, but they are embedded in a particular conception of a community-individual relationship that she does not consider. Similarly, "rules of thumb" are derived from particular conceptualizations of how the world functions, and by the value systems associated with them. Thus, heuristics are, at some level, particular to each society, or to each individual in a society.

Ostrom's analysis excludes individual, idiosyncratic interpretations that contribute to inter-individual variation in environmental decision-making. Given that different actors have access to different types of information - e.g., experts in a particular domain of knowledge, such as healers or fishermen -, it is reasonable to assume, for instance, that a variety of

ecological ideas, conceptions, and values are held by different actors in the same community. Admittedly, the formulation of frameworks requires a simplification of the possible mechanisms underlying different process, so that researchers from different contexts can use such tools. However, it is precisely in this oversimplification that important causal aspects are left out.

A related issue is that Ostrom's approach presents a particular conceptualization of the world and the role of humans in it, which is assumed to be universal for all human societies. The design principles that Ostrom synthesized, and, later, the conceptual maps that she constructed, correspond to the particular context of a community of users or actors that are exclusively humans. CPRs, as she defined them, can be either of human or "natural" origin (natural meaning separated from the human domain), and are essentially objects dominated and controlled by humans. Following a "modern" ontology (i.e., the modern constitution proposed by Latour), "nature," as represented by CPRs, the "biophysical conditions" of the initial IAD (Ostrom 2011), or the "resources" in the latest IAD-SES framework (Mcginnis and Ostrom 2014), is distinct from the actors that are part of the action situation. In contrast, a number of studies (discussed in the following sections) carried out among several non-Western societies reveal a different set of conceptions regarding animals, plants, and other elements of the environment (Descola and Pálsson 1996; Århem 1996; Atran et al. 2002; Medin et al. 2007; Uzendoski, Hertica, and Tapuy 2005; Fausto 1999; Costa and Fausto 2010; M. Brightman, Grotti, and Ulturgasheva 2014), that necessitate fundamental changes in the frameworks proposed by Ostrom and her collaborators. From the perspectives of some of these societies, for instance, certain plants and animals possess agency and human-like qualities. Thus, classifying them only as resources, as defined above (i.e. agentless objects for human utilization), would be inaccurate.

An attempt to overcome the neglect of non-modern conceptions of humanenvironment interactions has been recently developed by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), an independent initiative, open to countries that are members of the United Nations, the goal of which is "strengthening the sciencepolicy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development" (http://www.ipbes.net). The conceptual framework (CF) developed by the IPBES (Díaz et al. 2015; Figure 2) attempts to integrate the different stakeholders' conceptualizations of the dynamics of resources use, considering such conceptions to be parallel "knowledge systems." Thus, the elements of an Western epistemological configuration of the functioning of environmental decision-making, perceived as the default (in green letters in the graph), are *translated* into an admittedly generic representation of alternative "knowledge systems" (blue letters) (Díaz et al. 2015:5). "Biodiversity and ecosystems" are equated with "Mother Earth," "Ecosystem goods and services" are "Nature's gifts," and "Human wellbeing" is assumed to be "Living-well in balance and harmony with Mother Earth."

The authors recognize that this is an oversimplification. However, despite the laudable intentions of the authors to include non-Western views of the world in a framework that will be used to plan better strategies for managing resources, the problems arising from the construction of this framework resemble those pointed out (above) for the IAD. Terms that belong to different ontological constructions of the world are assumed to be equivalent, represented as boxes in the CF with different colors. The broader implication is that the CF is universal in its representation of conceptualizations of human-environment interactions and the process of decision-making, implying that non-Western views resemble those of the West. In this manner, alternative views of the world in general, and of human-environment interactions in particular, are formulated in terms of content (i.e., "knowledge," as pointed

out in the previous chapter), precluding the possibility that they imply distinct concepts (e.g., an animal is a subject rather than a "resource") immersed in completely different configurations or frameworks. This is similar to academic and applied conservationist efforts that attempt to incorporate particular aspects of local or "traditional ecological" knowledge into Western epistemological frameworks, by isolating such aspects as useful units of information, and by overlooking the context of their creation and the conceptual configuration in which they make sense (Nadasdy 1999; Agrawal 2002a; Löfmarck and Lidskog 2017).

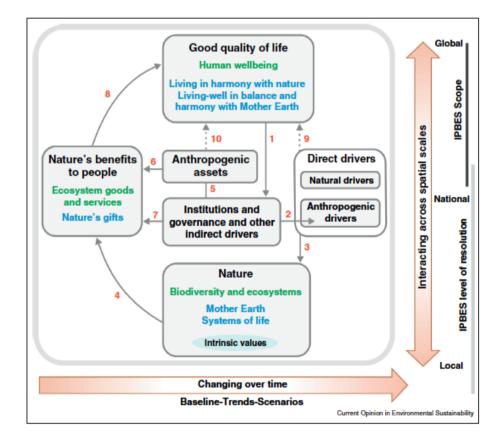


Figure 2: The IPBES Conceptual Framework (CF). (From Diaz et al. 2015)

This is partially the focus of ontologists' criticisms regarding the use of "culture" (see below). The concept is perceived by these scholars to be no longer useful, as, though it appears superficially to comprise these different "representations" that exist between social groups, it implicitly assumes that they all refer to the same existential *reality*. Thus, using the culture concept, nature or biodiversity is only the "cultural" notion used by Westerners to refer to what some non-moderns call "Mother Earth." However, as I will explain in detail in the next section, alternative ontologies are more than just pure knowledge or representations about the same objectively real world. Rather, they suggest that fundamentally different conceptions of the elements that populate the worlds of different human groups are at stake, implying that such conceptions (and worlds) are created through different manners of interacting and socializing with such elements. As a result, in order to accurately investigate the use, or, better, these interactions, theorist must consider the possibility of building alternative frameworks as well.

Ethnographic "Non-Modern" Accounts

An important body of scholarly research suggests the existence of different manners of thinking about the environment, its elements, and the role of humans within it, among non-Western societies. For instance, research by Atran et al. (2002) among the Itza' Maya of Guatemala directly engages the different conceptions (unaddressed by Ostrom) involved in the negotiation over the use of certain species. This study shows that the members of this indigenous group recognize ecological relations between animals, plants and humans, and that humans protect ecologically important plants (i.e., plants involved in interactions with many other species), even those that are not directly useful to them. The evaluation of empirical indicators of Itza' agro-forestry practices provide further evidence, by showing that such practices preserve ecologically important forest species. When asked to rank-order forest species in relation to their importance to forest spirits (*aruxes*), the Itza' demonstrated a shared belief that the *aruxes* value and care for ecologically important species. Thus, the Itza's protection of such species is a result, not of utilitarian interests, but rather of their

respect for, and social relations with, these spirits (Atran et al. 2002). Through the use of complementary methods linking valuation of the forest with actual behavior, this research uncovered an alternative conceptualization of human-environment interactions compared to that assumed by Hardin and Ostrom. For the Itza', the *aruxes* seem to be important players in the "game" over the use of non-human beings (animals and plants). Thus, according to this people, "negotiations" over environmental exploitation involve more than just human actors (see also Schmidt and Dowsley 2010). While this study represents a valuable new approach to understanding environmental interactions and alternative conceptions, further clarification is needed regarding how beliefs, such as respect for the *aruxes*, are related to higher-order ontological models of the environment among the Itza'.

Within the body of ethnographic research that has addressed the issue of ontological configurations, and their implications for relationality, Irving Hallowell's work among the Ojibwa Native Americans of Canada (Hallowell 1960) was pioneering. I affirm this not only because Hallowell's was one the first studies of the topic, but also because he was one of the first who considered it essential to understand people on their own terms and using their own conceptions, a claim later advanced by ontologists (see below), who rarely acknowledge Hallowell's work. He interpreted the existence of the category of *other-than-human persons* in the Ojibwa worldview, which contains certain animals, the master spirits that protect them, and even some non-living elements of the environment (thunders, rocks, etc.). These are all 'subjects' for the Ojibwa (rather than objects) because they can maintain social relations with humans. Hallowell stated: "Although not formally abstracted and articulated philosophically, the nature of 'persons' is the focal point of Ojibwa ontology and the key psychological unity and dynamics of their world outlook" (Hallowell 1960:43). This broader notion of persons is the basis of the Ojibwa relational worldview. This means that, for the Ojibwa, certain elements of the environment are subjects rather than resources. This, in turn, could have

important repercussions for the application of Western theories of natural resources to management plans that rely on collaboration with groups like the Ojibwa.

A reexamination of animism through the work of Philippe Descola at the end of the 20th Century also entailed a reconsideration of ontological foundations, by questioning the stability of the realms of culture and nature, typical of the modernist ontology, and pointing out the existence of alternative relational modes that transcend the limits of such domains. Descola's original proposition for three modes of identification (Descola 1996) has been recently updated and revised into four types of "ontologies," that he defines in terms of the different combinations of the contraposed features "interiority" and "physicality" that mediate the interactions between humans and non-human others: 1) animism, where human and non-human beings share a similar essence despite their physical differences; 2) totemism, in which a particular non-human shares ontological and physical elements with a human group; 3) naturalism (the inverse of animism), characterizing Western ontologies, such that similarities between entities are physical, while differences are ontological; and 4) analogism, that recognizes an inherent difference among all things and beings, but organized in such a manner that it is possible to establish points of correspondence, or analogies, between them (Descola 2006; 2013). Descola acknowledges that this typology is not rigorous and that different conceptions can coexist simultaneously within societies and individuals. However, he contends that one of the four tends to predominate and is maintained by different individuals across particular situations. Indeed, this is what makes it a particular ontology (Descola 2006).

A number of studies, some of them inspired by Descola's work, explore animistic views and attempt to move beyond the Western dichotomy between nature and culture (Århem 1996; Cormier 2003b; Descola and Pálsson 1996; Erikson 1997; Erikson 2000; Tania Stolze Lima 2000; Reichel-Dolmatoff 1976; Surrallés and García Hierro 2005; E. B. Viveiros

de Castro 1992; Bird-David 1999). For Amazonian societies in particular, the development of "perspectivism" demonstrated that relations between humans and certain animals and plants transcend the object-subject duality. Tania Lima (1996; 1999) initially suggested this term as a particular form of animism, based on her research among the Juruna, and also citing the ethnographic research of other studies, such as those of Howell (1984), Århem (1993) and Baer (1994). She described that, for the Juruna, interactions with certain beings occur as parallel events – i.e., taking place simultaneously from the perspective of both humans and these beings - because all actors have a "point of view" in the form of a human perspective of the world. Thus, what the Juruna perceive as a hunt for white-lipped peccaries, is seen by the peccaries as the attack of an enemy raiding party. As a result, "[t]here is no reality independent of a subject" (Lima 1999:117).

In dialogue with Lima, Eduardo Viveiros de Castro (VDC) further developed her insights, building on different ethnographies of the Americas, but mostly focusing on the Amazon region, and expanding the scope of perspectivism to that of a pan-American worldview that encompasses the perception of non-human beings (E. Viveiros de Castro 1998). VDC's work proposes that humans, certain animals, and spirits are ontologically similar to each other because they possess a human soul, which affords them a human-like consciousness that is manifested in their human-like practices. These non-human subjects see themselves as living in human houses, performing human activities, while their social organization resembles human social systems. They also see their prey and predators as human prey and predators. Thus peccaries see worms that they dig from the ground in the same way that humans see game meat. Peccaries see humans (their predators) as jaguars (humans' predators). Differences among species, then, consist of the "envelop" covering their souls, i.e., the external body is worn like "clothing" and disguises the spiritual likeness. This particular condition of ontological similarity and somatic variability allows many instances of

metaphysical metamorphosis, such as the animal-human transformations of evil spirits or Amazonian shamans. In broader terms, it permits interaction among beings in an extended social world comprising subjects of different *natures*. Although some studies suggest that some animals do not manifest human-like consciousness or spirituality (Baer 1994; Overing 1986), Viveiros de Castro asserts that master spirits that are common in Amerindian worldviews - spirits that take care of and govern particular species - play the role of the subject with which humans socially engage.

Building on Descola's naturalism and animism and influenced by Latour's stance on modernity (see above), Viveiros de Castro's structuralist analysis attempts to reformulate the Western dichotomy between nature and culture in terms of the perspectivist ontology. For the moderns, the author asserts, the similarity between humans and animals lies in their common 'nature,' expressed in the materiality of their bodies. Difference, in turn, is established by the existence of diverse 'cultures' or representations of that physical world. Thus, Western societies are *multiculturalist*. In contrast, for non-modern societies, according to Viveiros de Castro, all beings possess a human soul, and as a consequence they share a similar culture - that is, having a human perspective of the world. Alterity, then, lies in the species' bodies, the group of dispositions and affects that serve as envelops or clothes to cover a common soul, and that allow others to note their perspectives. Therefore, Viveiros de Castro classifies non-moderns as *multinaturalists*.

There are some issues worth noting in Viveiros de Castro's approach, such as his tendency to overgeneralize the structuralist 'model', ignoring the nuances of ethnographic context (Turner 2009); his neglect of inter-individual variation in views within each of these contexts; and his conceptualization of Amerindian ontologies as timeless and unchanging. I will address these and other critiques in more detail in Chapter 6. For now, I wish to highlight the value of perspectivism for exposing alternative modes of humans' conceptions and ways

of engaging with the environment. Such a relational ontology, where interactions among humans and some animals take place in an inter-subjective context, as pointed out by Hallowell and other researchers, may have important repercussions for strategies of resource management, as well as for study of environmental decision-making.

Conceptualizing Ontologies

Viveiros de Castro's development of multinaturalism, in combination with Latour and his STS colleagues' examination of the hegemony of modernist thought, mentioned above, as well as other ethnographic studies that pointed out the existence of alternative conceptualizations of the world (in contrast to that of the ethnographer), such as the work of Marilyn Strathern (Strathern 1988; Strathern 1996; Strathern 2004a), Tim Ingold (2000), and Roy Wagner (1981), influenced scholars from different epistemological positions to independently develop the so-called ontological turn in anthropology. Their critiques resemble concerns raised during the mid-1980s during the crisis of representation in anthropology, where the voice (and writings) of the anthropologist was questioned for pretending to objectively represent the people under study by exotizing or "otherizing" them, and by presenting their culture as an integrated whole (Clifford and Marcus 1986). This new shift calls for a reconsideration of more fundamental assumptions within the field than the previous "reflexive turn" of the 1980s, challenging not only the role of anthropologist as the producer of constructed representations, but also delving into philosophical concerns by pointing out that such representations are not sufficient to understand "the other" and her world. For most of these scholars, anthropology is concerned with difference (Carrithers et al. 2010; Holbraad 2009; E. Viveiros de Castro 2011). Therefore, instead of approaching such difference in terms of cultural representations or ways of knowing a single objectively-real world - that is, from an epistemological stance -, the premise is to burst the modernist bubble

and to explore radically different worlds or realities - i.e., taking an ontological standpoint (Blaser 2009; Carrithers et al. 2010; Henare, Holbraad, and Wastell 2007). The ontological turn, then, encompasses a diverse body of research whose common interest is in taking the ethnographic subjects' articulations and conceptualizations seriously. In that way, the intention of these scholars is to rethink the manner in which anthropological research is conducted, ensuring that, this time, it actually takes a bottom-up perspective (Alberti et al. 2011; Blaser 2010; Henare, Holbraad, and Wastell 2007; Holbraad 2009).

Ontology as a Heuristic Device

Henare, Holbraad, and Wastell's Thinking Through Things (2007) was one of the first volumes that proposed the turn to ontology, encouraging researchers to pay attention to others' construction of their own worlds through the emergence of 'things' or concepts. For these authors, the ontological pursuit is methodological, and taking seriously statements such as "powder is power," formulated by Cuban diviners (Holbraad 2007), and considering such statements to be literal truths, serves the anthropologist to advance theory. Their proposal is to perform anthropology from a "radical constructivist" position, that is, by collapsing the difference between discourse - such as in statements like "powder is power" - and reality i.e., powder is power. Holbraad further develops his version of the ontological project in the debate "Ontology is just another word for culture" (Carrithers et al. 2010). In order to defend his position against the motion, Holbraad asserts: "the key tenet of an ontological approach in anthropology, as opposed to a culturalist one in the broadest sense, is that in it anthropological analysis becomes a question not of applying analytical concepts to ethnographic data, but rather of allowing ethnographic data to act as levers [...] for the transformation of analytical concepts." For him, anthropologists must recognize the limitations of their own concepts for understanding those of other people. Since we and the people that we work with live in different worlds, he argues that "[o]ur task... must be to

locate the inadequacies of our concepts in order to come up with better ones" (Carrithers et al. 2010:180). Thus, instead of trying to make sense of utterances such as the Nuer claim that "twins are birds" (Evans-Pritchard 1951) – by "interpreting" them using our own conceptions, or 'translating' them into our terms – the author proposes that we should modify our own concepts in order to hold these statements as truth, a method that he calls *ontography* (Holbraad 2009). From a "culturalist" point of view, a difference in concepts would be considered a disagreement over the term twin, and the work of the anthropologist would be to explain how it is possible that a twin can be considered a bird. In contrast, Holbraad indicates that the ontological approach to alterity questions the implicit assumption that we understand what they might be saying, and suggests that concepts of *twins* and *birds* might be referring to two entirely *different* notions. The author asserts that "[t]he Nuer... may be talking past us rather than against us" (Carrithers et al. 2010:184). By recognizing that the Nuer's concepts are not known to us, we are stripping their affirmations of any judgement - that is, they are not wrong because they disagree with us. Then, for Holbraad, the corollary, is that anthropologists should not inquire as to why ethnographic data is the way it is, but rather what ethnographic data is in itself: we should neither interpret nor explain, but rather conceptualize. Thus, by examining our own concepts, anthropology becomes a recursive activity (Holbraad 2012).

It is important to point out that Holbraad's rendition of "ontology" (also expressed by Henare, Holbraad, and Wastell 2007) does not represent other people's worlds in themselves, but rather the anthropologist's (re)construction of them, that results after reconsidering and transforming her own analytical concepts, so that "conceptual repertories" gathered through ethnographic research, reflected in statements such as "twins are birds," are tenable. Ontology, then, works as a heuristic device (Holbraad in Carrithers et al. 2010; Henare, Holbraad, and Wastell 2007). Yet, despite the fact that many of Holbraad's arguments

resemble those of others who follow the ontological approach (e.g. Pedersen 2012), Holbraad's interpretation of ontology is not widely shared among other anthropologists. After all, anthropological approaches to ontology did not arise as a self-aware movement (M. Scott 2013), and there is considerable semantic variation around the term ontology⁴.

Ontology as a Performative Worlding

Other authors have attempted to ground the term ontology, utilizing it to understand current environmental conflicts (Blaser 2009; 2010; 2013; de la Cadena 2010; 2015). This is the case of Blaser and his development of "political ontology" (2009; 2010; 2013). In contrast to Holbraad, Blaser uses ontology to refer to the realities that people create. For him, terms such as cosmology, worldview, or culture, are inadequate because they are still immersed in the so-called Cartesian dualism - i.e., nature-society, subject-object, materialmental - that characterizes Western ontology. In contrast, Blaser's use of the term 'ontology' is meant to transcend this dualistic conception (Blaser 2009; see also Carrithers et al. 2010). He considers that using ontology as a heuristic device, as Holbraad does, is not sufficient. For Holbraad, a fundamental issue that anthropology intends to address is making sense of things said by others, that appear to us as nonsensical. The solution for him is to realign our conceptions with those of the people we study, so that we can try to understand their statements. In contrast, Blaser contends that the relativistic paradox remains: "if taking different worlds seriously means that they cannot be wrong, what do we do when facing the world that claims that the world is only one and what we have are multiple representations of it?" The only manner, according to Blaser, to avoid articulating such a "foundational claim" is by conceiving of ontology as "a way of worlding, a form of enacting a reality" (Blaser 2013:551), that is, a performative endeavor rather than an analytical tool. In the same

⁴ For reviews of the term, see Bessire and Bond (2014), and Kohn (2015).

tradition as feminist theoretician Donna Haraway and STS scholars who seek to go beyond the historically-contingent modern dualisms, mentioned above, Blaser argues that the ontological approach should conceive of reality as a "material-semiotic formulation" (Haraway 1991; 2007; Latour 1999; Law 2004; 2007; Mol 1999). This requires us to stop assuming that a material world exists *out there*, and start imagining the possibility of alternative realities or *worldings*, which, following Latour, are being continuously produced through the creation of hybrid, or nature-culture, configurations. In that way, it is possible to overcome the problem of relativism, and to formulate statements about people's realities that do not need to be taken as absolute truths in *themselves*; in other words, "to articulate a foundationless foundational claim" (Blaser 2013).

In order to illustrate how performative ontologies come about, Blaser employs Annemarie Mol's "ontological multiplicity" (Mol 1999; 2002). Using the example of atherosclerosis, Mol explains how different versions of a concept come into existence as a consequence of the different 'performers' involved. Thus, the atherosclerosis that registers to the clinician as a patient's pain, is interpreted by the radiologist as a blood pressure differential expressed in a graph, and, under the pathologist's microscope, as a shrinkage of arterial diameter. Atherosclerosis, then, is ontologically variable according to the different actors that enact it. As such, Mol argues "*ontology* is not given in the order of things, but [...] instead, *ontologies* are brought into being, sustained, or allowed to wither away in common, day-to-day, sociomaterial practices" (Mol 2002:6; emphasis in original). Thus, rather than observing or constructing a particular version of a reality, a thing exists because it is enacted: "reality does not precede the mundane practices in which we interact with it, but is rather shaped within these practices." Because such a multiplicity of realities-in-practice is constantly being shaped, and in that regard, is "open and contested," it is also political (Mol 1999:75). Blaser builds on Mol's insights, as well as on other ethnographic accounts that show the different manners in which reality is conceived, in order to propose the possibility of a variety of reality-makings, which may be entangled in *partial connections* (Strathern 2004b), in what many call the *pluriverse*, which replaces the problematic conception of a universe that exists "out there." Blaser's focus on politics is intended to emphasize the existence of alternative realities that are often made invisible by the modernist presumption of a unique world, putting into practice Latour's search for a symmetrical anthropology. Thus, the meaning of 'political ontology' is twofold: First, it alludes to the politically charged negotiations through which the elements of a particular ontology are substantiated. In addition, political ontology refers to the study of conflicts that arise from such negotiations, as different ontologies interact and attempt to persist on their own terms (Blaser 2009; Blaser 2010; Blaser 2012; Blaser 2013).

In the face of recent environmental conflicts, Blaser considers approaches such as political economy and political ecology to be misguided precisely because they rely on the modern assumption that conflicts are based on epistemological misunderstanding - i.e., different ways of knowing a common material world -, when they are essentially ontological - i.e., people are referring to entirely different worlds (Blaser 2009). In political economy, non-Western environmental perspectives are only validated when fitted within modern/scientific discourses of "nature" (e.g., the case of indigenous or traditional ecological knowledge, discussed in Chapter 1), and, when they cannot be fitted, such perspectives are often eliminated from the political domain. This corresponds with what Elizabeth Povinelli has called "cultural hegemony," i.e., when subaltern perspectives are made invisible by the dominant culture that is assumed to be "objective" and "culturally neutral" (Povinelli 1995). Her work, which Blaser considers "a precursor of political ontological concerns" (Blaser 2013:558), took place in the Aboriginal community of Belyuen in Northern Australia and

examines how Aboriginal conceptualizations of the world are dismissed by state officials, subordinating them to the dominant Western ontology. She asserts that, for the Aboriginal people, social interactions that take place between people and Dreaming sites are fundamental for the well-being of the countryside. These conceptions, however, are only considered by government commissioners when confirming the existence of cultural traditions that reinforce Aboriginal ties to the land, since the Australian government relies heavily on such cultural customs for granting land rights. In this way, for governmental authorities, Aboriginal beliefs do not transcend the "cultural" realm. Only Western concepts such as ecology and political economy, rather than the Aboriginal conceptualization of human-environment interaction and labor, are taken seriously and considered important for solving *real* problems. Povinelli asserts that official representatives of the Australian government overlook the fact that their own cultural framework, in which science is considered the only means for ascertaining truth, is put into practice at the expense of the Aboriginal framework. Similar to Latour's critique of the modern constitution (Latour 1993), she affirms: "If culture is a lens through which the local group mediates the practices and policies of the larger system [...], then what of the lens of the larger system and its practices of knowing?" (Povinelli 1995:506).

Marisol de la Cadena (2007; 2010; 2015) makes a similar argument in reference to the rise of Andean indigenous movements, suggesting the existence of a form of politics that defies the modernist conception. The recent inclusion by indigenous legislators of 'nature' or *Pachamama* as an entity with rights in the Ecuadorian constitution, as well as the protests of indigenous communities against mining activities close to the Ausangate and Quilish mountains in Peru for fear of incurring the mountains' anger (de la Cadena 2010), are instances in which non-human beings are beginning to become a part of the public political space. In this context, de la Cadenza asks us to reconsider "politics as usual" in favor of a

politics that include those non-human actors, or *earth beings* as she calls them. Such inclusive politics is crucial for understanding indigenous Andean conceptualizations of human-environment interactions. She also employs Strathern's term *partial connections* in order to illustrate the nature of Andean indigeneity, as a "historic-political articulation of more than one, but less than two, socionatural worlds," resulting from indigenous linkages to the majority "Western" Peruvian society (de la Cadena 2010:347). Such partial connection, expressed in "historically shaped discourses through which they appear (class, ethnicity, and the current confrontation with neoliberalism) and exceeding them at the same time" have favored indigenous participation in the politic arena (de la Cadena 2010:348). However, Andean people have been traditionally obliged to modify and translate that "excess" (e.g., notions of earth beings) into modern terms, in order to be considered legitimate actors. Conklin and Graham (1995) make a similar case for indigenous Amazonians, whose constructed political identity is only effective in affording them political power if it conforms to Western stereotypes of indigeneity. Like Povinelli, de la Cadena criticizes the hegemony of the dominant modern ontology which sets such beings outside of politics - the "modern" conception of politics - because this realm is reserved solely for human-to-human interactions (de la Cadena 2010). Thus, earth-beings are normally relegated to either the domain of nature, where they are studied through science, or disqualified as purely "beliefs," "folklore," or symbolic elements of non-modern knowledge systems. However, the author argues that Western knowledge, based on scientific facts, is never lowered to the level of "beliefs." In this way, environmental conflicts are often explained from a political economic standpoint, arguing, for instance, that such conflicts are the result of the neoliberal approach of the Peruvian government, which facilitates the expropriation of lands. Citing Chakrabarty (2000), de la Cadena asserts that even though such interpretations might "not be inaccurate" they are "not necessarily sufficient" (de la Cadena 2010:341). Following Isabelle Stengers, the author

calls for "slowing down reasoning" when considering non-modern worldviews, and for us to stop ascribing our preconceptions, in order to grasp how entities such as earth-beings can be important political actors. She also employs Stengers' concept of "cosmopolitics" to refer to the political reconfiguration required after we have "slowed down" our reasoning, which recognizes that alternative voices or worlds are part of the political space, or cosmos, without giving primacy to any of them (Stengers 2005). De la Cadena calls this a "pluriversal politics" (de la Cadena 2010:360), i.e., a politics which, instead of addressing conflicts over power within a unique world, refers to antagonistic power relations among different worlds.

Blaser's political ontological project has been informed by the work of de la Cadena and other academics from both Latin American and the United States (Escobar 2003; Escobar 2008; Mignolo 2000; Mignolo 2007; Walsh, Schiwy, and Castro-Gomez 2002), who, in the fields of post- and decolonial, subaltern, and cultural studies, examine asymmetries or inequalities that exist between modern and non-modern societies as a consequence of colonial encounters. In particular, Blaser attempts to contribute to the cosmopolitical cause by uncovering different ways of "worlding" and the conflicts that arise when they intermingle. In his study among the Yshiro indigenous people that inhabit the Paraguayan Chaco, Blaser (2009; 2010) recounts the failed experience of a hunting program established by the Paraguayan state, and supervised by the EU-supported NGO Prodechaco. Blaser argues that the root of this problem is a type of misunderstanding called "uncontrolled equivocation" by Viveiros de Castro (2004). Misunderstandings of this kind occur between individuals with different ontologies or worlds, rather than different perspectives of a common world, who do not realize the extent of these differences. In order to understand the different concepts that compose such worlds, and using Latour's terminology, Blaser (2009) affirms that the failure of the hunting program is based on the *factishes* employed in the varied notions of "sustainability" or "environment" held by the different actors involved. For

the Yshiro, the maintenance of reciprocal relations guarantees the availability of animals in the *yrmo* (a *factish* that represents the physical environment). For "traditionalists," these relations occur between the *bahluts*, the original "specimens" of game animals who "make" animals approach Yshiro hunters, and the *konsaho*, the male or female shaman who conducts rituals to express gratitude over these gifts. For those who do not believe in *bahluts*, reciprocity is maintained between human beings. Thus, in order to guarantee the correct execution of retribution, the Yshiro communities believed that their Federation should possess exclusive rights to manage negotiations between hunters and the pelt industry. In contrast, Prodechaco's practiced "environment" involved complying with two different *factishes* held by the entities that created the institution: The European Union's *factish* of "environment", necessitating the conservation of biological and cultural diversity; and the Paraguayan government's "environment", which represented the interests of powerful landowners of the region. Based on these notions, Prodechaco restricted Yshiro hunting on private land.

According to Blaser, Yshiro ontology was in direct opposition to that held by the other actors, for whom neoliberal principles of private property rights and market values take priority. The author affirms that the Yshiro did not understand the relationship between sustainability and hunting restrictions, and, in general, the necessity to obey national commands, perceived as unconnected to the central issue of performing reciprocity in order to guaranty sustainability. The Yshiro's disregard of Prodacheco's hunting restrictions was, in turn, considered to be evidence of environmental over-exploitation, despite the fact that the Yshiro did not hunt beyond the limits recommended by animal population studies. Thus, Yshiro claims of sustainability based on their "traditional" beliefs were "translated" by Prodacheco and the Paraguayan government as being either mistaken or an example of cultural manipulation. Finally, the Paraguayan government decided that the only way to force

the Yshiro to comply with their regulations, designed from a "bureaucratic-scientific" perspective of conservation, was by intensifying police vigilance on private land, and by establishing a National Park in the region, without consulting the Yshiro community (Blaser 2009; 2010).

Blaser's account of the Yshiro case illustrates the ontological conflicts that took place between the different actors involved in the management of their land, caused by different enactments or *factishes* of the environment, and interpreted as "equivocations" on the part of the other actors. According to the author, these enactments substantiate different worlds, not just different cultures, which are constantly in the making. In contrast to *culturalist* interpretations, where conflicts related to environmental conservation are approached by negotiating among the perspectives of different cultures regarding a common environment, political ontology addresses the unnoticed negotiations that exist between distinct performances or realities. In the particular case of the Yshiro, Blaser asserts, these "equivocations" expose the prevalence of a modern ontology that manages to sustain its hegemony by obscuring and subjugating "the enactment of other possible worlds" (Blaser 2009:16).

In a similar manner, I contend, indigenous conceptualizations of the environment are being neglected in environmental and conservationist theory and discourse, specifically in that related to management of resources. However, there are some conceptual problems with the approach of Blaser and other ontologists that must be taken into account when applying an ontological analysis. One of these pertains to theoretical and methodological considerations regarding establishment of the extent of difference. I discuss this and other concerns in the next section.

Critiques to Ontological Approaches

In approaching the critique of modernity and some manifestations of the ontological project, my purpose has been to question and reconsider our preconceived ("modernist") assumptions about what the world is and how it functions. In the context of environmental decision-making, the turn toward ontology addresses some of the problematic issues pointed out at the beginning of this chapter regarding theories of the management of common-pool resources that attempt to assess and predict environmental behavior. Ostrom and colleagues' suppositions that Western conceptions such as "common-pool resources" or "resource management" are universal, and that negotiations over their consumption only occur between human beings, or the IPBES Conceptual Framework's well-intended translations of Western ideas into non-Western terms, create a space for potential "equivocations," similar to the ones indicated by Blaser in the case of the Yshiro. Tools like conceptual frameworks, used commonly for understanding governance systems and planning strategies at the international level, still entail a modernist conception of the world, resting on a scientific foundation, which not only dominates other ontologies during the development of solutions to environmental problems, but in many cases makes them invisible in these negotiation contexts, as demonstrated by Blaser. However, some scholars have raised important concerns regarding the Ontological Turn (OT), in terms of its theoretical and philosophical implications, as well as its empirical assessment.

For a start, similar to the critique I presented above regarding research conducted by Ostrom and colleagues, most ontological analyses do not problematize the potential variation of positions that may exist within a social group to which a particular ontology is attributed. Ontologies, or realities, are usually portrayed as homogeneous and uncontested within the society, and ontologists often ignore idiosyncratic variation and dynamic processes of cultural change and assimilation. Radical alterity, for ontologists, only takes place among

Westerners and non-Westerners, or between our ethnographic subjects (allegedly nonmodern) and us (allegedly moderns). This is a common critique directed toward Viveiros de Castro's perspectivism, in which he attributes a pan-American ontology to societies that have different histories of contact, and certainly, different manifestations of animism (e.g., Turner 2009; Ramos 2012). In fact, the emphasis on criticizing Westerners, or moderns, seems to reproduce one of the great divides pointed out by Latour (1993) – the difference between the moderns and the pre-moderns. In that way, those anthropologists who attempt to account for new *worldings*, are actually instantiating the modernist ontology that they seek to move beyond.

These assumptions presuppose two related issues that resemble concerns regarding the use of "culture" to denote difference (Abu-Lughod 1991; 1999; Appadurai 1996; Bessire and Bond 2014; Brumann 1999). First, there is the problem of representation, or, whose voice within a social group is taken to be "emblematic" of their ontology (Graeber 2015). In the case of Blaser's work, he is careful to indicate that he is not presenting a generalized notion of the Yshiro cosmos, *yrmo*, but rather accounting for a particular version of it, provided by what he considers the Yshiro "intellectuals": "[Intellectuals] ponder and question more systematically than most Yshiro the meaning and consequences of the contemporary order existing in the Chaco region. Hence, they have become references to which loosely connected groups in the Yshiro communities resort for advice or for opinions in private consultation or during community meetings" (Blaser 2010:24). Ethnographers have often consulted experts for constructing "culturally informed" narratives, neglecting non-expert voices in this process. This is a problem if our intention is to understand the social group as a whole. Blaser claims that he is aware of dissonant perspectives that exist within the Yshiro community. However, he does not incorporate such variation into his analysis, and, although his intention is not to account for the "Yshiro version" of a conflict, his conclusions seem to resemble a

contraposition of Western and non-modern ontology. Blaser does inform us of the existence of conflicts between 'traditionalists' and the Christianized Yshiro, who see the beliefs of the former as impediments to 'development' (Blaser 2009; 2010). However, the ontology of the traditionalists takes priority in his analysis. Something similar occurs with de la Cadena's account of Andean cosmopolitics. She is clear in asserting that her ethnographic study was the result of her interviews with two Andean 'experts' (de la Cadena 2010; 2015) and that she is not trying to describe an Andean ethic. However, on many occasions, her claims seem to be applied beyond her informants, a fact most noticeable in her notion of "Andean indigeneity," which she treats as an emergent phenomenon without addressing the patterns of inter-individual variation inherent in such a notion. In this regard, I believe that the attempts of these two authors to approach the "pluriverse" could benefit from incorporation of dissonant voices within the social groups themselves, and their negotiations over conceptions such as yrmo or manifestations of earth-beings.

The complementary side of this issue is the tendency among ontologists to conceive of alternative realities as bounded "objects," that remain constant not only across individuals within a particular social group, but also through time, as often happens with conceptualizations of "culture" (Abu-Lughod 1991; Eriksen and Nielsen 2013). Accounts such as Viveiros de Castro's perspectivism, where the level of abstraction and theoretical reflection is such that ethnographic data seems to be relegated to a second plane, suggest that these ontologies have always existed in the manner that we currently know them, and that they will remain in the same form permanently. As Bessire and Bond point out: "the ontological turn reifies the wreckage of various histories as the forms of the philosophic present," with its ultimate effect being to "standardiz[e] multiplicity and fetishiz[e] alterity through the terms by which it claims to eschew representational politics" (Bessire and Bond 2014:449). Furthermore, and similar to the case of reified notions of "culture," or Bourdieu's

habitus, in which timeless dispositions seem to exist independently of the individuals that they affect (Bourdieu 1977), questions such as how realities or "worldings" emerge and how they are reproduced and adapted by younger generations, still remain unanswered.

In addition, if realities or worlds are demarcated by radical alterity, then how do we explain the connections that exist among them through what some call the "partial connections" composing the "pluriverse"? For de la Cadena, partial connections are the syncretic configurations that emerge at the confluence of different worlds. In the case of the Andean world she asserts: "Through the lens of partial connections, indigeneity in the Andes - and I would venture in Latin America - can be conceptualized as a complex formation, a historic-political articulation of more than one, but less than two, socionatural words [...] Neither indigenous nor mestizo, it is an indigenous-mestizo aggregate that we are talking about. [...] as fragments with no clear edge, 'indigenous-mestizos' are always a part of the other, their separation is impossible. Thus seen, albeit hard to our logic, indigeneity has always been part of modernity and also different, therefore never modernist" (de la Cadena 2010:347-8). Without neglecting the history of colonial oppression on Andean and other indigenous peoples in Latin America, my concern with de la Cadena's approach is that, precisely given this history, it may no longer be possible to speak of a radically different nonmodern world or worlds, at least in the way that it is conceived by her and other ontologists. My focus here is on the nature or *ontology* of the alterity that some anthropologists profess to know. Holbraad asserts that "conceiving of alterity in ontological terms (i.e., as a matter of what things, including alterity itself, may be) is a way of giving it free rein to be as different as it wants. Unlike saying that differences are social or cultural, saying that they are ontological leaves constitutively open the question of what they might be, allowing logical space for it to be answered differently in any given instance" (see his comments in Blaser 2013). The task proposed by Holbraad and other ontologists, then, is laudable in that they

want to strip alterity (and everything else, for that matter) of any a priori conceptualization. However, such a goal seems unattainable, and comparable to the scientific (and traditional ethnographic) goal of objectivity, which is intended but never achieved due to the effects of the researcher herself on the phenomenon under study. By asserting that alterity should be conceived of in ontological terms, we are already imposing a particular view of what alterity is: it is ontologically different.

This is precisely one of the most important critiques of the OT. It is still the voice of the anthropologist that is heard in the reification of a "reality," and it is unclear whether they are actually taking others seriously, or whether they are ascribing, from the outset, their own presuppositions of a radical difference that may not be that radical after all. As Heywood asserts: "there are many worlds' is an ontological commitment, a meta-ontology in which 'many worlds' exist" (Heywood 2012:148). This is evident when Viveiros de Castro's multinaturalism and perspectivism, an ontology attributed to indigenous Americans, is taken as a framework to conduct anthropological research (Blaser 2009; Hage 2014). The ontology of the Amerindian people, in which human and non-human beings share a similar essence or soul and differ in their bodies (or natures), allowing them to inhabit their own realities (E. Viveiros de Castro 1998), is assumed by anthropologists to be a general paradigm or metaontology holding that different human groups (i.e., Yshiro intellectuals, Andean peasants, Cuban diviners) inhabit their own worlds. To be fair, I must acknowledge Blaser's direct address of this concern, in which he asserts that the pluriverse is a heuristic device useful for considering the *possibility* of alternative realities rather than *describing* reality (Blaser 2013). However, as Holbraad points out, he seems to commit himself to a particular understanding of alterity, one that is "emergent, fluid and tentative" (see Blaser 2013). I discuss this point in more detail in the following section.

Finally, as I argued above, despite the fact that ontologists seem to support a multiplicity of ontologies, often conceived as coexisting in a pluriverse, some critics suggest that a number of OT scholars are ultimately reproducing what they purportedly claim to reject: "the most modern binary of all: the radical incommensurability of modern and nonmodern worlds." (Bessire and Bond 2014:442). In some cases, ontologists even seem to be actively advocating for the embrace of the non-modern ontology, essentializing it as animistic, relational, and non-dualist (M. Scott 2013). While the intention of these authors is to denounce the hegemonic status of Western thought, and, as they say, "redefine anthropology as consisting of a theory of people's ontological autodetermination" (E. Viveiros de Castro 2011), their scale seems to be leaning in a particular direction, and the premise is not coexistence but replacement of the Western by the non-Western (Latour 2009). Criticizing this position, Heywood states that "taking seriously' is a question of approach, and not of description," which entails attempting to understand a particular world at a given time, rather than redefine alterity in a specific way (e.g., as a pluriverse). Building on Viveiros de Castro's approach to understanding Amerindian ontologies, Heywood asserts that taking a particular ontology seriously implies excluding, at least at that particular moment, the possibility of taking other ontologies seriously, such that the limits of each ontology are "a matter of methodological choice" (Heywood 2012:149). While this method might overcome the imposition of a meta-ontology, avoiding favoring one (i.e., the "relational" ontology) over the other (the "modernist"), Heywood's claim overlooks the possibility that ontologies do not exist in isolation, and that they might emerge as a political response in contraposition to other manners of conceptualizing a reality. Similarly, in their accounts of indigenous cosmopolitics, Blaser and de la Cadena also seem to ignore the possibility that the indigenous ontologies that they describe are a form of strategic representation, a political identity assumed as a homogenous image in order to pursue political goals (B. Conklin and

Graham 1995; Cepek 2016). Without questioning the legitimacy of such attempts, I believe that it is crucial to conceive of ontologies as fluid endeavors, whose boundaries may result from specific politico-historical negotiations.

Ontologies as Emergent Configurations: Some Theoretical and Methodological Premises

My intention in approaching and criticizing the OT is not to reject the possibility of difference, but to avoid making *a priori* assumptions about its extent and nature, especially if the tendency is to claim the existence of alterity before we actually know the nature of these other potential worldings. While there may be concepts and manners of conducting oneself in the world that differ markedly between members of diverse societies, the existence of such differences, potentially giving rise to "equivocations," do not necessarily imply the existence of radically different worlds that are stable in themselves. Alterity might not be as rigid as ontologists claim, and the boundaries between these "realities" may be rather fluid. While the meta-ontology suggested by the OT goes as far as considering difference as "a difference *specifically* of being," in which "'being […] encompasses 'everything'" (Heywood 2012:148; emphasis in original), I want to leave that possibility open, and consider ontological status as an empirical question.

For the purpose of this dissertation, I define "ontology" as an individual's, or a group's, conceptualization of the world, as understood by anthropologists and not as worlds that exist by themselves *out there*. Although it might sound like a contradiction, here, I am partially following both Blaser and Holbraad in their renditions of ontology. First, like Blaser (2013), I believe that ontologies are composed of the material-semiotic expressions that individuals formulate about their worlds, what Latour calls *factishes*, the nature-culture hybrids that result from enacting a particular reality. However, in contrast to the concept of radical alterity that entails a rupture between realities, or worldings, of modern and non-

modern peoples, I favor the possibility that people's realities are not isolated, but rather overlapped to greater or lesser extent. Thus, individuals that are historically linked to each other and are part of a specific social group at a particular level of organization - i.e., family, clan, community, society, or however we want to demarcate them - may, among themselves, share more similar conceptions of the world than they share with members of a different social group. I will call these within-group similarities an *emergent ontology*, a notion partially inspired by Ross' approach to "culture," which he defines as the "emergence of shared meaning" (Ross 2004). Shared conceptualizations emerge partially based on the common social realm in which people navigate, similar to the habitus described by Bourdieu. However, in contrast to this encompassing, and alleged atemporal conception, it is essential to account to its dynamic nature, and investigate the historical, social and environmental factors that contribute to the emergence of different habituses, as well as the processes that make that particular conceptions to become widely shared (Ross 2004). As Ross asserts for culture, the boundaries of an emergent ontology are not fixed, since, as an emergent phenomenon, it is the product of individual perspectives which undoubtedly change over time and across contexts. In this regard, my approach differs slightly from Blaser's conception of ontologies as emergent (Blaser 2013), in that he still overlooks the dynamics of individual contributions (and consequently, variation) for the formulation of ontologies.

In addition, and probably as a consequence, I also follow Holbraad (Carrithers et al. 2010; Holbraad 2009) in considering that ontologies do not exist *out there*, as worlds in themselves, but rather are heuristic tools that anthropologists use to make sense of people's conceptualizations and engagements with their world. I do believe that concepts that people formulate are *factishes*, things that are part object and part meaning, that vary from person to person, and perhaps within the same person in different moments. However, defining an ontology on the basis of a collection of *factishes* is an abstraction, as is the "emergence" of an

ontology, as I have suggested above. In the context of the OT, ontologies are abstractions of pieces of information, subjectively demarcated by the ethnographer, and etically (as opposed to emically) reified as "realities," - e.g., through "foundationaless foundational claims." It is true that ethnographic research can bring us closer to the people that we study in order to better understand them – although, according to some ontologists, our opposed realities are destined to be incommensurable. Yet, our ethnographic understandings are still theoretical narratives about what the world might be for the people we study. While it is almost certain that most ontologists would probably not agree with this statement, I, like Graeber (2015), doubt that the subjects of anthropological study routinely concur with our abstractions, accepting that they live in fundamentally different realities than other human beings. I recognize that the approach to ontology that I am proposing might resemble a meta-ontology, a critique of the OT explained above. A similar critique has been made by Holbraad of Blaser's assertion that difference is fluid and emergent (Holbraad in Blaser 2013). As recounted above, Holbraad's concern is that Blaser is establishing a particular nature for difference, and, as such, it might appear as a meta-ontology. However, Blaser contends that establishing such tentative limits for alterity – i.e., being fluid and emergent – is not equivalent to imposing a dominant ontology – e.g., modern ontology –, but rather admits the possibility of political contention among ontologies. Furthermore, he asserts that seeking "heuristic purity" for difference, as Holbraad attempts to do - i.e., "understanding difference in its own terms" –, can only be fully pursued by contrasting it with a particular "story" of how the world is, and, in that regard, by delimiting alterity (see Blaser 2013 for both positions). Since stories, or narratives, tend to be open to interpretation – or, as Helen Verran asserts, "stories exaggerate contingency" (see Blaser 2013) – Blaser asserts that the "delimitations" that he proposes for his particular "story" of how the world is, that is, the fact that they are enacted and performative, are rather "constitutive" characteristics. My argument

is similar in that I consider practice to be fundamental for understanding people's constructions of their own "world" – if such a world exists (see below for my focus on practice). However, simultaneously, I am not attempting to take my conception of ontology for granted, but rather to conceive of it as a tentative hypothesis that we need to explore with the ethnographic data.

Additionally, "partial connections," as employed by de la Cadena for explaining the links between Andean indigeneity and the modern world, may represent a useful tool to approach the dynamics of the Matsigenka through their history (see Chapter 3). However, the notion of partial connections, as illustrated by de la Cadena, seems to suggest that the indigenous and modern worlds, which converge forming "more than one but less than two" "indigenous-mestizo aggregates," are homogeneous in themselves. As mentioned above, I argue that those "worlds" or ontologies may rather result from the convergence of a variety of individual ontologies, and consequently, such group-level ontologies are more diverse and fluid than anthropologists tend to think. Consequently, "partial connections" are the variable points of ontological similarity that exist between different groups of people, which may be linked to processes of ontological change. As a result of these connections, limits between emergent ontologies of different social groups are arbitrary.

I wish to finish with a comment that is both theoretical and methodological. One of Graeber's critiques of the OT is that ontologists follow a "tacit ontology" that is equivalent to "classical philosophical Idealism [where] ideas generate realities" (Graeber 2015:21). The author is referring to Henare et al. (2007) and Holbraad's (Carrithers et al. 2010) renditions of ontology, where concepts expressed in statements are conceived of as realities in themselves. I agree with Graeber's critique, but also see an additional problem in the fact that these authors attribute too much importance to words and concepts, and, precisely because they are following their own meta-ontology, they do not take into account the possibility that people's

statements may be metaphors⁵, or that the meanings of words may be diverse. How many times do the utterances of the people we study consist of jokes or figures of speech whose purpose is to make a broader, abstract point? The question for Holbraad and Henare et al. then becomes, how do we know which statements are "truth"? A possible solution to this predicament is for the anthropologist to pay attention to practice in addition to the ideas and concepts that people express. In this regard, Mol's (2002) and Blaser's (2013) conception of ontologies as performative endeavors is appropriate. The distinct enactments of atherosclerosis by different physicians, as recounted by Mol, show the variety of *factishes* that the disease represents. Focusing on practice also allow us to see the continuous feedbacks between thought and behavior, since, in addition to the fact that ideas motivate actions, as demonstrated by cognitive anthropologists (Atran et al. 1999; Atran et al. 2002; N. O. Ross 2002), practices also drive the production of new thoughts and concepts (Barth 1966; Keller and Keller 1996). By investigating both what people say and what they do, we can better understand the nature of peoples' conceptualizations, and avoid the "exaggerated contingencies" that our (that is, the anthropologists') stories might generate.

In sum, by addressing the OT in anthropology, my objective is to demonstrate the unsuitability of modern theories of natural resource management for understanding the environmental conceptualizations of some non-Western societies, including those of the Matsigenka of Tayakome. Considering the notion of ontology, as defined above, can aid our understanding of these people's constructions of the world, which may (or may not) be profitably viewed as alternative realities, and may (or may not) be as radically different from Western conceptions as ontologists propose.

⁵ Holbraad dismisses this possibility by asserting that this symbolic interpretation is still made from a "culturalist" standpoint, where statements are representations of a unique reality that exists *out there* (Carrithers et al. 2010).

CHAPTER 3: ONTOLOGIES IN CONSTRUCTION: THE HISTORICAL AND ETHNOGRAPHIC SETTING OF MATSIGENKA ENVIRONMENTAL CONCEPTIONS

This chapter presents a historical and ethnographic overview of the Matsigenka of the community of Tayakome inside Manu National Park, which lays the foundation for the exploration, in future chapters, of potential causes that may have contributed in the development of current Matsigenka ontologies. I present the broader historical experience of the Matsigenka of Manu in order to illustrate how their relationship with the environment may have shifted over time. This, in addition to a general review of the current Matsigenka social landscape, serves to illustrate the continuous contact that the Matsigenka have sustained with non-Matsigenka (e.g., protestant and catholic missionaries, Manu National Park staff, researchers from the Cocha Cashu Biological Station, *colono* settlers surrounding the park). As I explain in the final section of this chapter, where I provide an ethnographic description of Tayakome, I contend that these different instances of contact may have influenced, and continues to influence, current Matsigenka conceptualizations of, and daily engagements with, their environment, including non-human beings. By illustrating the historical and social context in which such relationships unfold, my intention is also to demonstrate the dynamic nature of ontologies, and to suggest potential reasons for the existence of Western and non-Western commensurable worlds.

The Matsigenka of Tayakome

The members of the Native Community of Tayakome are Matsigenka, an Arawakan ethnolinguistic group inhabiting the upland forest of the Andean foothills , commonly referred to as *montaña*, as well as the lowland forest of the departments of Cusco and Madre de Dios, in the southeastern region of Amazonian Peru (Rosengren 2004). Specifically, their territory extends, in the West, from the eastern shore of the Apurimac River, including the Upper Urubamba and a large part of the Lower Urubamba River Systems, to the Manu River

and the eastern shore of the Alto Madre de Dios River in the East (Figure 3) (Johnson 2003; Rosengren 2004). The current Matsigenka population is approximately 15,600 people. Of these, the Peruvian Ministry of Culture has calculated that approximately 700 individuals live in voluntarily isolation or in a situation of initial contact, spread throughout the Manu River headwaters, as well as in the contiguous Kogapakori, Nanti, Nagua Territorial Reserve, located in the Urubamba Basin (Ministerio de Cultura del Perú 2017). Among the Matsigenka who have settled in indigenous communities and are - to differing degrees more integrated into Western Peruvian society, the majority inhabit the Urubamba River region, containing the montaña forests mentioned above, while the remaining Matsigenka live in the area of the Manu and Alto Madre de Dios Rivers (Figure 3). There are linguistic differences between the two large populations that inhabit these regions. The dialect spoken in the Manu area, which includes Tayakome, contains a number of words of Harakmbut origin, apparently due to early interethnic interactions between these Matsigenka and other Harakmbut people of the area, including the Huachipaeri (Shepard 2003). The Native Community of Tayakome is located on the Western shore of the Manu River, comprises approximately 200 Matsigenka, and is one of the two legally-recognized Matsigenka communities that are located within the limits of the Manu National Park (MNP, Figure 4). The other community is Yomibato, located one day upriver from Tayakome on the banks of the Yomibato Quebrada or Stream, a tributary of the Manu River, and comprises almost twice as many Matsigenka residents. Although both are officially recognized by the Peruvian government, neither community has legal title to its land because they are located within a Natural Protected Area. There are two additional, smaller Matsigenka communities located in the Park, Maizal and Sarigeminiki (known in Spanish as Cacaotal), composed of less than 50 people each. They are officially considered satellite communities of Tayakome and Yomibato, respectively, but have recently initiated a process to become legally recognized as

independent from them, a fact that concerns the Park administration and conservationists interested in the Manu region (see below).

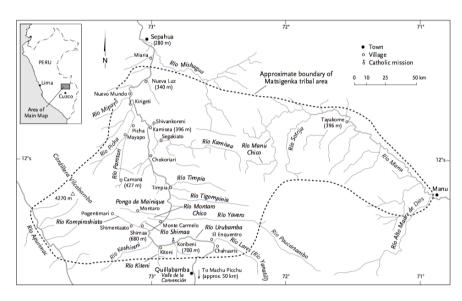


Figure 3: Approximate territory of the Matsigenka ethnic group. (From Johnson 2003)

Because Tayakome is located at the geographical center of the MNP, it takes between three and four days (depending on the season of the year) to reach this community from Cusco, one of the closest cities to the Manu area. The first day, one must take public transportation (small vans) for approximately eight hours along an unpaved road, descending from the high altitude of the Andes (between 3200 and 4000 m.a.s.l.) to the warmer towns of the lowlands (near sea level). Over the two following days, the trip continues by boat: The first day's journey begins in one of these lowland towns, Atalaya, located on the southern bank of the Alto Madre de Dios River, and proceeds downriver for 6 hours (8 hours in the dry season) to the town of Boca Manu, at the mouth of the Manu River, which is the entrance of the Manu National Park (MNP); The second day's journey from Boca Manu proceeds upstream on the Manu River, arriving to Tayakome in the late afternoon, approximately 10 hours later (longer in the dry season). Still, despite its geographic remoteness, and the fact that its members are not fully integrated to the regional market economy, Tayakome is far from being socially isolated from the broader Peruvian society. Below is summary of the history of the Matsigenka of Manu, followed by a brief illustration of the non-Matsigenka social groups with whom members of Tayakome have the most contact, and concludes with a brief ethnographic description of ontologies in practice in Tayakome.

Brief History of the Matsigenka of Manu

The Unconquered Lowlands

Abundant archaeological evidence of trade between the lowlands and the Andes (Lathrap 1973) suggests that such interactions occurred as far back as the 8600 B.P. (Renard Casevitz, Saignes, and Taylor 1988). The Manu region in particular, bordering the mountains, was the area where the lowlands were closest to Cusco, and therefore to the Inca Empire. Despite numerous Inca incursions and attacks in an attempt to conquer the lowlands surrounding the Alto Madre de Dios River, Inca control over these lands was never achieved. The lack of fit between the Andean subsistence system and the tropical environment, as well as the impossibility of establishing political control over decentralized lowland ethic groups, may have contributed to this failure (Camino 1977). Nevertheless, trade in Amazonian and Andean goods, common in pre-Inca times, continued and intensified during the Inca dominion of the highlands, and was made possible by an extensive and dense exchange network that connected remote Amazonian villages to the center of the Empire (Lathrap 1973; Lyon 1981).

During this time, the Matsigenka occupied the region within the Urubamba and Ucayali River basins, which constituted an important commercial route between the highlands and lowlands. The Yine people, current Matsigenka neighbors, were the middlemen in these commercial transactions, traveling this route often, and simultaneously attacking, robbing, and enslaving the Matsigenka. These raids forced the Matsigenka to leave

the shores of the main river and settle in tributary streams (Camino 1977). During this period, *curacas*, powerful Matsigenka political leaders, and sometimes shamans, gained importance. They remained along the main rivers for the purpose of discouraging Yine attacks by exchanging produce, manioc beer, and even women and children sent by relatives who were under the protection of the *curaca*. However, not all Matsigenka participated in this *curaca*-led social organization, and, in many cases, individual families or clans took refuge in remote areas of the headwaters (Camino 1977).

Expeditions led by recently-arrived Spanish conquerors to the lowland region in the middle of the 16th century, attracted by mythical accounts of a golden city (i.e., Paititi or El Dorado), were soon repelled by indigenous peoples who attacked the Spanish soldiers with bows and arrows (MacQuarrie 1992). The lowlands surrounding the Alto Madre de Dios were, consequently, avoided by the Spanish for several decades until the establishment of a mission. This was initially occupied by Jesuits who converted a few Matsigenka children, who, along with other lowland good, were "bought" from the Yine in exchange for axes and other goods desired by this indigenous group (Rosengren 2004). During the 18th and 19th centuries, Franciscan and Dominican missionaries were more actively attempting to subdue Matsigenka groups, again, indirectly through their trade with the Yine, who were interested in obtaining metal tools, hooks, glass bids, and clothes (Rosengren 2004; Camino 1977; Shepard and Izquierdo 2003).

The Disruption of the Rubber Boom

The Yine continued raiding the Matsigenka and other groups through the end of the 19th century and the beginning of the 20th century. However, their purposes changed. Such raids, commonly referred to at the time as *correrias*, served to capture other indigenous to satisfy the need for labor during the Rubber Boom. The discovery of the rubber vulcanization process by Charles Goodyear in 1839, and Dunlop's later invention of the pneumatic tire,

gave rise to this period of intense exploitation that had a profound impact on the Amazonian region and its local populations (MacQuarrie 1992).

Rubber tapping activity notably increased in the Manu area with the arrival of the rubber baron Carlos Fermin Fitzcarrald in 1896. He directed Matsigenka, Yine, and mestizo rubber workers in his employ to dismantle and carry his steamboat over the narrow stretch of land between the Mishagua River, a tributary of the Urubamba River, and the lower Cashpajali River, a Manu River affluent. The location of this legendary feat, currently known as the Isthmus of Fitzcarrald, effectively united the Urubamba-Ucayali Basins and the Manu-Alto Madre de Dios regions, opening up the latter for the extraction of rubber, and in general, for foreign colonization. Rubber tappers led by Fitzcarrald infamously massacred Mashco indigenous groups inhabiting the Manu, after which all resistance from indigenous peoples in the area ceased (MacQuarrie 1992). During this time, some Ashaninka and Matsigenka curacas contributed, like the Yine, to the capture of other Matsigenka and Mascho groups, becoming intermediaries in the supply of labor for the rubber patrons, and consequently, coming to depend on them (Rosengren 2004; Camino 1977). Indigenous populations that resisted the *correrias* were tortured and often killed. The German explorer von Hassel traveled through the Alto Madre de Dios region and witnessed the mistreatment suffered by the Matsigenka and other indigenous peoples subjugated to the rubber tappers at the beginning of the 20th Century. He calculated that around 60% of the indigenous labor in this area died as a consequence of the terrible health and working conditions that they endured (von Hassel 1904). In addition, epidemics of new diseases such as the flu, smallpox, measles, and malaria decimated a large part of the local populations (Shepard and Izquierdo 2003).

According to oral histories from the Manu region, the friendly relations that the Matsigenka had with the Harakmbut-speaking Toyeri up until the 20th century were disrupted and turned violent during the rubber boom times. In the Manu headwaters, the Toyeri carried

out a number of massacres in Matsigenka settlements, continuing until the 1950s. Subsequently, through the mid-1980s, the Matsigenka of this region came under attack by another neighboring group, the Pano-family speaking Yora or Yaminahua, who fled from the northern Purus region and settled in the Manu area at the end of the rubber boom. The Matsigenka affirm that in the past there were many more Matsigenka communities throughout in the Manu region. The few existing in the present consist of survivors of the violent conflicts with the Toyeri and the Yora (Shepard and Izquierdo 2003).

The collapse of the rubber boom occurred around 1914, caused by the more profitable, and shorter, lines of supply for British rubber, planted in Malaysia with smuggled Amazonian rubber seeds. Rubber Barons and tappers left the Amazonian rainforest, after having nearly annihilated local indigenous populations. By 1921, the last colonist settlement, the Dominican mission of San Luis de Manu, established at the height of the rubber boom in what is currently the *colono* town of Boca Manu at the mouth of the Manu River (see below), was also abandoned (Llosa Isenrich and Nieto Degregori 2003; MacQuarrie 1992).

During this time, the Yine who came to the Manu region with Fitzcarrald, established a small community on the lower Manu River, while a group of Yora people from the Purus River settled in the headwaters of the Manu, near the Isthmus of Fitzcarrald (MacQuarrie 1992). Among the Matsigenka, curacas largely disappeared, as they were no longer central actors in the economy of the Urubamba River. The Matsigenka groups fissioned, losing regular contact among themselves. A few *curacas* remained through the 1930s and 1940s under the protection of hacienda patrons, whom they served as foremen, organizing production and obtaining labor for the harvest (Camino 1977). In fact, even though the *correrias* and interethnic violence diminished after the collapse of the rubber boom, indigenous slaves were still employed in these hacienda plantations, as well as in logging outfits (see Shepard et al. 2010). Some Matsigenka settled around the areas of extraction,

forming what, at present, are large, densely-populated Matsigenka communities in the Urubamba region. Other Matsigenka, along with members of other indigenous groups who also suffered abuses as a consequence of the rubber boom and other extractive economic activities, only survived by secluding themselves in the headwaters of the Manu and Urubamba Rivers (Rosengren 2004), occasionally abandoning their horticultural fields to become nomadic hunter-gatherers. The indigenous groups that are currently in the process of being contacted, or who are considered "uncontacted," are, thus, far from being "innocent savages," inexperienced in the ways of Western majority society. They are rather displaced refugees, who found that isolating themselves in the hinterlands of the forest was the only way to escape and survive the threat of extermination posed by the mercantilist economic forces of the last century (Shepard et al. 2010).

The Conquest of Manu

The Manu region was apparently forgotten by the majority of the Peruvian population from the collapse of the rubber boom until the 1940s, when construction of a road that reached the Alto Madre de Dios River was completed (see Figure 4). Highland entrepreneurs from Cusco were attracted to the Manu region, establishing hacienda plantations and exploiting forest resources that abounded in the lowlands, in particular, highly-appreciated and profitable hardwoods like cedar (*Cedrela odorata*) and mahogany (*Swietenia macrophylla*), that were becoming scarce in other lowland forests. Matsigenka elders from Tayakome still remember those times, when they were working for *colonos* in the extraction of these, and other, fine woods processed in sawmills established on the banks of the Manu River (Llosa Isenrich and Nieto Degregori 2003).

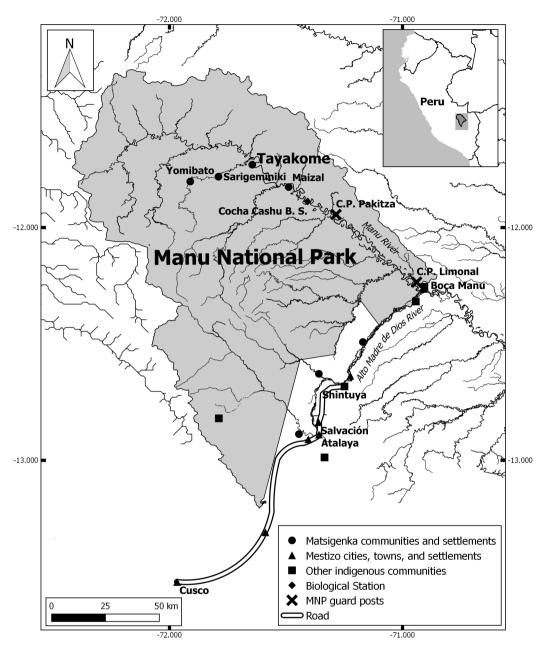


Figure 4: Manu National Park and the Native Community of Tayakome. (Map created with the assistance of Ronny Barr).

During subsequent years, migrants into the Manu region were also interested in animals such as giant river otters, caimans, ocelots, and jaguars, which they hunted in large quantities. The tanned hides were later commercialized; sold on the international market for the production of clothing. With the increase in the population in the area, fishing also increased. This was particularly detrimental due to the use of dynamite in the rivers (Llosa Isenrich and Nieto Degregori 2003). The migration of Andean peasants to the lowlands, especially during the 1950s and 1960s, was a consequence of the combination famines in the highlands and the Peruvian state's encouragement to "conquer" the rainforest (García Sánchez 1994). The idea that the lowlands in eastern Peru represented fertile, but, at the same time, "empty" territories, drove the colonizing process, which was particularly encouraged by Peruvian President Fernando Belaúnde Terry during his two terms in government (1964-1968, and 1980-1985). Belaúnde promoted the construction of roads into the lowlands, which facilitated the expansion of the farming frontier, as well as the continuation of hacienda plantations, and mining exploitation. Andean farmers who migrated into the area to supply labor for these activities became, as a consequence, the *colonos* of the Amazonian forests (García Sánchez 1994; Llosa Isenrich and Nieto Degregori 2003). In the region around the Alto Madre de Dios River, their descendants currently inhabit the towns scattered around the borders of the park, and are the non-Matsigenka people with whom members of the Matsigenka communities within the park sustain most interactions (see below).

SIL and the Establishment of Tayakome

During the 1950's and 1960's, the presence of Christian missionaries had drastic effects on the Matsigenka of Manu. The highly dispersed settlement pattern adopted by the Matsigenka of the Lower Urubamba and the Camisea River basins after the Rubber Boom era was transformed with the establishment of Catholic and Evangelic missions in the 1950s. The missionaries installed schools on the banks of major rivers in those basins, which served to attract and concentrate the dispersed populations, and later served as centers of the resultant communities (Barclay and García Hierro 2014).

In 1952, the Peruvian Ministry of Education created a bilingual education program for the ethnic minorities of Peru, with the aim of preparing indigenous bilingual teachers who would later teach in their own communities. During the early years, this program was

managed by the evangelical linguists and missionaries of the Summer Institute of Linguistics, or SIL (B. Snell 2011), who established the first schools in the Matsigenka communities. In the mid-1960s, SIL founded an elementary school in the area that is currently the Matsigenka Community of Tayakome, near the settlement of a Matsigenka clan led by the elder Ahuanari. He and his family came from the Upper Manu River, fleeing the constant attacks of Pano-speaking groups (D'Ans 1975). Currently, his descendants represent approximately a fourth of the population of Tayakome.

The missionaries brought two Matsigenka men from the Urubamba region for the purpose of attracting the Matsigenka clans scattered throughout the region. One of them, Martin Vargas, was raised and educated in a boarding school, and converted to Protestantism by the linguists. He served as a teacher in the elementary school, and is still remembered in Tayakome by elders and middle-age adults who were alive at the time. Some of them, adults currently in their late 40s or older (and who were children when they met Martin), mentioned to me that he was responsible for "baptizing" them with the Western names that they have now, replacing their original Matsigenka names (field notes). Italiano Cabrera, the other Matsigenka who came with SIL, was born in the Camisea River region, and had considerable experience traveling and living in Andean towns and cities. Both men traveled up numerous rivers and streams in the headwaters of Manu, probably between 1963 and 1969, convincing their fellow Matsigenka to settle near the place where the school would be established. The families who finally came to live close to the missionaries constructed the school and cleared a vast extension of forest that served as a landing strip for SIL's small planes used as transport between Manu and SIL headquarters, located on the shores of the Yarinacocha lake, in the central Peruvian Amazon (D'Ans 1981; Shepard 1999a; D'Ans 1975). This was the beginning of the settlement of Tayakome.

During their years in Manu, SIL linguists perfected their knowledge of the Matsigenka language with the primary aim of evangelizing local residents through translation of the Christian Bible into their native language. Simultaneously, the missionaries provided bilingual elementary education to the recently resettled Matsigenka, and trained and indoctrinated bilingual Matsigenka teachers. Interestingly, SIL's linguistic research among the Matsigenka also produced a prolific body of ethnographic publications (Snell and Wise 1963;Snell 1972; Snell and Davis 1976;Snell 1998). The missionaries were the drivers of profound changes in the livelihood of the new members of Tayakome, by improving their health through the provision of healthcare services, and by giving the Matsigenka shotguns and ammunition. Pelts obtained from hunted peccaries, jaguars, otters, and other animals, where later exchanged with the missionaries for Western goods, such as clothes, aluminum pots, and metal tools (Jungius 1976). While the introduction of some of these goods into Matsigenka society happened before their contact with the SIL, it is likely that their dependence on them increased during this time due to the constant supply provided by the missionaries. Thus, with access to machetes and other Western goods, in addition to health services and schooling, the Matsigenka of Tayakome became highly reliant on the missionaries during the early years after creation of the community through the establishment of the school and the health post (Shepard et al. 2010; D'Ans 1975).

Creation of Manu National Park

The indiscriminate exploitation of resources that took place during the 1960s only ceased when the Manu Basin was declared a protected area, mostly at the insistence of the Peruvian taxidermist and naturalist of Polish descent, Celestino Kalinowski. As a naturalist, Kalinowski traveled to many different areas of Peru, but was particularly fond of the Manu region due to its exuberance and diversity of wildlife. His concern about the detrimental effects of logging and hunting in the area led him to contact the Peruvian authorities, urging

them to declare the area around Manu River and its headwaters a protected area. Due to his initiative, Manu was designated a National Forest Reserve in 1968, and a National Park in 1973 (MacQuarrie 1992).

At the time of its creation, Manu National Park (MNP) occupied an area of 1,532,806 ha., distributed between the Departments of Madre de Dios and Cusco. This area comprises a variety of ecosystems located throughout the altitudinal gradient of the Manu Basin: from the high altitude grasslands above 4000 meters, through the cloud forest and other mountain forests on the eastern slopes of the Cusqueñian Andes, down into the lowland rainforest near sea level (Jefatura del Parque Nacional del Manu 2002). Since its creation, the park has been recognized as an important landmark for biological conservation, both in Peru and in the Neotropics more generally, due to its diversity of fauna and flora, documented by research primarily carried out at the Cocha Cashu Biological Station within the park (e.g. Terborgh 1983; Terborgh et al. 1990; Salo et al. 1986; Gentry 1988; 1990; see more below). Some years later, in 1977, the Manu Biosphere Reserve was created by UNESCO, under its "Man and the Biosphere" program, to include all of MNP, along with some adjacent areas, and increasing the total extent of the protected area to 1,881,200 ha. In 1987, the UNESCO added the park to the list of World Heritage Sites due to its high value for biological conservation. Currently, the Park itself occupies an area of 1,716,295.22 ha, after parts of the adjacent Manu Reserved Zone were incorporated into the total Park area in 2002 (SERNANP 2014).

Initially, the primary objective of MNP was to protect the diverse biological communities included in its constituent ecosystems, which, together, were considered to be "a representative sample of the natural diversity of the southeastern rainforest region of Peru" (Universidad Nacional Agraria La Molina 1985:125). Therefore, after its creation, *colono* loggers and hunters were expelled from the area (MacQuarrie 1992). The situation of the indigenous groups living within the Manu Basin at this time, one of which was the

Matsigenka, was different. State bureaucrats in charge of establishing guidelines for the Park never consulted resident indigenous peoples about the creation of a protected area in their territory. Instead, these functionaries claimed the authority to "permit" indigenous peoples to stay within the park's limits (Shepard et al. 2010), neglecting any consideration for indigenous self-determination. The first Master Plan of MNP, developed in 1985 by members of the Forestry Research Institute from the La Molina Agrarian Nacional University in Lima, established a policy, still preserved and acted upon by many MNP personnel, effectively stating that the indigenous groups that reside in the park can only remain inside if they maintain a "traditional way of life," which is interpreted to mean forgoing the use "Western technology." In the case that indigenous people opt to live in a "civilized" manner, that is, characterized by "advanced acculturation," they must leave the protected area (Rios et al. 1985:87).

Despite the fact that, at the time, the recently-instituted Law for Native Communities upheld indigenous rights over their territories (Gobierno Revolucionario del Peru 1974), this provision was later retracted in the second version of the Law of Native Communities and of Agriculture and Livestock Promotion of the Selva and Ceja de Selva regions. According to the Article 18 of the revised law, "the permanence, without property titles, of the native groups settled in the territories of the national parks, [is allowed] on the condition that their activities do not contradict the principles and objectives of the establishment of the units of this category of natural protected areas" (Gobierno Revolucionario del Peru 1978). Unabashedly, the authors of the first MNP Master Plan indicate that the "accumulated experience" of MNP, with regard to laws relevant to its existence, had a fundamental impact on the formulation of subsequent legal norms relating to the presence of indigenous peoples in Natural Protected Areas, citing as an example the Article mentioned above. Thus, the laws that regulated the establishment of natural protected areas gave primacy to the State for land

property, overruling any attempt at indigenous sovereignty (Gobierno Revolucionario del Peru 1978).

In the first Master Plan for the park, the zoning strategy was allegedly designed for the purpose of "facilitating" the maintenance of the presumed "natural equilibrium" by the Matsigenka (Universidad Nacional Agraria La Molina 1985:87). Zoning consisted of delimiting specific areas near Tayakome for conducting subsistence activities such as farming, gathering, and hunting. However, as pointed out by Shepard et al (2010), the proposal did not involve any rigorous study of how the Matsigenka actually use and interact with the forest. In addition, authors of the Master Plan asserted that, because the Matsigenka have "conducted conservationist practices" for hundreds of years, various aspects of their accumulated knowledge would be instrumental to their compliance with the objectives of the park, and, additionally, for the improvement of scientific, "Western" knowledge about the forest. This included, for instance, Matsigenka classification of forest types, and their knowledge about unknown species, interspecific relations, or animal behavior; management practices of plant species, and ecosystems, as well as history of land use; and the identification of edible and medicinal plants (Universidad Nacional Agraria La Molina 1985). However, these stated intentions were never acted upon, as there was no further formal study of Matsigenka resource management practices on the part of the park administration. In general, for nearly three decades after the creation of MNP, the park's anthropological policies, essential for delineating interaction between the administration and local populations, were vague and contradictory (Shepard et al. 2010).

The ideas upon which MNP was founded reflect, on one hand, the essentialization of the Matsigenka culture, alluding to its "traditional," static constitution, and ignoring the complex history of contact experienced by this indigenous group. In addition, the Matsigenka were idealized and stereotyped as noble savages, as long as they continue living according to

their "traditional customs." The implicit assumption was that human beings are incompatible with the environment as soon as they leave this "natural, harmonious state," that allegedly lies at the base of a socio-evolutionary ladder in which "Western civilization" is at the top. Consequently, during the creation of MNP, it was perceived that Matsigenka livelihoods within the park had to be controlled and restricted. This perception is still maintained by the MNP administration, as well as international conservationist stakeholders, despite evidence indicating that different groups of people have populated this region continuously for hundreds of years, and that the currently-observable biodiversity may be the result of such a constant human intervention, as has been demonstrated in other regions of Amazonia (e.g. see Balée 1989; 2013; Clement et al. 2015). In addition, official interest in Matsigenka knowledge of the forest had the purpose of incorporating it into Western knowledge systems, as occurs even today when Traditional Ecological Knowledge (TEK) is invoked as a complement to scientific knowledge (e.g. Moller et al. 2004; Berkes, Colding, and Folke 2000; Rathwell, Armitage, and Berkes 2015). Both are examples of cultural hegemony (Povinelli 1995) that disregard indigenous conceptualizations of the environment.

Aftermath of the MNP Creation for the Matsigenka and Initial Conflicts

According to some accounts, due to new regulations imposed by the MNP administration, which included the establishment of a park guard post near the community, the missionaries of SIL felt threatened, and apparently attempted to set the Matsigenka against the local MNP authorities (see D'Ans 1975; 1981). After a few years, the missionaries decided to relocate the community outside of the Reserved Zone territory (D'Ans 1975; 1981; Jungius 1976), convincing many Tayakome families to follow them. Promising the continuation of supply of Western goods and evangelical indoctrination, they established and financed a new community, currently known as Segakiato, on the other side

of the Fitzcarrald Isthmus, on the Camisea River in the Andean foothills(Shepard and Izquierdo 2003).

MNP's initial interactions with the Matsigenka, including the indirect expulsion of the missionaries of SIL, were based on essentialist notions of the Matsigenka -i.e., considering them "untouched" by history and ignoring the dependent relationship that they had developed with SIL. The consequent sudden loss of health and educational support, as well as the abrupt cessation of trade with the missionaries, had a dramatic impact on the people who remained at Tayakome (Shepard et al. 2010). The MNP administration did not manage to fill the void left by SIL, prompting the migration of a considerable number of Tayakome families to other regions within the Manu and Alto Madre de Dios river basins. Those families who originally came from the Pini-Pini and Palotoa Rivers, tributaries of the Alto Madre de Dios River, returned to their area of origin, establishing the present-day community of Palotoa-Teparo, in the buffer zone of MNP (Shepard and Izquierdo 2003). A few families moved downstream from Tayakome to engage in more frequent trade transactions with researchers at the Cocha Cashu Biological Station, established in 1973 on the right bank of the Manu River. There, these Matsigenka families provided researchers at the station with fish, manioc, and bananas in exchange for Western goods. This led to the creation of Maizal, a smaller Matsigenka community close the biological station, which is considered to be a satellite community of Tayakome by the MNP administration⁶. Other families left Tayakome in order to avoid respiratory epidemics and internal conflicts, as well as the constant raids of the neighboring Panoan-speaking Yora ethnic group. They settled upriver, by the Yomibato Stream (also called Fierro Stream), a Manu tributary, which, at the beginning of the 1980s was established as a community of the same name. During the 1980s, many Matsigenka who inhabited the

⁶ Maizal is currently in the process of becoming a new, independent native community. This is also the case with Sarigeminiki, or Cacaotal, a Matsigenka settlement that is considered to be a satellite community of Yomibato, both of which are located on the shore of the Fierro Stream, upriver from Tayakome.

headwaters of the Manu River took refuge in this community, while fleeing Yora attacks on the Cumerjali and Sotileja Rivers, thus making Yomibato the largest community in Manu (Shepard and Izquierdo 2003; Shepard et al. 2010).

The conflictive relationship between the MNP administration and the Matsigenka who remained in Tayakome was partially instigated by the park guards stationed at the nearby guard post. Community members still remember the park guards as abusive, constantly drunk, demanding food, and engaging in sexual relations with Matsigenka women, which was partially the result of a lack of support and training by the MNP administration. Due to the complaints of the Matsigenka and a reorganization of the guard posts around MNP, the post was later relocated downriver to what is now the Control Post of Pakitza (field notes; Shepard et al. 2010). However, interactions with park guards were still tense. Since that time, any fishing equipment considered non- "traditional" by the MNP officials – e.g., fishing hooks and line, hand nets and gill nets – was confiscated any time Matsigenka boats passed a guard post, and there is rumor among both Matsigenka and non-Matsigenka that this fishing equipment was later used by the park guards themselves, or by other MNP administrators visiting from Cusco, to fish in the park. Despite the fact that the Matsigenka were still fishing with bows and arrows, they had already become accustomed to using fishhooks and other equipment provided by the missionaries. The obtrusive disposition of the park guards and the perceived hypocrisy of the MNP administration was resented by the Matsigenka and resulted in a further deterioration of relations.

The drastic decline in the health status of the Matsigenka population also worsened the relationship with the MNP administration. With the removal of medical services provided by SIL, infant and child mortality during 1974-1980 in Tayakome reached a rate of approximately 60%, and the population declined at a rate of 50% for the decade of 1975-1984. Although data are scarce, this was perceived to be much worse than the health situation

during the SIL occupation (Shepard et al. 2010). During this period, the MNP administration implemented an extreme protectionist agenda that restricted Matsigenka contact with the broader Peruvian society, in accord with the park's stated aim of maintaining these people as "un-Westernized." As a consequence, the administration blocked several attempts by anthropologists working with the Matsigenka during the1980s to provide medical aid, even threatening to revoke these researchers' research permits in the protected area (Hill and Kaplan 1990; Kopischke 1996; Shepard et al. 2010). As a consequence of these interventions on the part of the administration to block such third party initiatives in support of the population of Tayakome, Matsigenka resentment against MNP grew, complicating their interaction. In general, due to the lack of a clear anthropological plan for the park and almost non-existent communication between the MNP administration in Cusco and the Matsigenka communities during this time, the park's restrictive policies in pursuit of conservationist objectives were largely seen as unfair and damaging by the members of Tayakome (Shepard et al. 2010).

In the early 1980s, Catholic Dominican missionaries, who had established a mission in the Manu region at the beginning of the 20th century in the indigenous Harakmbut and Wachipaeri community of Shintuya (Figure 4; Llosa Isenrich and Nieto Degregori 2003), took over the management of elementary education in Tayakome, causing profound changes in the community (Shepard et al. 2010). For a start, the Dominicans began their relationship with the Matsigenka of this area by distributing clothes, medicine, and tools in both Tayakome and Yomibato. Some members of Tayakome assert that, during this early period, the priest leading the mission attempted to take advantage of them by hiring them to work in the mission's sawmill in exchange for goods that were actually donated by international organizations (Moore 1984). In contrast to these testimonies, during my time in Tayakome, some Matsigenka regarded the initial time of Dominican missionary contact fondly, alluding

to the "generous" nature of the priest, who provided them with Western goods without asking for anything in return. In any case, the assistance-based relationship, and the conspicuous paternalistic disposition of the missionaries towards the indigenous people continues in the present. Since their arrival in the early 1980s, Dominican missionaries have regularly visited the Matsigenka communities of Manu, distributing the aforementioned Western goods – mostly clothes, aluminum cooking pots, knifes, machetes, soap –, constantly alluding to the "poor," "uncivilized," and "disorganized" condition of community members, and display a general disregard for the Matsigenka lifestyle, a situation that, they believe, can only be remedied by means of the missionaries' aid. This attitude has also led to quarrels with the MNP administration, in which priests have accused the park of isolating the Matsigenka and not allowing them to "develop" as "civilized" people. As envisioned by the priests, such development entails integration into the market economy, permission to exploit and sell the natural resources that the Matsigenka have access to in the surrounding forest , and, in general, the practice of urban customs, in order to rise above their "impoverished" existence (Shepard et al. 2010, field notes).

The effect of the Dominican mission on Matsigenka livelihoods is more a consequence of its influence in the domain of formal education than a result of its attempts at evangelization. The Dominicans took charge of managing the elementary schools in the Manu communities, in association with the Peruvian Ministry of Education. The Catholic teaching philosophy has been notably in opposition to the SIL pedagogical style (Shepard et al. 2010). While SIL was conducting thorough linguistic research and ethnographic study (e.g. Snell and Wise 1963; Snell 1972; Snell and Davis 1976; Snell 2011), admittedly for the purpose of translating the bible into indigenous languages and thereby evangelizing more efficiently, they were also teaching the Matsigenka to read and write in their own language. In contrast, the Catholic mission's pedagogical approach was, and still is, focused on

"acculturating" the Matsigenka into the majority Peruvian society, teaching them to read and write in Spanish. After taking administrative control of the elementary schools in Tayakome and Yomibato, the Dominican missionaries brought in two Matsigenka teachers to run the schools. Both of them were raised in Dominican boarding schools in the Urubamba region, and, as such, were more "Westernized" than the Matsigenka of Manu. These teacher, both still active in their respective communities, have been more effective diffusers of religious ideas than the priests themselves, since the bi-annual masses performed by priests in the community have always been conducted in Spanish, and the priests have never made an effort to learn the Matsigenka language. According to the accounts of current Tayakome members regarding their religious beliefs (see Chapter 5 and 6), much of what they learned about Catholicism was taught to them by these Matsigenka school teachers. In addition, these teachers have influenced other spheres of Matsigenka life (Shepard et al. 2010) in ways that will be explained in more detail in the section (below) describing the current situation of Tayakome.

First Attempts at Reconciliation and the Casa Matsigenka

With the creation of MNP, the Matsigenka communities were forbidden by the park administration from conducting any economic activity that leads to the commercialization of forest products. Matsigenka people traveling to the *colono* settlements outside the protected area were not permitted to bring any fresh fish, game, or horticultural produce to sell outside. This represented (and still represents) an obstacle for the procurement of Western goods to which the Matsigenka grew accustomed during the period of SIL missionary residence. Dominican missionaries, researchers visiting the community, researchers at Cocha Cashu, and even poorly paid school teachers have been, since the establishment of the park, the major sources of donated clothes and packaged food for the Matsigenka. In order to gain access to a more continuous supply of those goods, and to become more independent and

self-sufficient, some young men started to temporarily leave Tayakome during the 1980s, to work in the *colono* communities surrounding the Park for several months. They commonly worked in the tourist industry as boat drivers or crew members, or endured terrible conditions in gold mining and lumber extraction outside of the park. Their initial inability to speak Spanish fluently, and their inexperience with the outside society often made it difficult for them to procure better paying jobs. This situation increased Matsigenka resentment toward the Park, which, in their view, was impeding their engagement with the market economy of the broader Peruvian society, without providing a viable alternative to satisfy their needs and desires for outside goods (Shepard et al. 2010).

In the 1990s, the idea fora tourist lodge run by the Matsigenka was proposed, in part, to remedy this situation. The indigenous rights organization CEDIA put forward the plan, but the state office in charge of Peruvian protected areas during that time (the Peruvian Institute of Natural Resources, INRENA), rejected it. This response increased the discontent of the Matsigenka, and, in response, INRENA, in a political maneuver to bypass CEDIA, proposed its own project for a tourist lodge run by the Matsigenka. Despite CEDIA's accusations of intellectual property theft, and a highly-publicized complaint to Peru's Defensoría del Pueblo (office of the people's ombudsman), the Matsigenka communities accepted the project, and only a small faction in Yomibato maintained its reservations due to kinship links with members of CEDIA (Herrera 2007; Shepard et al. 2010).

Until this time, direct dialogue between the MNP higher administration and the Matsigenka communities was nearly nonexistent, as the park guards were the only park representatives with whom the Matsigenka had any kind of communication. Only at the beginning of the 1990s, amid pressure from the communities, researchers in the park, and indigenous organizations, did the MNP administration start to take a serious interest in the situation of the Matsigenka (Shepard et al. 2010). In 1993, the MNP leadership, as well as

conservationist organizations, organized a meeting in Tayakome, explaining to the Matsigenka, for the first time, the reasons for the creation of MNP 20 years earlier. After the first visit of the MNP Director to Yomibato in 1995, the park administration prepared a formal plan that was intended to address the necessities and problems experienced by the Matsigenka communities. The final document suggested a series of important reforms relating to the park's relationship with Tayakome and Yomibato, such as the inclusion of indigenous participation in the development of future MNP strategic plans, and support for the protection of intellectual property rights over their traditional knowledge. However, these reform measures were never implemented, and the MNP administration's priorities reduced back down to conventional biological conservation, which entailed reinforcing an essentialist view of the Matsigenka, protecting and promoting their allegedly "traditional" lifestyle – i.e., the non-adoption of "Western customs" –, as a condition for their continued residence inside the park (Shepard et al. 2010).

The construction and operation of the indigenous tourist lodge, called the *Empresa Multicomunal Casa Matsigenka* (Multi-communal Enterprise Casa Matsigenka, in Spanish), improved relations between the MNP administration and the Matsigenka, at least during the first years after its establishment. The lodge was inaugurated in 1998, after the German Agency for Technical Cooperation (GTZ), in collaboration with INRENA, provided the financial support to both Tayakome and Yomibato necessary to build the required infrastructure at Cocha Salvador, an oxbow lake located on the left bank of the Manu River, within the tourist zone of MNP. GTZ and INRENA attempted to make the project both culturally and environmentally viable, consulting with Peruvian organizations and anthropologists that had worked with the Matsigenka. However, programs that were planned as part of the project, such as socio-environmental monitoring and the continuous training of Matsigenka staff, were never implemented due to a lack of financial support (Shepard and

Izquierdo 2003; Shepard et al. 2010). Importantly, the economic success of the project, initially considered to be virtually guaranteed due to the exclusive access of the Matsigenka to the tourist area of the park during the off-season, was later jeopardized by the successful lobbying of the MNP administration by tourism companies. Since then, Casa Matsigenka has been struggling to gain a foothold within the tourism industry of the MNP, due to the considerable competition that exists with other more experienced, and prepared, tourism operators (Ohl-Schacherer et al. 2008; Herrera 2007).

Current State of Affairs between the MNP Administration and the Matsigenka Communities

Currently, despite the fact that the relationship between members of the Matsigenka communities and the MNP administration are still tense at times, communication between both parties has improved and there is more opportunity and willingness to engage in dialogue. Direct interactions between the Matsigenka communities and park guards are considerably better than in previous years, and there are now several Matsigenka park guards on the payroll. Many Western goods brought from outside the park are no longer confiscated. Still, equipment perceived as damaging to the "natural" order of MNP is not allowed. For instance, such restrictions apply to gill nets, due to the harm that they can cause to larger animals, such as giant river otters, when installed in oxbow lakes. Despite such constraints enforced by the MNP administration on the livelihoods of the Matsigenka that live within the limits of the protected area, members of Tayakome generally perceive the existence of the park as beneficial for them. In response to my questions during a recent trip to Tayakome in 2017, most of the adult members of the community responded that they believe the establishment of MNP has impeded the incursion of colono people into Matsigenka territory in order to log the forest, as community members see colonos do just outside the limits of the protected area. For this reason, most Tayakome members affirm that they want to remain

living inside the MNP, because they see the benefits that it offers. Still, they are also of the opinion that the MNP administration should increase opportunities for dialogue with the communities so as to hear their concerns.

The MNP administration, for its part, has augmented its fundamental objectives, spelled out in the latest versions of its Master Plan, to include the protection of, and the advancement of research about, the cultural diversity existing within the limits of the park (Jefatura del Parque Nacional del Manu 2002; SERNANP 2014), in addition to its primary objectives to facilitate biodiversity conservation and promote biological research. However, as described above, despite the fact that the Park developed an anthropological plan in 1995 to address the situation of the indigenous peoples living within its boundaries, the recommendations made in this document have never been put into practice. Attention to the concerns of the indigenous peoples that live in MNP have been more the result of individual efforts on the part of some high ranking administrators, than any strategic plan. Indeed, since I began conducting research in Tayakome in 2010, the interest of different MNP administrations (directors tend to change every three to four years) in the Matsigenka has been variable. While some have certainly been more concerned than others with regard to the well-being of the Matsigenka communities, all have employed a top-down approach to address community-related issues, without considering the perspectives of the Matsigenka people themselves. Only in recent years has the MNP administration, with the aid of other conservation stakeholders, made an effort to attend to community concerns utilizing a more participatory approach. This change in approach is partially a response to external pressure from regional politicians, backed by illegal loggers and miners, for whom the presence of MNP is an impediment to their extractive interests. Lately, they have used the image of the indigenous people inhabiting MNP (mostly Matsigenka) as propaganda to protest the existence of the park, without consulting with, or informing, these indigenous people about

their actions. Presenting the Matsigenka as malnourished and poor, these regional politicians and their supporters have blamed the restrictions imposed on these indigenous populations by the park as the cause of such problems (field notes; Agencia de Prensa Ambiental 2015). The increased attention, on the part of the MNP administration, to the necessities and perspectives of the Matsigenka of Manu has been an attempt to reverse any negative views of the park among local populations, and thus rob regional politicians of a potent propaganda tool with the potential to cause serious damage to the permanence of the protected area.

Although there is still much unfamiliarity, on the part of the park, with regard to Matsigenka perceptions and practices, and stereotypical and essentialist conceptions still predominate, there seems to be a genuine interest to work toward finding solutions that benefit all parties. Nevertheless, it remains to be seen whether these attempts to improve relations between MNP and the Matsigenka will address the more profound points of contention that exist between them, namely, how to reconcile the negatively perceived presence of humans within state-protected natural areas and people's right to selfdetermination. At the heart of these issues lie ontological conflicts (e.g., the conception of the environment as a "pristine" human-free domain versus the conception that humans are an integral part of the environment) that are the topic for another dissertation project.

Conclusion: Matsigenka's Extended Social Landscape

As mentioned above, despite the community's geographic remoteness, Tayakome members engage in continuous interaction with both Matsigenka and non-Matsigenka residents of other settlements around the borders of MNP, and these interactions have influenced, and are still influencing, the changing ontologies of the Matsigenka of Tayakome. Below I provide a brief description of the settlements, towns and groups of people that constitute Tayakome's extended social landscape.

A few hours downriver from Tayakome is **Maizal**, a small Matsigenka community which is considered by the MNP administration to be a satellite of Tayakome. The community was unintentionally founded by three men from Tayakome in the early 1970s, who decided to move closer to the Cocha Cashu Biological Station, located less than an hour further downriver. In that manner, they would be able to exchange the produce of their gardens, mostly manioc and bananas, for hooks, fishing line, packaged food, and other types of Western products brought for, and by, the (generally foreign) researchers at the station. According to John Terborgh, the renowned biologist and conservationist who founded the station, these Matsigenka men made a deal with him in which they promised never to never hunt, fish, or use the forest near the biological station in exchange for the possibility of employment and regular visits. With time, the small settlement occupied by these Matsigenka men and their families grew into a community with approximately 50 inhabitants, with its own kindergarten and elementary school. Currently, Maizal is in the legal process of becoming an independent community, along with Sarigeminiki (or Cacaotal in Spanish), another small community that is currently considered to be a satellite of the larger Yomibato community, upriver from Tayakome (Figure 4).

Less than three hours downriver from Tayakome, is the **Cocha Cashu Biological Station** (CCBS), located on an oxbow lake or *cocha* (in Quechua) that gives the station its name. CCBS is internationally renowned for the pioneering biological research conducted there since the 1970s by Terborgh and his students. Since its foundation, Terborgh and other researchers at the station have had frequent interactions with the Matsigenka of Manu, are such interactions are likely to have been an important driver of cultural change among residents of Maizal, who moved closer to the station in order to obtain Western goods. Currently, CCBS is managed by the San Diego Zoo, which administrative duties after Terborgh's retirement. Nevertheless, the station still maintains frequent contact with the

Matsigenka, principally with members of Maizal, a large number of whom are employed as motor drivers, staff, or research assistants.

The Pakitza Control Post, one of the two MNP control posts located on the Manu river is one hour downriver from CCBS. Upon entering MNP, non-Matsigenka must present the entrance permit previously processed and granted by the MNP office in Cusco to park guards at the control posts. This serves to restrict the type of people who can visit the park. Entrance permits are specific to the particular zones of the Park that will be visited: Tourists and the staff of tourism agencies are allowed to visit the lodges located in the Tourist and Recreation Zone along the lower Manu River; research permits are granted mostly to biologists who work at the Cocha Cashu Biological Station, located in the Investigation Zone, or to anthropologists like me, who work in the Matsigenka communities, located in the Special Use Zone; visitor permits are granted to representatives of NGOs, local or regional government institutions, or indigenous organizations, who visit the Matsigenka communities for the purpose of specific projects. Matsigenka residents of communities inside the Park do not require permits to re-enter the Park. They must, however, request a written permit from their community authorities (e.g., the community president) whenever they want to leave the Park with the intention of returning, a measure established by the Matsigenka themselves in order to prevent (generally) younger men from "escaping" their communities for long periods of time in order to avoid their duties as comuneros, or community members. This requirement, as expected, is not well received by many comuneros, who sometimes blame Park authorities for enforcing this Matsigenka-designed permitting system.

Pakitza – the Matsigenka word for harpy eagle, the largest eagle in the world, and a prized attraction for tourists and conservationists –, is the farthest point upriver that tourists can travel inside of MNP. Only researchers, representatives of the institutions just mentioned that visit Tayakome and Yomibato, and members of these communities can continue their

trip upriver, after showing their respective MNP permits at this post. Pakitza was initially located one river-bend downstream from Tayakome when MNP was created in early 1970s. However, because of problems between the park guards and the community (see above), the post was relocated further downriver to its current position (Figure 4). There are a few people in Tayakome, and more in Yomibato and Sarigemini, who have never traveled further downriver than Pakitza in their entire lives. This is changing among younger people, who tend to leave the community in order to continue their high school studies in one of the boarding schools in the area (see below), or to engage in wage labor in the tourist and banana industries outside the park.

The eco-lodge Casa Matsigenka (mentioned above) is located less than a couple of hours downriver from Pakitza, in the tourist zone of the MNP, by an oxbow lake known as Cocha Salvador. Commonly referred to as "Casa Machi," the lodge is managed by both communities Tayakome and Yomibato: Three Matsigenka and their families, drawn from both communities, rotate every four months as site managers of the lodge. Casa Machi serves mainly as accommodations for tourists brought in by private tour companies, which come with their own Mestizo guides and cooks, to visit the lake (see more details in the next section). Matsigenka couples who "voluntarily" agree to work in the lodge for the required four months must generally be pressured into accepting these positions during community meetings. Workers at Casa Machi earn minimum-wage salaries, which, for a few people, is an incentive to spend four months away from their houses and fields. However, for the majority of community members, work in Casa Machi is accepted grudgingly, as the living conditions in the lodge are far from desirable for most Matsigenka. For instance, because the lodge is located in the tourism zone of MNP, the park administration restricts fishing, hunting, and the planting of even small patches of manioc by the Matsigenka workers. Family members of the workers send costales (large plastic sacks) of manioc to drop off at

the lodge whenever a boat leaves the communities heading downriver. However, such boats are infrequent. Consequently, despite the fact that Western food (mostly rice, potatoes, canned tuna, and cooking oil) is sent by the Casa Machi management office in Cusco (see more below), there is a pervasive conception in Tayakome that being posted in Casa Machi implies being poorly fed, justifying the reticence for volunteering. It is in the context of this lodge that members of Tayakome who generally do not leave the community or the park (mostly adult women) have the most contact with non-Matsigenka people, namely, Mestizo tour guides and their staff, and foreign tourists.

The Limonal Control Post, the second of the two MNP posts located on the Manu River (Figure 4), is less than three hours downriver from Casa Machi. This post effectively serves as the entrance of MNP, at the mouth of the Manu River. For this reason, it is more frequently visited than Pakitza, where park guards are fairly isolated from the *colono* life of towns just outside the borders of the park. Like Pakitza, in Limonal, non-Matsigenka are required to show their entrance permit granted by the MNP administration. There are between two and three rotating park guards posted at both Limonal and Pakitza, as well as at other control posts around the borders of the park. Like in the majority of Peruvian natural protected areas, the job that park guards carry out is, in my experience, and according to the park guards themselves, undervalued. Their low salaries do not compensate for the considerable amount of time per year that they spend in these posts, and are only able to visit their families for a few days every couple of months. Because the posts serve as vigilance points, they are generally located in remote (from a colono perspective) areas with very basic services, and only shortwave radios for communicating between the posts and the main park office in Cusco, making the park guards' job extremely isolating. Still, they are frequently in contact with the Matsigenka, and other populations who reside in the general vicinity of the post. As such, park guards are the MNP staff who have the most direct interaction with the

Matsigenka whenever the latter leave their communities to travel outside of the park, during patrolling trips that the park guards perform along the river, and during occasional visits to the communities. The relationship between the Matsigenka and the park guards has improved in recent years, although it is still tense on occasion. Due to the lack of direct communication between the Matsigenka communities and the higher MNP administration, park guards are the most immediate representatives of the park, and often enforce (some guards more assiduously than others) the restrictions mandated by MNP on residents, e.g., prohibiting fishing and hunting outside of the Special Zone.

Located 20 minutes downriver from Limonal, Boca Manu, as its name in Spanish indicates, is situated at the mouth of the Manu River just outside the entrance to MNP (Figure 4). The town is, in its majority, populated by *colono* residents, some of whom are the descendants of the first settlers in the area who emigrated in the 1940s. These are among the wealthiest of Boca Manu's current residents, owning stores where one can find a variety of packaged food products - from canned tuna, noodles, and cooking oil, to cookies, candy, soda, and beer –, produce, clothes, tools and sometimes fuel, all brought from Cusco by truck and then by boat. Since Boca Manu is the last point where Western products (especially fuel) can be procured before entering MNP, it is a frequent stop for tourist boats before and after their visit to the Park. For this reason, some store owners and other residents rent rooms to tourists and other travelers who have business in the area between Manu and the city of Puerto Maldonado to the West. Other colono residents are boat builders, constructing wooden boats for the local tourist industry, and also for illegal gold miners who are very active on the lower Madre de Dios River and its tributaries, to the east of MNP, near Puerto Maldonado. To obtain wood for boat construction, boat builders also regularly contract with local loggers. However, because in recent years the Peruvian government has begun to establish and enforce more restrictions on informal (and often illegal) gold mining activities, the boat

building business in Boca Manu has considerably declined. An increase in the preference for aluminum boats, which are easier to pull during the dry season because of their lighter weight, has also contributed to this situation. Some residents have left Boca Manu and settled closer to Puerto Maldonado, while others remain working in log extraction (often illegal), and temporary jobs in towns of the area.

The commercial activity in Boca Manu is also the reason why there is an important mixed population of Yine and Matsigenka settlers living in the legally-recognized indigenous Native Community of Isla de los Valles, next to the colono town. Some of the Matsigenka residents of this community were former members of Tayakome who moved to Isla because of their liking for, and increased access to, Western goods. For other Matsigenka people who live inside MNP and have access to money (which varies considerably among individuals, see below), Boca Manu is important because it is the closest place where they can purchase Western merchandise, despite exorbitant prices (partially a consequence of the costs of transport, since Boca Manu can only be reached by boat). In fact, in recent years, an increasing number of Tayakome residents, mostly young adults, have spent several months working in Boca Manu, usually as wage laborers in the yards or small fields of the colonos. They generally spend all the money they earn on larger food items, such as large sacks of rice and sugar, as well as bottles of cooking oil. Some Matsigenka travel to Cusco (a journey of several days from Boca Manu) to buy more merchandise at cheaper prices. When I began work in Tayakome in 2010, a few Matsigenka adults mentioned to me that they wanted to live in Boca Manu. Now however, because many people have realized how expensive it is to live outside of the park, some of these same individuals now assert that they would prefer to remain living in the community, and just would like to leave temporarily for seasonal work in Boca Manu and other nearby towns.

Boca Manu is also important for some members of Tayakome, and for members of other Matsigenka communities inside MNP, because it hosts one of the three boarding schools that accept Matsigenka secondary-school students. The boarding school in Boca Manu is run by the Municipality of the town, and has recently regained the support of the Frankfurt Zoological Society (FZS), an international NGO interested in the conservation of the biodiversity of MNP, that actively supports the Park. Parents who send their children to this boarding school have mixed feelings about it. On one hand, the Boca Manu boarding school is preferred by many of Tayakome parents because it is the closest secondary school to their community (though it is still two days downriver). On the other hand, many parents are concerned about the influence of Boca Manu residents on their children, as alcoholism and domestic violence are common in town. In addition, the boarding school has developed a reputation for lax discipline and insufficient care of the students, a reason why only Matsigenka boys were initially sent to live there (unwanted pregnancies were thought to be too much of a risk for girls). Over the past few years, a number of teenage children have escaped the school and rarely returned to their communities, working in tourism and logging in Boca Manu and other nearby towns. In fact, many boys in Tayakome want to study at Boca Manu specifically because of the possibility to work and earn money in order to buy Western goods. This situation is apparently changing, due in part to the aid provided by the FZS in contracting better-prepared tutors, and the construction of a new wing of the boarding compound especially for girls and staffed with female tutors. In 2017, three boys and three girls from Tayakome attended this boarding school in Boca Manu.

There are a number of *colono* towns and **indigenous communities on the banks of the Alto Madre de Dios River** (Figure 4). Some of the latter are Matsigenka communities, Shipetiari and Palotoa-Teparo, which are mostly composed of people emigrating from, respectively, the Urubamba region or the headwaters of the Pini-Pini River. However, with very few exceptions, they are generally not in direct contact with the Matsigenka of the communities inside MNP. There are also other indigenous Yine and Harakmbut settlements along this river. The large Amarakaeri Communal Reserve under the management of the Harakmbut, in fact, comprises an important section of the area included in the ecological buffer zone around the park. In addition, over the last ten years, there has increasing contact with Mashco-Piro indigenous groups, who were previously in voluntary isolation, along the lower Alto Madre de Dios River. Their attacks on Yine and Matsigenka settlers from communities outside the park, and on MNP park guards, have caused additional conflicts between diverse local and national actors concerned about the fate of these people, which is an issue still in need of resolution. Indigenous organizations and some academics are concerned about the vulnerable condition of the Mascho-Piro, resulting from their lack of immunological defenses against common Western illnesses, such as influenza and chickenpox. In contrast, some Catholic missionaries and local Protestant pastors are more interested in rapidly integrating them into "civilized" society. The Peruvian government, for its part, with the aid of academic experts on the subject, is attempted a strategy of "controlled contact" with the Mascho-Piro, a plan that is not popular among other academics and indigenous advocates who would prefer to cease all contact. However, given the complex situation (i.e., the livelihoods of other indigenous groups are being affected by Mascho-Piro attacks), controlled contact seems to be the most promising strategy to deal with the Mashco-Piro, and determine their interests and intentions.

Among the *colono* towns located on the Alto Madre de Dios River, Shintuya and Salvación (see Figure 4) are the ones more frequented by the Matsigenka of Tayakome. The Dominican mission established in **Shintuya** in the early 20th century, runs one of the three boarding schools where teenagers from Tayakome (four girls and two boys in 2017), along with students from other Matsigenka and Yine communities of the area, can live while

attending the local secondary school. Those parents in Tayakome who are most interested in providing their children with a high quality education, prefer to send them to Shintuya because the secondary school in town, under the supervision of the resident priest, is known for being one of the best in the region, along with the secondary school in Salvación. However, the principal reason why many parents want their children to go to Shintuya is because the missionaries exert strict control over the students (in contrast to the boarding school in Boca Manu, see above), and there is little risk of the children escaping or being mistreated by town residents. The priests also strictly impose the practice of Catholicism, speaking Spanish, and many other Western customs (Bunce and McElreath 2017), which may be an important driver of ontological change in these students. Tayakome parents rarely visit their children in Shintuya, as transportation for the three-day journey and four-day return trip is scarce. When parents do manage to visit their children at the boarding school in Shintuya, they bring dried fish, bananas, manioc, or any other type of food requested by the Dominican priest who runs the boarding school, as a form of tuition payment for the children. This is the same priest who visits the communities in the Park twice a year in order to conduct Catholic mass, baptize children, and distribute donated clothes and other Western goods to the Matsigenka⁷. During the priest's visits, parents interested in sending their children to Shintuya approach to ask if one of the limited openings at the boarding school is available for their child. The priest is careful in selecting only the best students, i.e., those with the highest recommendations from the Tayakome primary school teacher. Education in

⁷ The Dominican missionaries have visited the Matsigenka communities inside the Park since the 1980s, when they took charge of managing elementary education in the Manu region. The head priest of the mission visits the Matsigenka communities twice a year for a few days. Interestingly, this Catholic mission is the only religious congregation allowed by the MNP administration (and the Peruvian government) to conduct evangelization in the communities inside the Park. The Protestant evangelical mission established in Boca Manu brings volunteer evangelical doctors from the U.S. approximately once per year to dispense treatment to residents of the indigenous communities in the Manu area for a few days. However, leaders of these medical missions have commented to me that their MNP entrance permit restricts them from conducting any type of religious proselytism inside of the park.

Tayakome is generally of low quality, so many children struggle when they go to outside secondary schools.

Salvación is the other *colono* town often visited by the Matsigenka of Tayakome. As the capital of the district of Fitzcarrald, where MNP is located, Salvación harbors local governmental offices, including the local headquarters of the park, as well as the main medical clinic where Matsigenka who live in the Park travel in the case of a medical emergency. One of the boarding schools that host Matsigenka children who wish to attend secondary school is also located in Salvación. Approximately half of the students at this boarding school come from Matsigenka communities on the nearby Alto Madre de Dios River. However, in recent years' children from communities inside the Park have begun to attend, some of them because there was no space for them in the boarding school in Shintuya, but principally because this represents a safe alternative for girls relative to the boarding school in Boca Manu, which is known for not taking good care of children (see above). The boarding school in Salvación, called Chaskawasi, is run by three independent Spanish social workers, with experience in legal aid and empowerment for vulnerable populations, who provide a more relaxed and less hierarchical social environment for the indigenous children, compared to Shintuya, encouraging them to speak in their own language. Chaskawasi hosts a number of international volunteers who help the children with their studies and also lead different extra-curricular activities. Similar to Shintuya, parents can travel to Salvación to visit their children only on the fairly rare occasions when a boat is available, and like Shintuya, parents send food when they can to support the boarding school. However, because Chaskawasi is located farthest from the entrance to the park (Figure 4), many parents in Tayakome prefer to send their children to the other two boarding schools. In 2017, two girls and four boys attended Chaskawasi.

Atalaya is the last town going west on the southern bank of the Alto Madre de Dios River. Tourism is one of the two most important economic activities carried out by Atalaya residents, who are mostly colono people originating from the Andean regions of Cusco and Puno. Every year, mostly during the dry season (between May and November), numerous tourists arrive from Cusco, boarding a tour boat in Atalaya to begin multi-day tours visiting the eco-lodges dispersed throughout the buffer zone of MNP, along the Alto Madre River, as well as the tourist zone inside the park (Figure 4). The majority of the young Matsigenka men from Tayakome who work during the tourist season every year come to Atalaya, where they are employed by the owners of small and medium-sized tourism companies as crew members in their boats, or, for a few of the most experienced workers, as outboard motor drivers. The production of plantains for market is the other main economic activity practiced by Atalayans, who, along with plantain producers in the other towns along the Alto Madre de Dios River, are the main providers of this crop to the closest highland towns and cities, like Cusco. During lulls in tourism, Matsigenka men often work harvesting and carrying plantains grown in the numerous private fields surrounding Atalaya. Whenever the Matsigenka visit Cusco, either to buy merchandise with the money they have earned, or whenever they have a medical emergency, they come to either Atalaya or Salvacion. From either of these towns they take public transportation (small vans called "stars") that arrives in Cusco in eight hours in the dry season. The trip can take two days during the rainy season, since seasonal landslides are common along the unpaved road.

Life in Tayakome

Historical accounts suggest that the Matsigenka used to live in dispersed family groups or clans in the forest, even before the rupture to the existing social order caused by rubber boom (Camino 1977; see also Rosengren 2004). Clan-based organization may have

been convenient and favored, perhaps as a strategy to better access scarce food resources in the forest, and perhaps also as a manifestation of the individualistic ethos that currently characterizes the Matsigenka (Rosengren 2004). In the case of Tayakome, as mentioned in the history section above, the community originated as a result of the efforts of SIL missionaries to attract dispersed Matsigenka clans around an elementary school and health post so that they could be more easily evangelized. Currently, Tayakome still maintains the clan structure as a principal social unit, but overlaid on top of this is a more recent sociopolitical structure influenced both by the presence of SIL at the foundation of the community in the 1960s, and also (and principally) by the influence of the Catholic Dominican missionaries, starting in the early 1980s (see more below).

The eleven clans that currently compose Tayakome are typically matrilocal (there are a few exceptions), such that a couple lives in their own household with their young children, and are surrounded by the houses of their married daughters and their families, and their unmarried adult sons. Each of the families that form a clan has its own house within the larger complex of the clan. A typical family house comprises a main building – a raised, thatched roof platform of palm wood, where the couple and their young children hang their mosquito-nets and sleep –, and a kitchen – a thatched, sometimes walled, structure at ground level, where the cooking fire is tended.

Among the Matsigenka, there is a strict division of labor. Hunting is conducted only by men, while women cook and care for small children, often while simultaneously performing other household tasks. Women are often supported in such activities by their older daughters, sisters, mothers, or female in-laws who reside in the same clan. In addition, there are also many important activities that are performed equally by both men and women, such as fishing, gathering forest products and materials, working in the family swidden field, and visiting relatives and friends, sometimes during parties of manioc beer, or *owiroki*.

There are other, generally gendered, activities that Matsigenka conduct during their spare time: Women spin cotton, weave *shichakensi* (a wide loop of cloth for carrying babies), *sagis* (cotton bags), or *magatsi* (the typical tunic-like, cotton Matsigenka clothes), and mats and baskets of palm leaves, or make jewelry from glass beads, called *ninketsike*. Men, for their part, make arrows and bows for hunting, weave *seoki* (bags made of *Cecropia* tree-bark thread), or go to the forest to look for materials to build or repair their houses, occasionally with their wives.

The Manioc Field

As I will explain in more detail in Chapter 5, the swidden field is fundamental to the livelihood of the Matsigenka. In the first place, eating manioc implies being properly fed. Every single meal is served with boiled manioc (though occasionally plantains can serve as a substitute), otherwise it is not considered a real meal. Manioc is also one of the first solid foods that infants received. In addition, women use manioc to prepare the fermented beverage owiroki, a vital component of important social gatherings, where family and neighbors are summoned to converse and drink until the *owiroki* was finished. These gatherings are characterized by Matsigenka-typical patterns of gender segregation. Thus, as also happens during daily meals, women sit together to share a bucket of owiroki (or the communal plates with fish or game meat, and manioc), generally sitting on mats on the ground, while men do the same, more often sitting at tables and on benches. The Matsigenka consider menstrual blood to be potentially damaging to male hunting skills (Shepard 1999a; Shepard 2002a; Rosengren 2002; Rosengren 2006b; Johnson 2003). Thus, avoiding sharing food from the same plate may be a precaution taken to avoid women's "contamination" of men's food. Masato parties for the Matsigenka seem to be times for consolidating and strengthening social relationships with kin and neighbors, and it is considered a personal offence if a family member or close friend does not attend a particular owiroki party to help the "owner" of the

owiroki finish the, often numerous, pots of the drink. Occasions, these events also serve to resolve conflicts that would not otherwise be discussed during sober moments. On several occasions where I observed such conflict, disputes were eventually resolved during the gathering, after becoming highly verbally aggressive. However, on only a few occasions did the feud transcend the drinking gathering.

Manioc fields are generally close to the family houses, but this is highly variable, with some fields located up- or downriver several hours away by canoe. Fields are usually planted during the dry season, between June and September. First, the husband of the household (although occasionally the wife too) clears a patch of forest. After waiting a few days for the cut vegetation to dry out, the field is burned, and then, sometimes with the help of other members of the family, or sometimes alone, the owner of the field (either the husband or the wife) plants manioc cuttings throughout the swidden field. It is also common for the Matsigenka to plant corn in the same field. However, corn is often planted after the manioc has grown to around 20 cm. in height, so that the corn does not outcompete the manioc due to its faster development. People also acquire small stems of different varieties of banana and plantain from neighbors, or from the healer or *seripigari* (see Chapters 5 and 6), which they plant dispersed throughout, or around the borders of, their field. In fact, after manioc, parianti (plantain) is the next most important staple food for the Matsigenka, since it is considered a suitable substitute while manioc is not yet big enough to harvest. Plantains are also preferred accompaniment for certain types of protein, such as *pagiri* (beetle larvae). Other common crops are sugar cane, sweet potatoes, sacha-potatoes, squash, peanuts, and beans. After the field has been planted, both men and women spend a fair amount of time weeding it, either an hour every day for a few days, or an entire day every week or so. This is similar to the constant work of clear weeds from around their houses. Weeding is a constant in Matsigenka life in order to prevent forest species from invading the domain of the household, or

overgrowing the manioc plants. The size of manioc fields varies between approximately 1 and 2 hectares (Ohl et al. 2008). The number of fields per nuclear family is also variable. People tend to utilize one field from the previous year, already producing manioc, while they are planting one or two new fields that will yield manioc from six months to a year in the future, depending on the manioc variety.

Seasonal Engagements with the River and the Forest Domains

As I explain in Chapter 5, for the Matsigenka of Tayakome, the forest and the river represent conceptual domains that are different from the house and field where they live. Thus, they engage with the non-human beings that inhabit these other domains, but they do not consider themselves part of them. The different types of relationships with non-humans (discussed in the following chapters), and the manner and frequency with which they are performed depend greatly on the season of the year. For a start, as with many other Amazonian groups, the river, and its seasonal changes, plays a fundamental role in Matsigenka procurement of food and, therefore, their livelihood. During the dry season, typically between May and November, the rivers of the Manu area are at their lowest levels. At this time, women, men, or both, go fishing near the community. Although the number of fish caught varies from day to day, it is almost certain that, during this season, the catch will be abundant, and include a great variety of fish species. Among the more common catfish, people frequently catch the smaller corio (Pimelodus sp., known as bagre in Spanish), approximately 20-30 cm in length, and the highly appreciated, larger species like omani (Zungaro zungaro), or cayonaro (Pseudoplatystoma fasciatum, doncella), both of which can reach one meter in length. It is also common during this time of the year that the adult men of the household, and frequently their teenage sons, wake up hours before sunrise and "pole" their canoes with a *tangana* a few hours upriver, where they have more opportunities to catch the larger catfish mentioned above, or other appreciated fish, such as the large predator

komaguiri (*paco*). Fisher-men and -women tend to go to specific spots on the river, where the Matsigenka know that fish are abundant, e.g., where the river cuts into the bank forming a deep pool. Catching one of the large fish species entails a momentary reprieve from food procurement, and the possibility of investing day-light hours, or even several of the following days, in some of the other activities mentioned above. Often, the entire family goes upriver on fishing and hunting trips that can last several days or weeks.

In the rainy season, between November and April, the level of the Manu River can rise by 10 meters. Despite the fact that the community, as well as other Matsigenka communities of the Manu area, are situated in the upland or *terra firme* forest on high banks overlooking the river, during this season there is always the risk of flooding low-lying fields, and canoes escaping. In addition, the concentration (and thus availability) of fish in the main river decreases, since the water inundates surrounding forest, and fish disperse over a larger area. During this time, fishing activity is gradually replaced by the hunting of large monkeys, such as osheto (spider-monkey) and komaguinaro (woolly monkey), which begin to gain weight and fat as a result of gorging on the many species of forest fruits which become available around March. These large prey animals become an especially important source of protein during the last months of the rainy season. In my experience in Tayakome, before this time, particularly during the months of January and February, when the rainy season is at its peak, obtaining enough food for a family is a challenge, and many people rely on fishing with cogi (Strychnos sp., called barbasco in Spanish), a poisonous root that make fish disoriented and facilitates their capture. During this time, people go early in the morning to put *cogi* upstream, in the few streams where the level of the water is still low, and are generally joined later by virtually all the members of their families, including children. Occasionally, the whole community organizes a *cogi* fishing day, designating a few men to dig up a large amount of *cogi*, and put it in some of the larger streams, while the rest of the community

waits downstream to catch the fish as they float past, belly-up. These are generally events that everyone looks forward to, primarily because of the highly anticipated amount of fish that people expect to obtain. However, results vary, depending on factors such as water level.

While men go on monkey hunting forays more frequently at the end of the rainy season, they make arrows all year around because they regularly visit the forest, either alone or in small all-male groups, to look for other prey, such as peccaries, agoutis, tinamous, or wild turkeys. Occasionally, they build blinds under fruiting trees and wait early in the morning for animals that come to feed on the fallen fruits. It is also common for the whole family go to the forest to gather fruits that are in season, or to cut down palm trees to collect the nutritious hearts, and the leaves for waiving mats and baskets. When this happens, the family often returns, weeks or months later, to the place where they left the fallen palm tree trunk in order to collect several varieties of *pagiri*, 1-to-2-inch-long beetle larvae, rich in fat, with a nut-like taste, that colonize the rotten trunk, and that are highly appreciated by the Matsigenka as a substitute for meat.

Life in Community

Prior to the establishment of Tayakome in the late 1960s (see above), Matsigenka clans are thought to have been politically and economically self-sufficient, perhaps living days away from other groups of extended families. Nowadays, the clans that compose the community are still economically independent, but they are geographically closer to each other, with the average walking distance between them being around 15 minutes through the forest. Visit all 11 clans in Tayakome requires approximately 90 minutes to walk between the farthest houses at the two extremes of the community.

Living in a community was the start of many fundamental socio-political changes caused by contact with missionaries: first with those of SIL in the late 1960s, and then with the Catholic Dominicans based in Shintuya, who initiated contact with the Matsigenka of

Manu in the early 1980s. The consequences of this contact for the Matsigenka, not only of Manu but also of Urubamba (as attested by Tayakome residents who emigrated from there), are similar to the effects produced by Protestant missionaries on the South African Tswana, described by Comaroff and Comaroff (1989). These scholars argue that the colonizing process put into practice by these missionaries not only sought to impose Christian religious forms on the Tswana, but also to produce profound changes on their notions of person, sociality, and habitus, in order to "civilize" them. The missionaries' ultimate aim was to transform the Tswana into submissive peasants in order to integrate them into the capitalist system that had been newly established in the region under colonial rule. These two components, "conversion" and "reformation," respectively, that form a part of what the authors call "the consciousness of colonization," do not necessarily occur simultaneously or even completely. Thus, while ideological and religious changes may not be successfully imposed on a colonized people, they still may be "reformed" through the imposition of covert internal hegemonic structures (Comaroff and Comaroff 1989).

The situation of the Matsigenka of Tayakome appears to coincide, in some respects, with the model proposed by these scholars. Conversion, as practiced by Dominican missionaries, has not been inordinately effective. This, in my opinion, is partially a consequence of the unwillingness of priests, who have visited the Matsigenka communities since the late 1980s, to learn the Matsigenka language, most likely as a consequence of their dismissal of Matsigenka culture. This contrasts sharply with the disposition of Protestant missionaries of SIL, who, like the Christians described by Comaroff and Comaroff in the case of the Tswana, regarded the Matsigenka language as a useful medium to facilitate evangelization, and they subsequently translated the bible into Matsigenka for this purpose (see above). Currently, the Dominicans engage with Tayakome members only in Spanish, believing that they already understand this language perfectly, or wishing that they would

learn it. Whenever the Dominican priest in charge of the Manu community's visits Tayakome, he gives mass in Spanish, and, in my experience, only a few people understand it. Most Matsigenka attend the mass out of custom, because they are used to the priest's visit and, more importantly, because they want to receive the Western merchandise (mostly bars of laundry soap, clothes, and candy) that he distributes in Tayakome, and in the other Matsigenka communities, to those who attend mass. Christian sacraments (and traditions) are, for the most part, not thought about or practiced by Tayakome residents outside of the biannual masses (see below). Couples are considered to be married when they start living together. They require no ceremony, and much less the Catholic priest's blessing. In addition, as Shepard (2002b) affirms, the burial of bodies of the dead was a custom imposed by missionaries, as, prior to their arrival, Matsigenka laid the bodies of their dead in the open air by the buttresses of large trees.

The few Christian customs and beliefs that have been effectively introduced into the Matsigenka of Manu, seem to be the result of reinforcement and inculcation on the part of the Matsigenka school teachers who were trained and brought by the Dominicans from the Urubamba region. These teachers speak Matsigenka and teach in the elementary schools. While Tayakome residents of middle age and older remember the Evangelical Matsigenka teacher brought by SIL (see above) because he renamed many of them using Western names, younger adults affirm that the current Catholic teachers taught them that the creator god Tasorintsi lives in the sky, that their souls will go to accompany him when they die, and that devils and unbaptized people go to the underworld (see Chapters 5 and 6). Most older residents did not attend school. However, some of them hold similar Christian ideas as a result of discussions with the teachers. However, there is considerable variation among community members regarding ideas about baptism and the Matsigenka soul (see Chapter 6, and also Bunce and McElreath 2017). During mass, Matsigenka baptize their children,

partially because the priest is insistent that they do so, but also because they have learned the Catholic custom of godparents who, in Peru, are generally expected to give presents to their godchildren. Thus, many parents baptize their children as much as (or primarily as) a means of receiving gifts from wealthy *colonos* or foreigners designated as godparents, as because they believe in the spiritual necessity of the sacrament.

As for the "reformation" component of the model proposed by Comaroff and Comaroff, one the aims of the Dominican missionaries have been to transform the Matsigenka into a "civilized" people. The pedagogical approach that these missionaries promote in elementary education has the goal of "acculturation and assimilation" through instruction in reading and writing in Spanish, rather than in Matsigenka (a sharp contrast with the Protestants of SIL) (Shepard et al. 2010:282). This has been one of the larger contributions of the Dominican-trained Matsigenka teachers, who took as one of their primary responsibilities to accomplish this "civilizing" mission in the community, even in non-school-related aspects of residents' lives (Shepard et al. 2010). Changes instigated by Catholic and Protestant missionaries in other spheres of Matsigenka life seem to have been more significant than those related to religious conversion. For instance, as mentioned above, Matsigenka changed their residency pattern from living in dispersed independent clans, to a more concentrated settlement pattern around the school and the health post, beginning during the time of SIL (D'Ans 1975). Matsigenka clans are economically self-sufficient, but, as members of a community, families are socially exhorted to participate in common activities. Most such activities consist of communal work, called *faenas* in Spanish, where everyone is summoned to clear weeds around communal buildings, such as the health post and elementary school, or to help in the preparation of the communal manioc field. Family members are also forced to participate in the organization and preparation of communitywide celebrations, in which manioc from this communal field is used for food and manioc

beer. These celebrations are held on community-specific commemorative days, as well as national holidays (e.g. Peruvian Independence Day, Mother and Father's Days, Christmas).

The current governance structure of the Tayakome is the result of the influence of the one of the school teachers. As a result of his personal connections and the indigenous organization CEDIA (Centro para el Desarrollo del Indígena Amazónico), Tayakome and Yomibato received support to register in Puerto Maldonado as official Native Communities in the 1990s. As a consequence, each community is required to elect a governing committee with a two-year term, comprising a president, vice-president, treasurer, secretary, and two vocals. This committee calls regular communal meetings every two months, and extraordinary meetings whenever they consider it necessary. While the members of the committee are elected democratically, their nomination, especially that of community president, is generally the result of communal pressure, since it is rare that a community member willingly nominates himself or herself for the position, and, in fact, most people actively try to avoid being nominated. In addition, because the positions of president and vice-president are public occupations, women, who tend to be shier in the context of these official communal meetings, never opt to occupy them, although they have been elected to lower-level positions. The fact that most Matsigenka try to avoid participation in the communal-governing system attests to the fact that this style of governance is foreign and has been overlain on the individualist spirit that characterizes most Tayakome residents.

Current External Contact and Potential Ontological Change in Tayakome

As mentioned above, Tayakome's relative geographical isolation has not impeded its members (some more than others) from maintaining contact with the broader Peruvian society. The constant, and, especially of late, increasing interactions with *colono* communities outside of MNP may be also influencing ontological change, and affecting the manner in which the Matsigenka perceive and engage with their environment.

Currently, the majority of Tayakome members are not fully integrated into the market economy, and do not have a reliable income. This is partially the result of MNP restrictions imposed on the communities, which force them to preserve a "traditional indigenous way of life" if they wish to remain living within the limits of MNP (see above). Still, at the community level, Tayakome, like Yomibato (the larger community one day upriver from Tayakome), receive limited revenue from Multicommunal Enterprise Casa Matsigenka (Casa Matsigenka), the eco-loge that both communities manage together. These funds are generally used to purchase tools or equipment for the community (e.g., machetes, big pots for cooking in communal parties), usually once per year, as well as for covering travel costs for leaders and delegates attending meetings outside of the park, and for people with medical emergencies who require care in the nearest large towns or cities, such as Salvación, Cusco or Puerto Maldonado. Those Matsigenka who work in the lodge for a four-month term also earn a small salary. However, most middle-age adults prefer to avoid the inconveniences of living at the lodge (e.g., the scarcity of proper food, since planting manioc and fishing is forbidden by MNP, as mentioned above) over earning a salary. Young adults, on the contrary, who more often want cash to buy Western goods, prefer to earn more by temporarily engaging in wage labor in the colono towns around MNP.

As a result, in the years that I have conducted field research in Tayakome, I have encountered a number of cases in which young husbands (none of them heads of their clan) did not cultivate a field in a given year because they were downriver working as outboard motor drivers or crew members for the tourism industry. Indeed, these activities are increasingly popular among young men (25-35 years old), who usually go to work in Atalaya or at colono-owned tourist lodges around the MNP. These men usually spend the complete tourist season (typically the dry season) away from their families, occasionally sending Western goods back to them, such as cooking oil, sugar, rice, soap, and clothes, which are

highly desired in the community. Consequently, their wives and children do not have their own swidden fields, and must instead harvest manioc from the fields of clan leaders, who are generally the fathers of these women. In the last few years, the community has attempted to control the number of young men who leave for work outside of the Park every year, in order to prevent the community from being stripped of its male population and work force – important for communal work parties, or *faenas* (see above). Thus, the community governing committee controls the permission process for all community members who wish to temporarily leave MNP while retaining their community membership⁸ and, thus the right to return. Usually, permissions are granted to around three or four men per year.

In addition, teenagers who attend boarding secondary schools in Boca Manu, Shintuya, and Salvacion (see above) are constantly exposed to *colono* customs and conceptions during the academic year. They return to the community for summer vacation noticeably more "Westernized," sporting fashionable clothes and hairdos. Because they are often permitted to work during the weekends, especially in Boca Manu, they have money to buy DVD players, movies, and cellphones, which are primarily used in Tayakome to take pictures and to listen to popular reggeaton and cumbia music (there is currently no cellphone service in Tayakome). Adult Matsigenka men who work in tourism also buy and bring back such Western goods, as well as larger equipment (generally large music systems, and small DVD players), bought in *colono* towns or during short trips to the closest cities of Cusco and Puerto Maldonado. However, a recent study suggests that school children, perhaps because of their young age and susceptibility to the influence of authoritative adults, may be more prone

⁸ This is a measure established by the communal authorities from both Tayakome and Yomibato, apparently for the purpose of preventing people from leaving the community for extended periods of time. If any member of the community wants to leave the Park for any type of trip without losing their communal membership, she needs to formally ask the President and the community in a communal meeting for their consent, explaining the reasons for her trip and the time that she would be away. Only with the written and signed communal permit, can she travel outside of the Park, showing copies of the permit at the two MNP guard posts, Pakitza and Limonal, located in the Manu River.

to acquiring *colono* norms and aspirations, compared to the adult men who work as wage laborers (see Bunce and McElreath 2017). In the case of the Shintuya boarding school run by Dominican missionaries, the priests actively attempt to inculcate a "civilized" ontology in Matsigenka teenagers, which involves, according to the priest himself, a rejection of certain Matsigenka customs. Thus, speaking the Matsigenka language and living a lifestyle typical of Tayakome (e.g., being a farmer or a hunter) is conceived "primitive" and negative. In Boca Manu, these ideas are not as strongly enforced by the boarding school authorities. However, outside of school, colono townsfolk discriminate against the Matsigenka children, often treating them with condescension or insulting them for their indigenous origin. The living environment is certainly less hostile to the Matsigenka lifestyle in the boarding school at Salvacion, Chaskawasi, where teenagers are better sheltered from similar attitudes among colono residents of the town. Children who attend Chaskawasi do have a more positive view of their own cultural group. However, because they attend school, their aspirations tend to be different from those of teenagers who remain in Tayakome, and generally involve continuing their studies in order to become professionals and live outside of Manu. All these various external influences may be affecting these children's perceptions of their environment.

There are also fundamental changes taking place within Tayakome. In 2009, the year prior to my first visit to the community, the US NGO Casa de los Niños Indígenas (CDLNI), commenced work in Tayakome, installing a slow-filter potable water system that delivers running water to each house in the community. The water is taken directly from a spring, one hour walking from the closest house, which then is collected in a central reservoir in which the water is stone- and sand-filtered three times, and the distributed to each house in the community through a pipe system, built by community members themselves with the direction of the NGO specialists. Thanks to this initiative, since 2011, each household in the community has a spigot with clean water fit for consumption without the need to boil it. CDLNI also built two spigots and two bathrooms with a sewer system for the elementary school children in the center of the community. According to an analysis of stomach illness conducted by the NGO before and after completion of the water system, the health of Tayakome residents appears to be improving, with fewer instances of such illness. The establishment of fixed, cement spigots, connected to the network of water pipes may affect the practice of Matsigenka ontologies, given their traditionally flexible residence patterns and tendency to move and build new houses every few years. Still, the extent of these potential ontological changes has yet to be investigated.

In addition to the new water system, since 2013 Tayakome, as well as the other Matsigenka communities in MNP, have a system of solar electricity, provided by the Regional Government of Madre de Dios. The system includes a large truck battery connected to a raised solar panel for each family house. This provides electricity to power two energyefficient lightbulbs, one installed in the main house and one in the kitchen, as well as one outlet to plug electronic devices into. Before this time, the few car batteries that existed in the community (acquired as presents from state authorities or bought by the few men who work in tourism outside of the Park) were charged using solar panels belonging to the health post. These batteries were used almost exclusively for the purpose of plugging in sound equipment to enliven owiroki parties with cumbia, Andean, and pop music. These parties tend to last all night, or at least, until the owiroki runs out, so it was common for these batteries to be used continuously until they were completely drained. Even before solar panels were installed for individual houses, the loud music changed, to some extent, the dynamics of owiroki parties, since the traditional singing and telling of stories by older men and women was often replaced by listening to the loud music and dancing in a Western style. Now that the music is even more frequently played (because of the large, powerful batteries in each house), I have heard some older adults complaining that it is difficult to have a conversation, let alone listen

to stories and singing. Interestingly, many young adults and teenagers still take an interest in these stories. Some years ago, anthropologist Glenn Shepard recorded several of the oldest men who then resided in Tayakome and Yomibato telling these stories. Some of the CDs that he distributed in both communities are still played occasionally.

It is important to mention that, in contrast to other indigenous groups of the Amazon, the Matsigenka of Manu have been fairly isolated from with the influence of indigenous federations. As such, political identities and references to specific stereotypes of indigeneity (e.g. ecologically noble savages) employed strategically by other indigenous groups in pursuit of specific interests (B. Conklin and Graham 1995; Greene 2009; Cepek 2016), are (so far) distinctively absent among the members of Tayakome when presenting themselves to (relatively infrequent) outside visitors. This type of discourse is more often managed by regional indigenous federation, such as the Native Federation of the Madre de Dios River and its Tributaries (FENAMAD). Tayakome residents are exposed to such discourse when representatives of FENAMAD visit the community. However, such visits are sporadic, and generally occur whenever new FENAMAD officials have been elected and make brief visits to all of the communities of the Madre de Dios River basin. In addition, the central office of FENAMAD is in Puerto Maldonado, and since travel between this city and Manu is long (at least three days) and costly, there is no permanent contact between the Matsigenka communities inside MNP and the federation. A few years ago the relationship with FENAMAD notably improved, and the frequency of visits increased slightly because a member of Yomibato, the other large Matsigenka community inside MNP, was elected as part of the managing committee of FENAMAD, and pushed for the establishment of more regular contact with Manu. Still, FENAMAD's discourse regarding development and environmentalism has apparently not (yet) exerted a major influence on members of Tayakome, as far as the manner in which they perceive and portray themselves in relation to

their surroundings and broader Peruvian society. As I discuss in more detail in Chapter 8, for the majority of the Matsigenka of Tayakome the forest does not require protection because it is constantly renewing itself, growing, and invading. As such, the Matsigenka do not see themselves as natural protectors of the environment, in contrast to the notion of indigenous peoples currently advanced by FENAMAD (Peña 2018).

Conclusion: Historical Construction of Matsigenka Ontologies

Ontologies are constantly being constructed and reconstructed as part of a dynamic process influenced by in-group and out-group social interactions, as well as the social transmission of idiosyncratic conceptions. In this chapter, I have focused on potential external sources of change for Matsigenka ontologies, with the aim of showing that the Matsigenka and non-Matsigenka worlds may be not as incommensurable as proponents of the ontological turn suggest. This is partially a consequence of the long history of contact and engagement between the Matsigenka of Tayakome and outsiders, similar to the history of many other populations affected by colonial encounters.

Even before the arrival of first missionaries in the 18th and 19th centuries and enslavement during the rubber boom, violent raids on the Matsigenka by other Amazonian groups may have had an influence on the nature of their interactions with the forest, and, consequently, their conceptions of it. In the particular case of the Matsigenka of Manu, the influence of Protestant and Catholic missionaries, in the second half of the 20th century, has had a considerable effect on their current engagements with the environment, which is most obvious in the change from a dispersed clan-centered settlement pattern in the forest, to a concentrated community-structured settlement pattern. In addition, the fact that SIL missionaries provided Tayakome residents with shotguns and ammunition, paying them for the pelts of the animals they hunted, may have represented a fundamental shift in Matsigenka

interactions with the forest, despite the fact that such commercial hunting was later prohibited by the MNP administration, and the Matsigenka were forced to revert to bow-hunting for their subsistence.

With the establishment of MNP, the Matsigenka have been largely forced to live in conformity with a Western image of "traditional" indigenousness, mandating subsistence activities that do not require the use of Western technology. This image, however, does not correspond with other "modern" aspects of community life, many of which are a direct or indirect result of the influence of Protestant and Catholic missionaries, and also of ever-increasing contact with colono visitors and communities bordering the MNP. Certainly, it is difficult to delimit the complete extent of any difference between current and past forms of Matsigenka engagement with the forest, mediated by the influence of outsiders. However, the above recount of the many outside engagements, and their consequences, in the history and contemporary life of Tayakome residents suggests that the "hybridization" that, according to Latour characterizes the "moderns," is also a feature of "non-moderns" (Latour 1993). In this context, and as I will show in future chapters, differences between Matsigenka and non-Matsigenka may not as radical and as ontological as some authors might suggest.

CHAPTER 4: EMERGING ONTOLOGIES THROUGH A MIXED-METHODS APPROACH

In his analysis of the Nuer notion of "Spirit" as a representation of God, Evans-Pritchard refuted allegations that "primitive peoples" possess inferior capacities for thought (Evans-Pritchard 1956), an idea that had been advanced earlier by authors such as Tylor (1958 [1871]) and Lévy-Bruhl (1985 [1910]), who based the claim on the fact that non-Western peoples often made seemingly illogical and contradictory statements about the world. Through a detailed study of terms and meanings, Evans Pritchard arrived at the conclusion that the Nuer do in fact recognize the difference between terms in (what to us are illogical) statements such as "twins are birds," and that the meaning of such statements is context-dependent, involving an "extra-quality" to a particular concept. Thus, Evans-Pritchard affirms that the Nuer do not believe that twins are literally birds. Because twins belong to a distinctive category, given that "twin-birth is a special revelation of Spirit," they are analogically equated with birds, which are also exceptional in their relationship with Spirit due to the fact that they are "children of God" (Evans-Pritchard 1956:145). Twins and birds are the same *in relation to God*. In other words, Evans-Pritchard argued that, rather than considering these expressions as literal truths for the people that enunciated them, they should rather be treated as symbols, metaphors, analogies, or some other type of "poetic" demonstrations of religious conceptions (Evans-Pritchard 1956).

For ontologists, however, this is not sufficient, as, with this type of explanation, a particular ontology of the world (that of the anthropologist) is assumed and imposed, namely, the ontology that there exists a single reality and people have different representations of it (E. B. Viveiros de Castro 2003). In Chapter 2, I have explained that one of the principal premises of the ontological approach is "taking others seriously" by considering that their statements are truths in themselves, and not metaphorical expressions (e.g. Henare, Holbraad, and Wastell 2007). Ontologists like Holbraad argue that we should consider alterity in terms

of the existence of different worlds built with alternative concepts. Then, in order to understand the expression "twins are birds," we need to rethink our concepts of twins and birds through ethnography, and come up with new ones with which such an assertion can be held as truthful (see Holbraad in Carrithers et al. 2010).

While I agree with the fact that conceptions need to be rethought and considered from the point of view of the people we study, I also argue in Chapter 2 that alterity should be an empirical question, rather than an *a priori* assumption. Therefore, taking people's statements seriously should not imply that we must always take their truth at face value, unless that is the intention of the people themselves. Ethnography, indeed, is the key for assessing the appropriateness of our analytical concepts, and specifically, for attempting to differentiate between people's literal meaning and metaphorical intent. The methodological question that rises, then, is how do we make such differentiation and elicit people's emergent ontologies. This chapter illustrates the methods that I used in my attempt to answer this question. I contend that, in this endeavor, the use of mixed methods for exploring local ontologies is crucial, and both qualitative and quantitative techniques should be considered.

Although I asserted in Chapter 2 that ontologies may be a semiotic-material conjunction, I still treat this as a hypothesis to be empirically tested. Therefore, I submit that attempting to elucidate the existence of alternative worlds through analysis of "semiotic" constructs is a good place to begin such exploration. An alternative, and equally valid, approach would instead begin with analysis of the "material" component, that is, practice or behavior, since both the semiotic and the material mutually influence each other. However, due to time constraints, it was more feasible to begin this exploration from a cognitive, semiotic, stand point. In Chapter 8, I provide preliminary results pertaining to the material component, based on people's self-reported behavior.

I begin this chapter by explaining the general methodology that I used to assess Matsigenka conceptions and explore the existence of potential ontologies, illustrating the combined use of qualitative research, along with formal interviews and experiments. In the second and third sections, respectively, I elaborate in more detail how I employed these two types of methods. Specifically, I explain the advantages and shortcomings that I experienced while using them, which in turn illustrates the complementarity of qualitative and quantitative approaches. Finally, I explain the use of the Cultural Consensus Model to analyze the formal quantitative data collected for this dissertation, highlighting its usefulness for determining the existence of agreement within subgroups of the interviewed population. The combination of these methods and analytical tools allowed me to explore and propose the existence of potential emergent ontologies.

Applying a Mixed-Methods Approach to Explore Emergent Ontologies

For this study, I implemented a combined methodology using both quantitative and qualitative methods. During the twenty-two months of field research that I conducted in the Matsigenka Native Community of Tayakome, I carried out ethnographic research through participant observation, unstructured and structured interviews, and formal experimental tasks. I visited the community for the first time in 2010, and spent two months getting to know the people, visiting their houses, and exploring potential ideas for investigating their conceptualization of plants, animals, and the environment in general. In 2011, I returned to Tayakome for five months for the purpose of learning the Matsigenka language, and also to conduct preliminary research pertaining to Matsigenka perceptions of their environment. During a third, extended, visit from January 2013 to March2014, in addition to conducting intensive participant observation, I collected most of the formal data included in this

dissertation, which was later complemented with two short field seasons during January 2015, and between April and May 2017.

In order to explore Matsigenka ontologies in Tayakome, I attempted to elicit the meaning of certain concepts and expressions, and assess how the resultant explanations are discursively employed in specific contexts, and enacted through practice. In order to do so, it was essential to learn the Matsigenka language. Many members of Tayakome, especially women, who have considerably less contact with the communities outside MNP than men, are not fluent in Spanish. Additionally, it is of particularly critical importance to attempt to understand people in their own terms. This is not only because this is a central premise proposed by ontologists. Any anthropologist should consider it part of her job to attempt to grasp the conceptions of the people under study, and not force them to adapt and fit their notions into ours, if we speak different languages. In order to compensate for my initially intermediate-level Matsigenka skills, while still acquiring a reasonably accurate understanding of people's notions, I required the constant aid of a few Matsigenka in Tayakome who also speak Spanish. By soliciting their help with translations and interpretations of new words and concepts that I discovered through my interviews and daily experiences living in the community, I was more confident that I understood what people told me, and this also facilitated the design of appropriate and precise questions for informal and formal interviews and experimental tasks.

For my particular topic of interest, the Matsigenka perception of their environment, I spent the first months of my extended stay in the community (between three and four months) conducting primarily participant observation (see details below), paying attention to how people express themselves in relation to the forest and their surroundings. At the same time, I participated in their daily life, most of the time accompanying people during daily subsistence activities, which is the most immediate and direct manner in which they engage

with their surroundings. I continued participant observation throughout my entire stay in Tayakome, but these early months constituted the period of time when I employed this method of investigation more intensively. During these first months, I also engaged informal conversations with people, inquiring about their life history, in order to later relate this background information with their particular opinions and conceptions.

After this initial period, I began to explore Matsigenka conceptions of the forest in more detail, attempting to compare these conceptions with my notions of the environment (see more in Chapter 5). In order to do so, I conducted semi-structured conversations with Tayakome members who were considered to be experts and non-experts with regard to forest species, asking general questions about the forest, and following up in more depth about particular conceptions that were new to me. In this dissertation, when I use the term "experts", I refer specifically to twelve Matsigenka (8 men and 4 women) who the majority of members of the community consider to be particularly knowledgeable about topics such as the Matsigenka spiritual world, and the use of plants and other techniques for curing. A few of these experts also have some training as *seripigari* (the Matsigenka healer or shaman). Most experts are the elders of the community, between 60 and 70 years old, while only a few of them are in their late 40s and early 50s.

For the purpose of exploring the content and limits of Matsigenka conceptions of the forest, I asked people to free-list elements of the forest (see more details below). I did this with nearly the entire adult population of Tayakome, because I wanted to explore the diversity of ideas held by people in the community. Through this method, I gained a preliminary understanding of the ways in which Matsigenka think of certain elements of the forest, both in terms of saliency and importance for them. To complement and extend the results of this task and my impressions developed through participant observation, I explored the valuation attributed to certain species by asking people to rank them in terms of

importance (see below). These rankings provided a useful complementary source of information to analyze people's motivations for interacting with these species (see below and Chapter 8).

To explore potential ontological differences between Matsigenka people and other human and non-human beings that inhabit the forest, as suggested both by my observations in the community and in the literature, I used triad comparisons (see more below). As I explain below, the results of these experiments turned out to be more suggestive than conclusive, but they provided interesting qualitative information that served in the design of subsequent semi-structured interviews and conversations. I present and expand upon the results of these formal and informal inquiries in the following chapters, where I explain perceived differences between the various domains that constitute the Matsigenka world (e.g. the forest, the manioc-field), as well as differences that exist between the human and non-human entities that populate them.

Based on everyday conversations with people in the community and listening to how they expressed their relationships with elements of the environment (e.g. animals, plants, celestial beings like the moon), I noticed that people attributed qualities that denoted humanlike consciousness or agency to some of these entities more than others. Occasionally, people affirmed that certain species were comparable to Matsigenka people, or they referred to some of them as possessing a soul. During times that I shared food with women, I became acquainted with food restrictions in different contexts. I learned that the more common restrictions practiced by them and their husbands comprise those motivated by fear that their infants' souls will be taken by species that they eat (see Chapter 7). In order to probe people's conceptions of different species and entities more deeply, I conducted a formal survey where I included an extensive list of species and elements of the environment (including some of the most salient items mentioned in the free-listings), and, for each one, I inquired about a series

of features that people commonly mention when they refer to these species (see Task 2 below). I acknowledge that the resultant categorization of species, based on the features that I presented, is artificial, and that Matsigenka characterizations of species may not be constant across different contexts. Nevertheless, the results of this survey were useful to organize some of the competing concepts held by people of Tayakome with regard to different species and elements, and, occasionally, the diverse meanings that the same person associates with a particular concept (e.g., the soul, see Chapter 6), allowing me to examine the contexts in which such meanings are employed, and how consistent this is throughout the community.

An important objective during fieldwork was to evaluate how concepts relate to each other, for instance, when people say that "the soul of *javapa* [a curing plant, see Chapter 6] is like a Matsigenka". In instances like this, I attempted to assess whether people were speaking figuratively (like Evans-Pritchard's interpretation of the Nuer), or whether they literally meant what they said (the interpretation favored by ontologists). My strategy was to examine the context in which this expression was produced, and try to determine the meanings of the concepts that were involved - in this example, "soul," "jayapa," "be like," and "Matsigenka" -at the discursive level, and, when possible, the practical level as well. For instance, I posed further questions regarding the extent and the form of the similarity that was implied by the verb "be like", kañotagantsi, specifically in the context of these two nouns. I also asked people to compare between nouns, for instance, by asking whether jayapa was similar to another species that was also mentioned as "being like" a Matsigenka, and in what contexts such affirmations held. In this manner, I followed Holbraad's recommendations for exploring ontologies ethnographically, but, at the same time, I avoided his proposal to simply assume that people's statements and expressions are always literal. Rather, I attempted to explore the meaning of their conceptualizations.

As a manner of assessing my interpretation of people's conceptions, and testing whether what they say they believe, in fact, guides their actions, I paid special attention to, and recorded, people's actual engagements with particular entities, in order to relate these instances with people's discursive notions of them. In addition, I integrated these experiences collected during participant observation with the results of a self-reported behavior interview (see below). This interview was necessary because, despite the extended field seasons that I spent in Tayakome, there was insufficient time to conduct thorough observations of each person's behavior with regard to all of the different beings that I recorded during my conversations and interviews with them.

I do not claim that the results I obtained using these methods and techniques are exhaustive or conclusive, primarily because of the contextual conditionality of some of the data (both qualitative and quantitative) that I gathered, i.e., the artificial context of an interview, as well as informal conversations and participant observation in the presence of a foreigner in the community (me). Nevertheless, the fact that most of the interview data coincide with some observed and some reported behavior suggest that it is indeed possible to use such data to both characterize and better understand emergent Matsigenka ontologies. Such ontologies may be ephemeral because ideas and conceptions change through time, in some people more rapidly than in others. However, I contend that, at a higher level, this combined methodology has allowed me to develop a better understanding of some general principles used by the Matsigenka of Tayakome to make sense of their world (explained in Chapter 9). Despite the fact that, as illustrated in this section, qualitative and formal methods go hand in hand, below I provide an account of each of them separately, in order to detail the procedure and rationale for their use.

Participant Observation and Informal Interviews

The qualitative component of my research consisted of observing and participating in Matsigenka daily life, paying special attention to instances involving human-environment interactions. I was fortunate to live during most of my time in Tayakome with a Matsigenka family, who I now consider to be my closest friends in the community. Living with them afforded me an insider perspective on the intricacies of the Matsigenka daily life, characterized by the physically-demanding subsistence activities in which I participated, and also exposed me to the interests, concerns and aspirations of the members of a Matsigenka clan. I also shared many close experiences with members of the other eleven clans that compose the community, visiting them frequently and similarly participating in their daily activities.

Living in the community with my husband (who is also an anthropologist conducting his own research in Tayakome) certainly facilitated opportunities for both of us to participate in the traditionally gender-segregated activities of Matsigenka life, after which we shared our impressions of the experiences in which each of us took part. Thus, I joined the women while cooking manioc and fish or game meat caught by the men, preparing manioc-beer or *owiroki*, weaving cotton clothes and cane-leaf mats, and helping in child-rearing activities, while my husband accompanied the men on hunting trips (whenever women did not accompany their husbands), clearing forest patches for future manioc fields⁹, and making bows, arrows and other male-made artifacts. Whenever our host family or other families that we visited invited us to share a meal with them, or whenever we invited them to do the same, I sat with the women of the clan, eating manioc and meat or fish from the same plate, while my husband did the same with the men. During our visits to different households for *masato* parties, I

⁹ This is the only stage of the process of manioc field preparation when women do not participate. Burning the cut vegetation, planting manioc and other crops, and weeding the field while the manioc is growing is practiced equally by both women and men.

always sat among the women, generally on reed mats on the floor, and participated in drinking circles with them, while my husband drank with the men around tables, as is now customary in the community. We also fulfilled our gendered roles while participating in communal activities. I helped the women cook for school events as well as for community parties, while my husband participated in the communal *faenas* (communal work parties) with all of the adult men, generally clearing weeds around the health post or kindergarten and elementary school buildings. Whenever we went in fishing trips with different families, my husband went fishing with the men, while I stayed with the women and children, gathering fruits and other materials in the forest, and then cooking manioc and our husbands' catch of the day.

Being a woman also allowed me access to gender-sensitive contexts, such as visiting girls traditionally sequestered in enclosed spaces during menarche (and learning about the dietary and behavioral restrictions that they have to follow), which is forbidden to men and boys. This follows from the Matsigenka belief that any contact with these girls, and menstrual blood in general, spoils men's hunting aim. As a woman, I was allowed to join groups of women attending those in labor (one of them was a member of my host clan). On some of these occasions I became the godmother of the newborn babies because the mothers asked me to cut their umbilical cord, a request heavily influenced by the mothers' desire to benefit from having a perceived "wealthy," *viracocha¹⁰ comadre* (Spanish for godmother, but used in this language by the Matsigenka). In the same manner, it was difficult for me to participate in male-only activities, such as hunting, or drinking gatherings when only men

¹⁰ *Viracocha* is the denomination that the Matsigenka apply to Andean people, mostly the colono people who live in the towns located around the borders of Manu National Park who come from the Andean departments of Cusco and Puno. Apparently, this term is not applied equally to all non-Matsigenka Peruvians (e.g., people from Lima and coastal Peru are inconsistently called *viracocha*). In fact, due to their isolation and the lack of salience of the Peruvian State in the area, the majority of the Matsigenka, mostly adults do not identify themselves as Peruvians. As a native of Lima, I believe it was difficult for them to classify me, and on many occasions I was told that, by association with my husband (a U.S. citizen), I was a *gringa*, an appellative commonly used in Latin America to refer to a North American or European citizen.

were present. At the end of each experience, my husband and I could exchange information gathered, and in this way enrich our respective research projects. In addition, I interacted equally with both women and men during activities that are performed by all of the (mostly adult) members of the household, such as fishing, gathering forest products, and working in the manioc fields (see Footnote 9). Finally, my husband and I participated in communal activities, such as the construction and repair of communal buildings (e.g., weaving thatched roofs with palm leaves), fishing with Tayakome members whenever they organized a community-wide fish poising of a stream, attending communal meetings and celebrations, and just hanging around with family and friends.

While participating in all of these gendered and non-gendered activities, I engaged in quotidian conversations, learning about people's individual and communal interests, desires, fears, preoccupations, problems, expectations and hopes. I also attempted to elicit more details relating to my own interest in Matsigenka conceptualizations of animals, plants, and other beings that live around them, as well as general conceptions of the forest, the environment, and their world. This rich ethnographic information that I gathered through qualitative research allowed me to develop hypothesis and questions about Matsigenka perceptions of the environment, that served to guide the design of subsequent formal interviews and experiments, which, in turn, facilitated a more detailed exploration of these questions. Thus, I leverage both qualitative and quantitative data in my analysis of the distinct "ontologies" that exist in Tayakome.

Formal Methods

In this section I describe the formal methods that I designed based on the qualitative research described above. I emphasize the rationale for such methods – that is, the hypotheses and questions formulated during participant observation and informal interviews that

motivated their design –, the procedures by which they were conducted, and their usefulness for the purpose of this dissertation. In some cases, the value of these formal methods is derived primarily from the qualitative interpretation of the data that they provided, rather than results of a quantitative analysis. This speaks to the complementarity between qualitative and quantitative approaches, which occurs at all stages of data collection, and demonstrates that there exists no strict separation between them.

As I mentioned in the previous chapter, during the time of my extended stay in 2013-2014 (when I collected the formal data), Tayakome was composed of 180 members, 72 of which were adults. For the formal interviews, participants consisted only of adult members who were willing to be interviewed. For most interviews, I used a stratified convenience sample of this group of people, attempting to include representatives of the existing demographic and experience-based sub-groups in the community, i.e., gender, age, experience outside of Manu National Park, and expertise regarding Matsigenka worldview according to my personal observations and the opinions of other community members. For the first two formal interviews (below), I was able to interview nearly all of the adult members of Tayakome, thereby accounting for most of the existing variation in beliefs within the community. The number of participants varied according to the interview, and is indicated below for each case.

1. Free listing of what exists in the forest

Free-listings are used to elicit the relevant content of a particular domain of knowledge for a specific social group, which is indicated by the agreement among respondents (N. O. Ross 2004). I used this as an initial task to explore general Matsigenka conceptions of the forest, and of the elements that are considered to be part of it. By examining which elements are salient for the majority of Matsigenka, I determine which

types of engagements with the environment were particularly important to them, and explore their ideas regarding these interactions.

For the free-list task, I asked 61 adults to respond to the question "what is in the forest?" In Matsigenka, this question can be asked as either "*Tata aiñio inkenishikue*?" or "*Tata aitio inkenishikue*?" *Aiñio* and *aitio* are translated as "there is/are," which, according to a Matsigenka dictionary compiled by the Summer Institute of Linguistics (B. Snell 2011) and coinciding with previous anthropological research conducted among the Matsigenka of Manu and of the Urubamba regions (Izquierdo, Johnson, and Shepard 2008), are verbs used to refer to animate and inanimate objects, respectively. This distinction generally corresponds with usage of these terms in Tayakome, where people indeed use *aiñio* to refer to animals and people, and *aitio* to allude to plants and elements like earth, stones, water, and some sky elements. However, there were cases where elements conceived of as inanimate from a Western perspective, such as the moon, the sun, the stars, money and gasoline, were referred to by Matsigenka with the verb *aiñio*. Such contrasts with Western conceptions of animacy guided the initial exploration of Matsigenka conceptions of these elements/beings, complemented with subsequent formal interviews (see next task).

Based on the free-list results, I determined the saliency of forest elements, that is, which species are considered most representative of the forest domain, or most important for the Matsigenka in this domain, as a function of being named first and by a large proportion of the participants. These free-list results also facilitated an exploration of general notions of forest-related expertise and variation in such knowledge among interviewees. Additionally, results of this task informed my design of lists of environmental elements that I utilized in subsequent interview tasks, thereby including species that are actually salient for the Matsigenka, rather than species that I think are salient for them.

2. Formal exploration of animistic characteristics

As a result of both my participation in the daily life of Tayakome and the results of the previous free-list task, it became evident to me that most Matsigenka attribute different degrees of agency and human- and super-human-like dispositions to certain animals, plants, and other elements of the environment, as result of are attributed with their particular animist conceptions. For instance, many Matsigenka spoke about certain people's frightening encounters with animals regarded as evil that are known for being able to transform into humans, as well as with other malignant spirits that inhabit the forest (see Chapter 6). I observed that some adults with infants avoid consuming certain animal and plant foods for fear that their child's soul would be carried off by these species, resulting in the child's illness (see Chapter 7). During manioc-beer parties and other social visits to their houses, some people told me stories about the origin of different beings, including manioc, a staple food among Amazonian societies, which was given to the Matsigenka by the moon, who was a Matsigenka in the distant past (see Chapter 5). I also wanted to further explore the distinction between aiñio and aitio (see previous interview task) and the potential correspondence between these terms and the ontological status of different beings and elements. I hypothesized that the difference between these terms is more complex than simply relating to physical mobility. Indeed, elements that are capable of movement, such as liquids, are referred to using aitio (e.g. water, the river). However, Matsigenka use aiñio to refer to gasoline because of the energy potential that it has for being flammable, and having the "agency" to power an engine, such as the 16 horse-power boat motors called pequepeques that are commonly used in the area (see Chapter 3). This contrasts with the perceived capacities of water. Thus, rather than simply denoting the capacity for movement, aiñio seems to refer specifically to agency. In order to explore such ideas in greater depth, and evaluate the presence or absence of animistic conceptions suggested in the literature for

Amazonian societies (e.g. E. Viveiros de Castro 1998; 2005), I formally explored how characteristics that denote similarity to Matsigenka are attributed to non-Matsigenka using an interview conducted with 66 members of Tayakome. I developed a list of 82 items (see Appendix A for Spanish, English and scientific names of the items mentioned in the dissertation), incorporating some salient animals and plants consistently mentioned in the previous free-list task, some no-salient species (e.g., insects, vines, and other beings not mentioned in the free-listings), and other environmental elements (e.g., sun, clouds, rain, money, gasoline). Since I observed a number of people making a strict differentiation between the realms of the forest and of the house, and referring pejoratively to neighboring ethnic groups, that, in their view, are associated with the forest, I decided to incorporate these neighboring groups of people into the list in order to explore Matsigenka notions of humanity.

After testing a number of different attributes in trial interviews, I developed a series of questions about characteristics that, for most Matsigenka, are associated with human-ness. The interview task consisted of asking the following questions for each item (X):

- A. What do you say, *aiñio* X or *aitio* X? (*Tata pikanti, aiñio* X *o aitio* X?)
- B. Is X alive? (*Aiñio/Aitio yani/ani X*?)
- C. Does X have a soul? (*Aiñio/Aitio isire/osire X*?)
- D. Does X think? (Yogari/Ogari X isiretaka/osiretaka?)
- E. Y (a woman or man in Tayakome who just had a baby) has a small baby, can she/he eat X or hunt X? (*Aiñio Y otiomiani, ogari/yogari Y agaveake/yagaveake osekata/isekata o ikentake X*?)
- F. Was X a human a long time ago? (*Pairani, yogari/ogari X inti/onti matsigenka?*)I asked questions A and B for a list of twelve items that are neither animals nor plants

(e.g., sun, water, money, gasoline). Questions C, D, and F were asked for these same items,

but also for 67 species of salient and non-salient animals and plants (e.g., game animals, insects, herbs, or trees that are used for healing), neighboring ethnic groups, and the Matsigenka themselves. Asking questions, A and B for these species was unnecessary, since, in preliminary interviews, the terms *aiñio* and *aitio* were consistently used to allude to animals/humans and plants, respectively, all of which were considered to be alive. Finally, I only asked question E for those animals and plants that are considered to be food, that are known to be dangerous, and several others chosen randomly to test whether or not they are taboo. This resulted in a sub-list of 47 items from the previous list. For each answer I asked 'Why?' (*Tatampa?*), which, on many occasions prompted the participants to provide important, complementary information such as stories, myths, or personal (or second-hand) anecdotes. See Appendix B for a complete list of the items used in this task.

The results of this interview provided significant insight with regard to the variety of ontological "status" of the items in the list. I discovered that this variance was principally related to the possession of a soul, together with having been a human in the remote past (see Chapter 6), and of being a taboo (see Chapter 7). The follow-up explanations elicited for people's answers also revealed the complexity of the notion of soul, which I explore in Chapter 6.

3. Triad task comparing predators, prey, and the Matsigenka

Based on ethnographic observations (e.g., the belief that old people transform into jaguars, or that harpy eagles were skillful Matsigenka hunters in the remote past), I considered the possibility that the Matsigenka might think of themselves as being similar to predators, or perhaps more ontologically "close" to them than they are to non-predatory animals, transcending, in this way, the human/animal or (as conceived in West) the culture/nature divide. This hypothesis coincides with Baer's explanation for the existence of food taboos among the Matsigenka of Urubamba: since animals such as harpy eagles or giant

ant-eaters are predators, as are humans, Baer argues that it is possible that eating them would be considered a form of cannibalism, and, therefore, they are avoided (Baer 2004).

To explore this idea, I used triad comparisons that allow for an analysis of the reasoning underlying the perception of differences and similarities between elements (Ross 2004). I presented a series of three pictures to 32 participants, and, for each set of three, asked them which two of the elements represented by the pictures were more similar to each other. Each triad included a picture of a group of Matsigenka, a predatory animal (e.g., jaguar, harpy eagle, or snake) and an animal that is prey for both humans and the predatory animals (spider monkey, white-collared peccary, or tapir). I chose spider monkey, white-collard peccary, jaguar, and harpy eagle because they were among the more salient animals mentioned in the free-listing task (above). Including such animals in the triad task presented an opportunity to test the perspectivist thesis (see Chapter theory) proposed by Viveiros de Castro for Amazonian societies (E. Viveiros de Castro 1998). In informal conversations held with many Tayakome residents, the tapir is virtually the only animal that might be considered to have a 'perspectivist' view of the world (i.e., it sees itself as a human, see Chapter 6). Therefore, I hypothesized that tapir might be consistently grouped with Matsigenka, and people's explanations for this grouping would reflect this perspectivist understanding. The fact that snakes were apparently not very salient in free-listings was interesting because snakes are considered by the Matsigenka to be one of the most dangerous animals, along with jaguars. I included snake in the triad task because I hypothesized that there could be a lesser "degree" of similarity between humans and snakes compared to other predators, as the snake is more superficially different from human beings than is the jaguar, for instance.

For this task, the triad combinations that I presented to participants always included either one prey and two predators, or two prey and one predator. In some of triad combinations I included Matsigenka, a prey and a predator, in order to test whether humans are considered more similar to either of the two animals. For each triad combination, I asked the participant 'Which two figures are more alike?' (*Tiani piteni icañovacagaiga*?), and then asked 'why?' (*Tatampa*?). I expected that, whenever the picture of the Matsigenka was presented along with a prey and a predator, the participant would choose the figures of the Matsigenka and the predator are most similar to each other. Similarly, whenever two prey and the Matsigenka were presented together, I expected that the participant would choose the two prey animals.

Ideally, this task could have allowed me to evaluate similarities or differences between predatory animals and Matsigenka hunters (along with Matsigenka explanations for them). However, it did not work as expected. Since I did not specifically indicate to participants the criteria for judging similarities, people exercised their own judgement to establish a variety of different dimensions of similarity and difference among the pictures shown. These dimensions are interesting in themselves, and I have included them in my discussion of Matsigenka environmental perceptions as qualitative information (see Chapters 5 and 6). Common explanations of similarity were related to the place where the organisms live, separating animals (prey and predators) from Matsigenka because the former inhabit the forest and the latter the house. In other cases, some animals were associated with Matsigenka because they were humans in the distant past, demonstrating that the task is highly contextsensitive. However, because participants used different dimensions of similarity/difference to make each triad comparison, it was not possible to find agreement among the participants, due to the low frequency of specific grouping patterns (see discussion of Cultural Consensus analysis, below). Nevertheless, the results of this experiment provided valuable qualitative information that complements results of the previous interview task by indicating the saliency

of explanations of similarity based on the common origin (and in a few cases, ontological¹¹ similarity, see Chapter 6) of Matsigenka and certain animal species, as well as other types of associations that are often more significant for the people of Tayakome. In this way, the triad results provide a qualitative approximation of the *habits of mind* of this people – that is, the way in which concepts are structured and available, depending on specific ontological configurations (cf. N. O. Ross and Medin 2005) – shedding light on the salient criteria that people may be using when interacting with the species around them, and consequently, their relationships with the forest and the environment.

4. Triad task comparing Matsigenka and neighboring ethnic groups

The closest neighboring ethnic groups to the Matsigenka are the Amihuaka (called Nahuas by outsiders and Yora in their own language) and the Kogapakori (apparently, an uncontacted Matsigenka subgroup), who have a history of violent encounters with the people of Tayakome. Most such encounters have been initiated by these neighboring groups, which are known for being far more belligerent than the Matsigenka. During my time in Tayakome, a number of people commented to me that the Amihuaka and the Kogapakori are similar to each other, and that their aggressive demeanor is the consequence of having originated from the harpy eagle in a mythical time long ago. This bird's predisposition to hunt is equated with the neighboring groups' willingness to shoot arrows at the Matsigenka every time they meet, which is less often in the present. Some Matsigenka also claim that the Amihuaka and the Kogapakori prefer to eat raw meat, similar to predatory animals that live in the forest, which explain these peoples' warlike character. If we follow scholars of the ontological turn, and assume, as suggested by Holbraad (see Carrithers et al. 2010), that we should consider the

¹¹ By ontological similarity, I refer to the consideration that certain animals are similar in essence to the Matsigenka because they are also considered to be human beings, which is discussed in more detail in Chapter 6.

statements of the people we study as truth, then, it is possible that, for the Matsigenka, these other ethnic groups are different, in essence, from human beings and more similar to predatory animals. However, the symbolism associated with "raw meat eater" as a sign of "uncivilized" people, and therefore "similar to animals" might be a conception acquired after more than half a century of contact with both the Evangelic and Dominican missionaries. In any case, I considered that, again, in order to explore the extent to which the Matsigenka conceive of a human/animal dichotomy, it was valid to attempt to investigate whether the Matsigenka truly believe that the Amihuaka are essentially more similar to the harpy eagle, or if this is just a metaphor that expresses a form of stereotyped racism.

To investigate this issue, I conducted a triad task with 33 participants. I carried out the same procedure as in the previous task, using pictures of Matsigenka, Kogapakori, and Amihuaka ethnic groups, along with pictures of predators (jaguar, harpy eagle, and snake). To each participant, I presented combinations of triads, including, in each triad, either two ethnic groups and a predator, or two predators and an ethnic group. I presented all possible combinations that included the harpy eagle, to test the salience of the origin story mentioned above. Similar to the previous task, results did not turn out as I expected regarding the association between neighboring ethnic groups and predators, due to the variability of comparison dimensions employed by the participants for each triad. Similar to the case above, the value of this task lies not in the quantitative data collected (since there was no discernable agreement among participants' responses), but rather in the qualitative information produced, which represents a good point of entry to inquire about this subject in more detail.

5. Rankings of species and stereotyping

In order to explore the importance and value attributed to salient animals and plants according to the results of free-listings and my experience gathered through participant

observation, I asked 52 participants to rank-order a list of 20 animal and plant species (all together in the same list) based on these species' importance to: a) the participant; and b) the seripigari or healer. Knowing how the Matsigenka value certain species could inform about ideas that may be influencing decision-making strategies, enacted through particular interaction behaviors with these species. The seripigari is regarded as an expert about the spiritual world, in which important interactions with non-human beings take place (see Chapters 5, 6, and 7). Therefore, I hypothesized that rankings in which participants take his perspective may shed light on the participant's opinions regarding species that are important in the spiritual domain, and elicit beliefs about the existence of spiritually powerful species that are similar to the *seripigari*. My aim was to compare personal rankings to rankings made from the *seripigari* perspective, in order to test the importance of such spiritually powerful species for the lay Matsigenka person. I was particularly interested in beings such as forest spirits (vuimpuiyo or sangariite, see next chapters), which are thought to be benevolent and care for the Matsigenka, and, according to some, also care for forest species that are useful to the Matsigenka (this is also mentioned by Shepard 1999b). With this in mind, I designed the task to include not only species that are exclusively known to the seripigari as an expert, but also species that are important in the daily livelihood of lay Matsigenka. I attempted a third ranking in which people ranked species from the perspective of benevolent spirits, emulating the work of Atran et al. (2002) with the Itza' Maya of Guatemala, who determined that these people value species that are important for the *aruxes*, the spirits that care for the forest. However, due to substantial individual-level variation in beliefs regarding Matsigenka forest spirits, such rankings proved unsuccessful. I discuss this experience in more detail in Chapter 8, when I present the results of this formal ranking interview.

After some initial trials, I limited the number of items in the ranking task to 20 because, with more items, the experiment was too long and people's attention drifted after

making the first ranking. The final list of 20 items, contains some of the species that were most salient in the free-listing task, which I suspect were particularly salient because of their utility. I also included species that were less salient, but that were common food taboos, as well as others that were considered, according to participant observation and informal conversations, to be ontologically similar to, or more powerful than, the Matsigenka. For the ranking task, I randomly selected two pictures from the list of 20 species, showed them to the participant, and asked "Suppose all animals in the forest die and only one can remain, which one would you like to remain, X or Y? Why?" (Catingara maganiro inkenishikuenirira inkamake, tiani pikogake iripitake, X o Y? Tatampa?) Based on the participant's answer, I placed the figures in front of the participant in vertical descending order, putting the morepreferred species at the top. Then I selected, again randomly, another picture and asked the same question, comparing the new with each of the pictures already in the ranking, and placed the new figure in its place according to rank. After finishing the ranking, I repeated the entire procedure, this time asking the participant to take the perspective of the seripigari or healer. Fortunately, I also managed to interview the only *seripigari* remaining in Manu, and was therefore able to compare his rankings with the rankings that other Matsigenka predicted him to make. The results of this task were analyzed to determine if there was agreement among the participants (see below), and were also compared to results of an interview of self-reported behavior (see below) in order to relate values elicited in the ranking task with actual practice.

6. Reported environmental behavior

One of the aims of this dissertation is to explore whether there is a correspondence between Matsigenka beliefs regarding animals and plants and people's interactions with, and practices towards, these species. As mentioned above, this correspondence (or lack thereof), determined quantitatively using the results of formal interviews, and integrated with

qualitative ethnographic data, can serve to clarify the extent of the seriousness of people's statements or expressions. Carrying out a rigorous study of environmental behavior, that is, observing a representative sample of people over a sufficient amount of time in order to have a well-informed idea of the spectrum and nature of their environmental interactions, would have been prohibitively time-consuming. Therefore, I collected preliminary data (that can be further explored and expanded in future post-doctoral research) regarding environmental behavior by asking Matsigenka people to report their own actions with respect to animals and plants, so that I could later relate these actions to the data collected about their environmental beliefs.

Based on information regarding beliefs about animals and plants gathered through both the qualitative and quantitative methods mentioned above, I created a list of eighteen statements of expected interactions and behaviors directed toward these species. The domains of these behavioral inquiries included the use of powerful plants (those that have human/Matsigenka-like souls) as well as sedge plants, called *ivienkeki*, used for protection or good luck, (these are provided by the healer or *seripigari*, different varieties of which improve hunters' aim, make manioc grow larger, or protect infants from evil spirits, among many other uses, see Chapter 6), food taboos, raising pets, etc. The total number of participants varies according to the statement (see Chapter 8). I asked each participant whether they carry out any of the actions suggested in the statements, and why.

I compared the outcomes of this task with the background information I had collected from each person (e.g., history of contact with *colono* towns outside of MNP) in order to explain variation in the responses. I analyzed such correspondence with the CCM (below) and residual analysis. The results of this analysis are complement the outcomes of the ranking task (see above), and facilitate comparison of the values attributed to species and the correspondent (or not) behavior directed toward them (see Chapter 8).

Analyzing Agreement through the Cultural Consensus Model

To navigate through data collected in the formal interviews, finding possible patterns of agreement in the distribution of beliefs, I employed the Cultural Consensus Model (Romney, Weller, and Batchelder 1986). The CCM uses factor analysis (Bernard 2006) to explore the degree to which the answers of each informant agree with the answers of the rest of the informants. To accomplish this, an agreement matrix is constructed, i.e., an informant-by-informant matrix in which cells are filled with the proportions of identical answers in each informant pair; this is the observed agreement. The output of a CCM analysis comprises a number of factors that explain the different types of agreement detected between informants. Ideally, this analysis indicates that a one-factor model adequately represents the majority of this inter-individual agreement. A one-factor model is deemed sufficient if the *eigenvalue* of the first factor, that is, the variance in response agreement explained by that factor, is high enough relative to the eigenvalues of other factors.

Technically, consensus can be assumed if: 1) the *eigenvalue* of the first factor is at least three times larger than that of the second factor (i.e., this ratio is greater than 3, which is a convention); 2) the first factor explains a large proportion of variance in the participants' responses (i.e., its eigenvalue represents a large proportion of the sum of all factors' eigenvalues); and 3) all informants' loadings on the first factor (that is, their individual agreement with the first factor model) are high and positive. If these three conditions are met, it is presumed that there is non-trivial agreement between the informants with regard to the questions, and that the average agreed-upon responses are represented by the first factor of the analysis, that is, *the model* (Romney, Weller, and Batchelder 1986; Weller 2007).

This model can be thought of as an *ideal informant,* that formally represents the average consensus held by the participants with respect to the questions. Note that this is not the knowledge of specialized experts (N. O. Ross 2004). Therefore, the results of the CCM

should be interpreted as individuals' average agreement with other participants, rather than "cultural competence" in a particular domain (as was originally phrased by the authors who proposed this method, see Romney et al. 1986). Every informant's loading on this first factor represents her agreement with her peers in the particular domain that the model represents. Thus, the CCM can establish: 1) an estimate of knowledge in a particular domain shared within a population(*the model*); and 2) a measure of each informant's agreement with this model (N. O. Ross 2004).

Since informants almost never completely agree with one another with respect to their responses, it is also possible to determine the agreement between them that was not explained by the first factor model, in the case that there was consensus. This is the *residual agreement*, and refers to the sub-models that may exist in subgroups within a population. Residual agreement is calculated by subtracting predicted agreement, which is the product of two participants' individual agreement with the consensus (first-factor) model, from observed agreement. The resulting residual agreement matrix can be explored with respect to specific subgroup differences (Nakao and Romney 1984).¹²

¹² There is a new method, developed by Batchelder and colleagues, that allows inference comparable to that of the standard Cultural Consensus Model (Batchelder and Anders 2012, Oravecz et al. 2015). These authors designed two software packages to run a Condorcet Model estimated in a Bayesian framework. The Condorcet Model, like a Factor Analysis, reduces the dimensions of the data (the number of questions) into a single factor. One software package is the Bayesian Cultural Consensus Toolbox (BCCT) (Oravecz et a. 2014). I did not use this package because it does not allow the user to modify *a priori* assumptions about the distribution of participants' competencies or agreement with the model. In other words, it does not allow one to modify the variables' priors (see more about priors in McElreath 2016), which I consider to be important in the case of my data. In addition, only binary data can be analyzed with this program, which would prohibit analysis of an important component of the data that I collected, namely, the rankings that I discuss in Chapter 8. The other package, CCTpack (Anders and Batchelder 2014), can handle rank-type data, but I could not make it work with the data that I collected (the Markov Chain Monte Carlo sampling process did not converge on stable parameter estimates: this was indicated by \hat{R} values substantially greater than 1). I contacted one of the authors of this package, Dr. Anders, who was of the opinion that 20 levels of rankings (such as I have) were probably excessive for the computational capacity of the package. Despite the fact that he recognized it was not a perfect solution, he suggested that I reduce the ranking levels that I used (20) to four (4) dimensions and try to run the package with this new data configuration, or to reduce the dimensions to just two categories and try to use the BCCT package. Since, by doing so, I would lose valuable information about Matsigenka perceptions of the ranking items, I decided to use neither package, and just applied the frequentist version of the CCM.

I used CCM to explore agreement among participants with regard to most of the formal methods described above. This proved to be a useful tool to determine the existence of shared conceptions and ideas, which, in turn, often indicated the existence of potential higher-level, or more detailed lower-level, ontologies, depending on the question under analysis. However, it is essential to take into account that, in order to make such inference, the results of the CCM analysis should be interpreted in light of qualitative ethnographic data in order to illuminate the nuances of people's ontologies.

Conclusions

As demonstrated by the methodology that I implemented, the strengths of both qualitative and quantitative approaches, when used in combination, can overcome their weaknesses when used independently. This combination of approaches is particularly important when exploring the meaning of Matsigenka discursive and pragmatic expressions that may be manifestations of an ontologically unique conceptualization of the world that surrounds them. Qualitative research is fundamental to analysis of the opinions, conceptions, beliefs, routines, and practices held and performed by the group of people under study. Such analysis represents the starting point for an exploration and interpretation of people's ontologies. Additional understanding of these concepts is gained through the use of experimental and formal methods, in order to formally test our interpretations and theories. However, these methods must be continuously grounded in the social context of the study population, interpreting quantitative results in light of additional conversations with the people who generated the formal data, coupled with participant observation. Therefore, experimental and qualitative methods cannot be dissociated from each other. Similarly, quantitative methods should be part of the toolkit of ethnographers, in order to more rigorously explore the nature of certain conceptions and how they are shared and distributed

within a population. It is precisely through such combined methodology that we can produce high-quality anthropological research.

CHAPTER 5: EXPLORING MATSIGENKA ENVIRONMENTAL FACTISHES

In this chapter, I explore the environmental *factishes* held by individuals in Tayakome, i.e., the part material–part semiotic constructs that result from individuals' ongoing engagement with their environment (Latour 1999; see also Mol 1999). These broader environmental constructs, which both result from, and influence, individual, as well as communal, experiences, will be complemented in future chapters with more specific accounts of the beings that inhabit them. Here, I discuss the broader domains inhabited by the Matsigenka and other beings in their world, that appear to be places where identity is defined. The domain of the house, *pankotsi*, where the Matsigenka live, and that also includes the manioc field, *magashipogo*, contrasts with the domain of the forest, *inkenishi*, and, to a lesser extent, the river, *oakue*, and the oxbow lake, *incajare*. My purpose in presenting these conceptual domains is to demonstrate that using Western concepts, such as "nature" or "culture", to understand the Matsigenka world (and probably other indigenous worlds) is flawed in that such categories do not fit Matsigenka conceptual cosmological notions.

I contend that the Matsigenka *factishes* of the environment presented in this analysis are emergent in that they are neither homogenous across individuals nor necessarily internally consistent or permanent. Based on my working definition of ontology presented in Chapter 2, these ontological configurations represent the Matsigenka world *as understood by me*. Consequently, the conceptualizations of the worldly *factishes* that the Matsigenka inhabit do not exist as an independent, invariant reality. Rather, they are conceptions, held by individual people, that are contingent and probably vary by context. What I present here, is merely an attempt to impose some transitory, subjective order on such ideas and suggest a potential manner in which the Matsigenka understand their world. In this regard, it is essential to account for the variety of conceptions held by members in the community. For this purpose, I occasionally make reference to the opinions of a subgroup of Matsigenka who

are considered by the majority of community members to be especially knowledgeable in domains related to the metaphysical connections that exist between humans and non-humans. These experts comprise both male and female elders (older than approximately 60 years) in the community, and also a few people of middle age (>45 years old), some of whom are known as herbalists, as well as others who have different degrees of *seripigari* (healer) training. While the opinions of this small group of experts are highly regarded in the community in specific contexts, I have attempted to always also present the variety of positions held by the majority of Matsigenka community members.

Matsigenka Factishes

Tasorintsi and the Creation of Kipatsi

The world that the Matsigenka inhabit is called *kipatsi*, a term that is generally used to refer to land, ground, or dirt. Rather than an encompassing term that abstractly refers to the entire reality in which the Matsigenka live, I believe that this concept is more comparable to "earth" as the material realm where the Matsigenka exist. The members of Tayakome do not often reflect on *kipatsi* as a broad domain, nor do they tend to mention it in quotidian conversations. Rather, people tend to use it in this particular sense when alluding to such things as the creation of the world, often during the telling of creation myths, and the apocalypse. Some seemingly Christian undertones in people's mythical narratives perhaps reflect the influence of both Protestant and Catholic missionaries, who have proselytized among the Matsigenka of Manu since the 1960s, when the former convinced the Matsigenka to settle in what later became Tayakome (see Chapter 3). Occasionally, Matsigenka themselves acknowledge that some ideas, especially regarding the origin and final resting place of the human soul, were taught to them by the Dominican missionaries when they first arrived (see below). However, since the Matsigenka of Manu have been in continuous contact

with Western society (including its customs and at least some of its technology) since colonial times (see Chapter 3), it would not be surprising if Christian elements appear in many aspects of Tayakome residents' conceptualizations of their world.

This is exemplified by the creation myth that several people told me when I asked them how and by whom everything was created. *Tasorintsi*, the creator god, also known by many in Tayakome as *Dios* or *Cristo* (Spanish for God and Christ), was a Matsigenka man who created *kipatsi*, the world where the Matsigenka live (which does not include *morekakue*, the underground, nor *enokue*, the sky), and who lives in *otsitiakue inkite*, literally "the beginning of the sky," or the place on the horizon where the sky meets the earth. One version of this well-known myth was narrated to me by Mateo (22), who heard it from his grandfather Salomon (~70). This is my lightly-edited translation of Mateo's story:

One day a baby fell out of a *kuiri* tree (peach-palm). A woman found him crying and brought him back home, telling her mother that she had found a child. The baby's new mother wanted to feed him because he was crying. She made him *owiroki* (manioc paste that is one the first solid foods given to babies, although the same term is used for manioc beer), but he didn't want to eat it. She tried to feed him with her milk, but he also rejected it. Then she brought tobacco, and he liked it and ate it. He grew up just eating tobacco, and became the man called *Tasorintsi*. He had a sister, *Irivatiki* (which is now also the name of a tree, see below), and he asked her to make manioc beer. People came to drink the manioc beer, and, while there, they ate fruits from the trees *intsipa*, *pocharki*, and *etsiki*¹³. Then, *Tasorintsi* grew to super-human size, along with his *magatsi*¹⁴. He didn't drink any masato. When the guests decided to leave, he said, "My grandchildren, stay and finish the manioc beer." His sister

¹³ These tree fruits (*Inga* sp., *Pseudolmedia laevis*, and a species from the Moraceae family, respectively) are widely consumed in Tayakome.

¹⁴ Matsigenka traditional tunic.

called to the ones who had eaten the *pocharki* fruit, but they were already on their way home. Tasorintsi blew on them and they turned into spider monkeys. Then the ones who had eaten etsiki left, and he said, "My grandchildren, come back and drink manioc beer." They didn't and he turned them into howler monkeys. Then the same happened with the ones who had eaten *intsipa*, and he turned them into squirrel monkeys. Others tried to leave and he turned them into woolly monkeys. His sister came and told him that none of the guests listened to her. Tasorintsi shrunk back down to his normal human size and asked her, "Where did all my grandchildren go?" Then he said he needed to go to the bathroom and asked his sister where it was. She said it was far away off in the forest. But his sister made a trap for him using the slippery bark of a tree, because she was afraid that he would turn all people into animals. She led him by the hand to the bathroom, and guided him so that he slipped on the bark and fell down a cliff, injuring himself. He called up to his sister, but she didn't listen to him. He converted himself into a small bird to try and go up the cliff. But his sister spit on the muddy cliff so that he couldn't get up. Then he tried turning himself into bamboo to try and get up the cliff. But his sister spit again, and he couldn't get up. Then the sister called *Tasorintsi*'s brother-in-law armadillo, and told him that *Tasorintsi* had fallen over the cliff. Armadillo went to the fireplace and dug a hole down to Tasorintsi, and carried him away. Tasorintsi said, "Brother-in-law, carry me far away and then stab me with sharp sticks." Armadillo took him to otsitiakue *inkite*, where the sun sets (the horizon). There, he tried lots of sticks, but none was strong enough to stab *Tasorintsi*. Then *Tasorintsi* said, "Stab me with a stick from my papaya tree (which was actually peach palm)." Armadillo stabbed him in the hands and feet, like Jesus, so that he couldn't move and wouldn't convert more people into animals. When Tasorintsi was nailed down with the peach palm stakes, armadillo

came back, looking for *Tasorintsi*'s sister, but she had already been turned into the tree *irivatiki*. Armadillo returned and told *Tasorintsi* news from the world. Every time *Tasorintsi* tries to move in order to look back at the rest of the world, it causes an earthquake. Armadillo is *Tasorintsi*'s companion, and often goes back to accompany him.

This is a particularly detailed rendition of the story of Tasorintsi, since people know this story, recounted it to me often with fewer details. They claimed that they do not know the story well, and sometimes referred me to those whom they consider to be expert storytellers generally the eldest men in the community (see Chapter 6). The final part of the story related above by Mateo, was different in most other people's versions, such that Tasorintsi is not nailed and immobilized, but rather simply remains on the horizon, where the armadillo visits him frequently and informs him about how the Matsigenka, his grandchildren, are doing (see Chapter 7).

When I asked 25-year-old Micaela about *Tasorintsi*, she responded that he lives in the sky, and he is also called *Dios* or *Cristo* (God or Christ in Spanish). She told me that she learned about Cristo when she was in elementary school, and her Matsigenka teacher (brought by Dominican missionaries) told her that Cristo created everything. However, since she had mentioned to me on another occasion some time before about the *Tasorintsi* that lives in *otsitiakue inkite*, I responded to Micaela's statement by asking her about *that Tasorintsi*. Her reaction was interesting: After reflecting on my question for a few seconds, she finally said "Ah, there are two *Tasorintsi*. One who lives in the sky, and the other who created the Matsigenka a long time ago and now lives in *otsitiakue inkite*." I believe that such a statement was motivated by my inquiries, and that most people actually do not often think often about these apparently incommensurate notions of *Tasorintsi* (see Chapter 5).

I received a similar response from other people in Tayakome whenever I asked about *Tasorintsi*. If I did not provide any specific context, the question nearly always elicited the Christian-like notion of the creator god, and the most salient characteristic for most people was the fact that he lives in the sky. Only when I asked about the origin of non-human beings or any other story regarding the creation of the world, would Tayakome residents refer directly to the Matsigenka *Tasorintsi* who lives in *otsitiakue inkite*. In this context, people described *Tasorintsi* as looking like a Matsigenka man, who wears a *magatsi* (typical Matsigenka tunic) and a *matsarientsi*, the feather-crown worn by men, but now seldom used. It is likely that each notion of *Tasorintsi* is invoked in different contexts, and, consequently, there is no conflict in holding, and putting into practice, these allegedly competing conceptions.

Despite the fact that not everyone knows different versions of this story, the figure of Tasorintsi as a creator god is essential to an understanding of Matsigenka conceptions of non-human beings (explored in more detail in subsequent chapters), since this story establishes the primordial ontological similarity between humans and non-humans (i.e., Tasorintsi turns humans into non-humans). For many species, this similarity is not maintained into the present (see Chapter 6), and most Matsigenka of Tayakome currently do not believe that humans and non-humans share a homogeneous essence, as some researchers claim for other animistic societies (e.g., Descola 2006; 2013; E. Viveiros de Castro 1998). Nevertheless, most Tayakome residents still attribute human-like aspects to certain species as a result of this mythical common origin (see Chapter 7), and this, in turn, influences their behavior with regard to these species compared to those that are not formerly-human (see Chapter 8).

The Realms of the Death

Another specific context in which the people of Tayakome use the term *kipatsi* to refer to the domain that they, the living, inhabit is when they contrast it with the realms where

spirits of the dead go, which they mention on rare occasions. Thus, above *kipatsi* is *enokue*, which literally means "up" or "sky¹⁵." Some Matsigenka figuratively equate it with the Christian "heaven," since it is inhabited by the spirits of the dead and by *Tasorintsi*, the creator god, who, as mentioned above, is also referred to as *Cristo* or *Dios* (Christ or God).

For others, however, *enokue* physically mirrors the world of living beings. These two conceptions of *enokue* are not always mutually exclusive, and many people believe that the world that their deceased relatives inhabit is similar to the one they themselves live in. While the majority of Tayakome members state that there is only one *enokue*, experts more frequently affirm that there are two or three *enokue*, each of which replicates the realm that lies immediately below it. There is a similar sequence of consecutive subterranean worlds, known as *savipatsakue* (literally "below the ground"), and also called *morekakue*, a term that literally means "where it is burning."¹⁶ Similarly, the number of these subterranean realms varies according to different interviewees.

Ideas related to the final destiny of the dead is also contested. When I asked what people think will happen to their souls when they die, the majority responded, "My soul will go to *enokue* [literally "the sky" or "above"], where *Tasorintsi* lives." For some people, including Segundo and his wife Marina (both in their mid to late sixties - one of the oldest couples in Tayakome), this statement was related to the fact that they had been baptized by a Catholic priest. According to Segundo, "if you are not baptized, your soul goes down below, because you are a *kamagarini* [lit. demon]. If you get baptized, you go to the sky." Marina added a moral tone to this claim: "When I die, my soul will go to the sky if I am good. If I am

¹⁵ According to the Matsigenka dictionary elaborated by SIL (Snell 2011), *enoku* means "up," and *inkite* is properly "sky." In my experience in Tayakome, sky is commonly referred to as *enokue*, and *inkite* is only used when mentioning the mythical place where *Tasorintsi* went with the armadillo, after his sister attempted to murder him (see below), and where they both live now: *otsitiakue inkite*. According to the same dictionary, this terms mean the "beginning of the sky." In Tayakome, people told me that that is the horizon, or "the place where the sun sets," which may have the same meaning.

¹⁶ From the verb *morekagantsi*, "to burn," and *kue*, a suffix used to indicate location.

bad, I will go to *morekakue*. My mom died a long time ago, she was attacked in the forest. Her soul went down below because she was not baptized. She was a *kamagarini*, that was not good." Marina did not want to provide more details about her mother's death, but she said these last words with sorrow, like feeling helpless and sorry about her mother's fate. I asked Marina how she knew that her mother's soul was in *morekakue*, and she said that the Catholic Dominican missionaries who came in the early 1980s taught her that.

While ideas about the place where the human soul resides in the afterlife are indeed influenced by Christian beliefs, such as the necessity of baptism in order for the soul to enter *enokue*, people do not always express these ideas consistently. This is the case of Carmela (~45), a knowledgeable herbalist and an expert with regard to the metaphysical world of the Matsigenka, as many in Tayakome affirmed. Carmela's father, Salomon passed away while I was in the community (I relate Salomon's passing in the following chapter). A couple of weeks after this incident, she affirmed the following when I asked her about the destiny of dead peoples' souls:

When I die, my soul will go to the sky. All my *noshaninka* [my country folk] are there, all of them. My dad is now there, also my mom. Up there is like here, there are houses, there is *owiroki* [manioc beer], there is a manioc field. The rain that falls here is *owiroki* up there, everybody is drinking in the sky. When the *owiroki* is done, the sun will rise. My dad's wife will tell him: you have come. There is forest there too.

However, in another conversation, Carmela also suggested that the spirits of the dead, like that of her father, go to *morekakue*, called by some *kamatsirisekue* (*kamatsirini* = dead person or corpse, *ku* or *kue* = place) when they die. Shepard (2002b) describes this as a traditional conception among the Matsigenka of Manu. He affirms that burial was a practice enforced by Protestant and Catholic missionaries, and that before their arrival in Manu, the Matsigenka placed their dead in a fetal position between the roots of large trees, like the kapok tree. One of the reasons for this procedure was to ensure that the body was decomposing, which signified that the soul of the deceased had departed to *kamatsiriseku*, the Land of the Dead, and, therefore, would not endanger his or her closest relatives (Shepard 2002b:209). This was, indeed, one of the major concerns of Salomon's relatives regarding his soul. Carmela explained to me some days after his funeral that she delegated the task of burying her father to her older son, Mateo, because she and her husband had to protect their 1-year-old baby. She said to me: "I don't have ivienkeki, kamatsirivienki. Had I gone to bury my father, then my son would have dreamed. His grandfather would have taken his soul, so that [my son] can accompany him to morekakue. That would have made him happy, to go with his grandson." Ivienkeki is a group of sage species used for different purposes (see Chapter 6), and the variety called *kamatsirivienki* is used, in particular, to bath infants in order to protect them against the spirits of dead people. In addition, dreaming has a negative connotation for the Matsigenka, because it is perceived as a state in which the soul is detached from the body, generally as a consequence of coming into contact with a malign spirit. Dreams are also seen as messages of bad omen. The kamatsirini (spirits of the dead) continue their lives in *morekakue* in the same manner as they lived in *kipatsikue*, and they haunt their living relatives because they appreciate them and do not want to be lonely in the underground. This is also the reason why they are always buried with their belongings. Otherwise, they would return to their house in order to retrieve them, and, while doing so, would haunt, and cause illness in, their relatives. Since infants are still physically weak and vulnerable, their souls are more susceptible to kidnapping by the souls of their deceased relatives, which would eventually cause the infant's death. In fact, a few days after Salomon's passing and funeral, some women continued painting their children's faces, and sometimes their own, with *potsoti* (annatto, *Bixa orellana*), which, they explained to me, has the property of protecting people from harmful spirits, such as Salomon's soul.

Aurelio, who is also regarded as an expert, due to his previous training as a *seripigari* (see Chapter 6), described *morekakue* to me, after I asked him where Salomon's soul was now:

Salomon's soul has gone to *kamatsirisekue*, down in the underground, he has met his wife there. There is the house of *kamatsirini*. It looks like here, there he has his field, everything. It looks like here. There is also forest. There is *shivage*¹⁷, spider monkey, everything. What I hunt here [in the land of the living], I hunt a spider monkey, he dies and goes below. Then, his soul goes below, and it is the spider monkey that exists down there, the spider monkey that the *kamatsirini* will hunt and will eat. His wife makes owiroki, just like here.

This description is similar to Carmela's depiction of her father's new life in *enokue*. However, in another conversation, Aurelio also asserted that Salomon's soul, and, in general, the souls of all who were baptized, go to the sky. Like Carmela, he is not the only one who I have heard maintaining both versions (*enokue* and *morekakue*) of the afterlife. It is possible, that the influence of missionaries on mortuary practices, as Shepard (2002b) affirms, may have also resulted in the integration of Christian conceptions that are now held among the members of Tayakome, as expressed by Micaela, Marina (above) and others. These ideas are not necessarily coherent, or they may be contingent on the context. For instance, when people answered my question about the fate of the soul, they were expressing a theoretical conception of what happens to souls, which perhaps conforms to the formal indoctrination imposed by the missionaries - i.e., the constant inculcation of concrete statements that have been internalized, such as "Tasorintsi is Christ", or "only baptized people go to Heaven". In contrast, when referring to Salomon's particular case, people were addressing an actual event, that elicited alternative notions about the subject. In any case, this is speculation in need of further investigation. This is not to say that, prior to missionary intervention, Matsigenka conceptions regarding their world were necessarily held homogeneously and coherently. As shown in Chapter 3, given the history of contact of the Matsigenka of Manu, external

¹⁷ Shivage is a generic term to refer to the small fish (less than 15cm long) that are generally caught when the Matsigenka put *barbasco* fish poison (*cogi*) in small streams.

influence has always existed, and it is therefore possible that Matsigenka have long held, simultaneously, apparently-incommensurable narratives across a range of contexts involving the notion of soul.

The Realms of Kipatsi

Pankotsi/Magashipogo (House/Field) as a Space for Matsigenka Identity

Exploring the factish inkenishi, which I translate as "forest", was revealing in that it opened my eyes to the fundamental role played by another *factish*, *magashipogote*, or the horticultural field, for the Matsigenka. The definition of *inkenishi* was very eloquently explained to me by German, a man in his 50s, once when I visited him at his house, located in the center of Tayakome. He was rebuilding his kitchen, setting up *pintana* poles, generally used as the central support beams of Matsigenka houses due to the straightness of this small tree. German still needed more *pintana* trunks to finish the basic structure of his kitchen, so he told me about his plans for going to the forest the following day. I wondered about the meaning of the phrase noatae inkenishikue, "I am going to the forest," for the Matsigenka, as, every time that I heard it, people seemed to be referring to a distant place, while, for me, the "forest" began very close to the edge of the community. Surrounding German's house was a younger secondary forest that separated his house from his neighbor's. I presumed that he was alluding to a visit he would make the following day to the more distant primary forest, that has not been cut in many decades. In order to confirm my suspicion, I asked German directly what the term *inkenishi* meant to him. He took a moment to reflect on his answer, and after a few minutes he calmly said: "The forest is where I haven't worked yet. I work in my field, where there are no trees. I also live where it is clear, where there are no trees." This stark distinction between worked and unworked land was an initial revelation to me, and inspired my next question, "Do you live in the forest, German?" To my surprise he answered quickly and almost smiling, probably amused about the absurdity of my inquiry, "No, I do

not live in the forest!" German's remarks struck me because they made me realize, for the first time, the fact that my outsider/Western notion of the *forest* is a particular *factish*: For me, the forest is the continuous area over which Manu National Park is established, and, consequently, *inside of which* the Matsigenka live. In contrast, German used *inkenishi* to refer to a very specific space in his world. Unlike my concept of forest, this space does not include the river, *oakue*, nor the oxbow lake, *incajare*, which are other realms in themselves. Moreover, he, as well as the rest of the Matsigenka of Tayakome, seem to make a rigid differentiation between *inkenishi* and the space of domestic life, which comprises *pankotsi*, the house, and *magashipogo*, the swidden field. Listening to the narratives of German and others, I began to understand how he and other Matsigenka not only locate themselves in their world, but also how they define themselves as Matsigenka. According to them, the forest ends where there are no trees, and that frontier is apparently one that establishes a Matsigenka identity for the members of Tayakome.

For a start, the house, *pankotsi* is a space that used to be forest, but that has been cut to transform it into the focus of Matsigenka domestic life. It generally consists of two buildings. One has a *menkotsi*, an elevated floor made from the flattened trunks of *camona* palm trees (*Iriartea deltoidea*), and a roof of palm thatch. Here all family members arrange their mosquito-nets to sleep, with the exception of teenage boys who are old enough to build their own smaller houses near the family house. The other building is the kitchen, whose palm-thatch roof is generally not as high as that of the family house because it does not have a *menkotsi*, as women set their fireplace on the ground. In recent years, the Matsigenka of Tayakome have started to enclose their kitchens with a wall, also made of *camona*, which serves to prevent the family chickens and dogs from stealing food. Members of the household constantly clean and maintain a large perimeter of bare earth around these domestic buildings, keeping small, early succession plants (i.e., weeds), called *towaseri*, from growing,

so snakes, common in the forest, cannot approach without being spotted and killed.

The horticultural field, *magashipogo*, is sometimes also equated with the house. In addition to being a space of cleared forest, *magashipogo* also represents the idea of being well-fed, particularly with manioc. In Matsigenka, manioc is *sekatsi*, a word also used to refer to food in general. The verb "to eat" is based on this root, sekatagantsi. Snell mentions stories among the Matsigenka of Urubamba, in which one could determine whether a person was human or demon by whether she eats manioc, because demons do not eat it (B. Snell 2011). I have not heard similar stories in Tayakome. However, producing and consuming manioc seems to be fundamental to Matsigenka identity. This is partially reflected in the origin myth of manioc, which many people know and narrate, that highlights its role as a staple food. One version of the myth was told to me by Rufino (33), Micaela's husband, during one of my first months in Tayakome, while I was visiting them. They were helping me improve my Matsigenka language skills, when I asked them why people refer to the moon, kashiri, using the term aiñio, instead of aitio. Both terms mean "there is." However, in my experience up to that point in the community, I had heard aiñio used in reference to humans and animals, such as "aiñio oshetopage inkenishikue" ("there are spider monkeys in the forest"), while aitio was used for plants and elements in the environment that seem to be incapable of moving under their own power, like in "aitio menkori enokue" (there are clouds in the sky). They both answered me, saying that the moon used to be a Matsigenka man a long time ago, and he brought manioc to the Matsigenka who, originally, only consumed mud. Therefore, because of the moon's condition as a Matsigenka, they say "aiñio kashiri." "Is the moon still a Matsigenka now?" I asked, and Micaela said, "No, but he has a soul [aiñio isire]." Intrigued by their explanation, I asked them to tell me the story, and Rufino narrated the following, which, again, is my condensed translation of his original version:

A long time ago, people ate clay, not the manioc that we eat now. They made the clay

into mud and drank it like we drink manioc beer. One day a girl was alone, enclosed in her house with palm mats [she was ritually sequestered just after menarche, as is customary in Tayakome], and the moon came down from the sky, bringing some cooked manioc. He looked like a Matsigenka man. He gave it to her to eat. So she stopped eating clay. After he left, the girl's mother came back and asked, "Why are you not eating dirt?" The girl replied that a young man had come and given her this food called manioc. The girl became pregnant from eating the manioc. However, when she gave birth, snakes came out. She grabbed a stick and killed most of the snakes, but one got away. This is the origin of the snakes of today. The next day, the moon came back down, bringing cuttings of manioc and plantains to plant. The girl's mother was mad at him for what had happened to her daughter. He planted large fields full of crops. But the mother was still mad at him, and told him to go away and leave her daughter alone. The moon said, "You are angry now, but tomorrow I will come and take away all of the manioc and other crops, and your daughter as well." The mother said, "Those are large fields, how are you going to take it all?" The next day the girl died and ascended into the sky. The mother went to look at the fields and there was nothing, no manioc, or plantains, or cuttings. Later, the daughter came back down from the sky. The mother saw her sitting on a ladder, and was happy. She said to her daughter, "Give me manioc." The daughter said, "See? Why did you get angry?" The moon then gave the mother manioc and plantain cuttings to plant, as well as cotton. Thus began the time of manioc, and people forgot about the clay that they used to eat. Since then, Matsigenka no longer eat mud and can grow large fields of manioc.

The fact that the moon brought manioc to the Matsigenka makes it a kind of deity

responsible for the origin of the Matsigenka lifestyle. Therefore, like Micaela, the majority of people in Tayakome affirm that, despite the fact that the moon is no longer a Matsigenka, it has a soul, which, in turn, endows it with a certain kind of subjectivity. In this regard, it is possible that the moon also occupies the same "ontological" category as Tasorintsi, the creator god. However, no one affirmed this explicitly, and I have not yet asked about it directly. People only affirm that, regardless of whether the moon was or still is a Matsigenka, it is not of the same kind as they are (see Chapter 6).

The story of the moon and of the origin of manioc for the Matsigenka highlights the central importance of the *magashipogo* as the source of manioc, the consumption of which produces *real Matsigenka*. Residents of Tayakome believe that a Matsigenka conducts her/himself in a particular manner because she/he has a soul, *osire/isire* (literally her/his soul). Now, there are different connotations that Matsigenka attribute to the term *osire/isire*, and these different meanings can be interpreted as different types of soul (see Chapter 6). For the present discussion, I wish to emphasize the particular type of soul that enables a being to become a person, more precisely, a Matsigenka-like person. Having this type of soul implies that a person can think like a Matsigenka, and do what Matsigenka normally do. Micaela explained it to me in this manner:

My soul lies in my head. If I have a soul [lit. if my soul lives], I can think about spinning cotton, then I think about rolling the cotton thread into balls to make my *magatsi* or my *tsagui*¹⁸. [If I have my soul] I can think about many things, like working in my field and cooking manioc.

In Matsigenka, the root for the term "soul," *-sire*, is also part of the verb "to think," *siretagantsi*¹⁹. For Micaela, as for many Matsigenka of Tayakome, having a soul (in this case, a human kind of soul) signifies the ability to think in a correct or proper manner, which,

¹⁸ A type of shoulder-bag woven with cotton threat.

¹⁹ Following Snell (2011), the suffix *-gantsi* gives the infinitive form of a verb. This conception is nevertheless changing in younger generations, apparently due to the influence of school and Western education. See more in Chapter 6.

specifically, means to think about engaging in activities that the Matsigenka "traditionally" perform. Rosengren similarly affirms that, for the Matsigenka of Urubamba, "[t]he quality of humanity is [...] not so much about a particular origin or a particular physical shape as it has to do with how each individual relates to the world of which he or she is part." (Rosengren 2015a:89; see Chapter 6). Thus, in Micaela's case, in accord with the marked division of labor by gender that exists in Matsigenka society, such relational activities include women's tasks, such as spinning and weaving cotton, cooking, and also working in the field (which is performed by both women and men).

The attribution of a Matsigenka-like soul to certain animal and plant species also implies that they behave like Matsigenka people, holding similar ethical values and social dispositions (see more Chapter 6). This is the case for spiritually powerful beings, such as the shrub *jayapa* (or datura in English) and the vine *kamarampi* (ayahuasca), as well as the bird *vuimpuiyo* (screaming piha). *Jayapa* and *kamarampi* play essential roles in the lives of the Matsigenka, serving as medicine that they, or the Matsigenka healer, called *seripigari*, use to cure both common and serious illnesses. The bird *vuimpuiyo* is a benevolent spirit that inhabits the forest. These three species all live and behave as Matsigenka do, having families, houses, and fields, eating manioc, and hunting animals who live in the forest (there are other species that the Matsigenka believe have different types of souls, explained in more detail in Chapter 6). Furthermore, all three species can be viewed in human form under special circumstances, such as during *kamarampi* or *jayapa* drinking ceremonies.

The case of *vuimpuiyo* illustrates this point very well. For some people in Tayakome, this bird is equivalent to the invisible forest spirits called *sangariite*, who take care of the Matsigenka and are in constant contact with the *seripigari*. In some parts of the lowland Amazonian forest, one can find small clearings in the understory of the forest which are occupied by the 1-meter-high herb *matiagiroki* (*Cordia nodosa*). According to some people

in Tayakome, these areas are the houses or swidden fields (magashipogo) that vuimpuiyo or sangariite have created, analogous to the houses and swidden fields of Matsigenka (see also Shepard et al. 2001). It is possible that *vuimpuivo* and *sangariite* are believed to engage in human-like behavior because they have Matsigenka-like souls. Therefore, they perform their life in the spiritual world as common Matsigenka do in the "material" world, conducting Matsigenka activities that include making a field and eating manioc as a staple. However, it is essential to take into account the fact that such similarity seems to be mostly refer to physical appearance. While vuimpuiyo's soul looks and behaves like a common Matsigenka person, it has a different type of subjectivity. In fact, it is considered to be more powerful than ordinary humans, and, in this sense, it more closely resembles the *seripigari*, the Matsigenka healer or shaman who is "of the same kind" (ishaninka, or paisano in Spanish, countryman in English) as these spirits. The seripigari alone can actually see and communicate at will with vuimpuiyo as a human-like being, and he alone can also see their houses and fields where common people see only patches of *matiagiroki* bushes. Common Matsigenka can see these spirits in human-like form only during kamarampi (ayahuasca) ceremonies, or when drinking jayapa (datura) to cure severe illnesses. I discuss these comparisons in more detail in the following chapter.

In sum, few animal or plant species are believed to be "exactly" like Matsigenka, in a *perspectivist* sense. Nevertheless, the Matsigenka of Tayakome seem to attribute personhood to beings, like the powerful *vuimpuiyo*, as a consequence of the kind of soul that they possess, which is, in appearance, like a Matsigenka (see Chapter 6). This allows such beings to behave like "proper" Matsigenka, e.g., maintaining a swidden field and living in a house, around which the forest has been cleared.

Matsigenka identity is defined by the practices that they perform, one of the most important of which is the making of a manioc field, and thus, producing and consuming

manioc. However, these ideas are contested to a certain extent by a few people. As I mentioned in Chapter 3, some young adults seem to be more interested in engaging in wage labor outside of Manu National Park, principally in the tourist industry, and in obtaining Western goods, than in living like most other Matsigenka in Tayakome. Therefore, they do not have their own manioc fields, and they must borrow manioc from the fields of their relatives. Still, even for these young adults, manioc seems to be essential for the daily life that they maintain in the community. However, their ideas about what constitutes good food, especially among those young people who attended, and still attend, boarding schools around MNP, seem to be changing. A few believe that colono food -e.g., rice, potatoes, and beef -ismore nutritious than the food that they consume in their community. These conceptions coincide with those held by colonos and missionaries, who also deprecate other aspects of the Matsigenka lifestyle, or, better put, other aspects that they stereotypically assume to be parts of Matsigenka life. Therefore, while it is unlikely that these young Matsigenka adults feel themselves to be less Matsigenka because they place less value on manioc, and other customs, compared to their parents and elders, the influence of the discriminatory opinions of outsiders may be producing fundamental changes in what it means to be Matsigenka, a topic which certainly requires further investigation.

Inkenishi-Pankotsi (Forest-House) Boundary as a means of Self-Definition

The house and the swidden field also bear on another aspect of Matsigenka selfdefinition, one that, in Western terms, could be equated with the notion of "being civilized." Indeed, whenever I asked the Matsigenka whether they live in the forest, after this first experience with German, I noticed that they were usually surprised by my question, and many interpreted this as a pejorative suggestion. Tayakome residents' reactions were nearly always emphatic and similar: "No Matsigenka lives in the forest! We live in houses and have fields." Initially, I found these remarks puzzling, because I believed that the association of

activities such as clearing a swidden field with Matsigenka-ness was a relatively modern idea for the Matsigenka. This impression was based on a conversation that I had with Tomas, who must be in his mid-70s, and who is one of the founders of Maizal, the small settlement downriver from Tayakome. He recounted the following memories for me, while he was on a visit to Tayakome during my initial extended stay in the community:

I do not live in the forest now. A long time ago, I used to live in the forest. When I was a child, I lived in the forest. The *amihuaka* were harassing me, so I fled and lived here in Tayakome, I came here. Here, my fellow Matsigenka worked in their fields, I saw their fields, I saw their fields, and I ate it. A long time ago I did not have a field... I used to eat what grows by itself in the headwaters of Manu, there is *posiro*²⁰, I ate that. There was no manioc. Now there are machetes, there is manioc. My dad started to work [the land] a long time ago. Now, the *viracocha* have come, they gave us machetes, then we could work, and I knew manioc. He [his father] planted *parianti*²¹, sugar cane, *magona*,²² chili pepper. I could eat chili pepper. I helped my dad work, and he quickly finished working [clearing and planting] his field... Those who are from Urubamba (lit. who live on the other side), other Matsigenka, gave us manioc. I went to Urubamba. In Urubamba there is no forest, there is a lot of food, like peach palm, I saw a lot... When I was small, I lived in the forest, we had a small house. Then [my dad] worked, cleared the forest [lit. cut down trees], and then we had a big house.

Tomas likely came to Tayakome when it was first founded by the linguist

missionaries of SIL in the 1960s, fleeing raids that the amihuaka carried out against the

nonbelligerent Matsigenka (see Chapter 3). SIL missionaries gave machetes, knifes, and other

Western tools to the Matsigenka with which they could work the land, and brought

Matsigenka from the Urubamba region, who introduced some customs²³ to the people of

²⁰ *Posiro* is a variety of small and very sweet banana fruit that, according to the Matsigenka, grows by itself in the forest. This, as well as other varieties of banana, might have been disseminated in the Amazonian forest after the arrival of the first European colonizers of the Americas (Marin et al. 1998), or according to other hypothesis, during pre-Columbian times from Polynesia (Langdon 1993).

²¹ Parianti (Musa sapientum var. paradisiaca) is plantain, a large banana that must be cooked before it is eaten, and substitutes for manioc when accompanying specific foods, such as *mavoro*, a species of *canero* fish (*Cetopsis* sp.), or *paguiri*, known as *suri* in Spanish, which is the larvae of different species of large beetles (e.g. *Rhinostomus palmarum*, *R. barbirostris*, *Dynamis borassi*, and *D. nitidulus*) that grow inside of palm tree trunks and fruits.

²² Magona (Dioscorea trifida) is one of the many varieties that are known in Spanish as sachapapa. It is a deep purple tuber similar in taste and consistency to a potato that the Matsigenka commonly grow in their farms, and eat boiled.

²³ Shepard (1998) recounts that the Matsigenka who came from the Urubamba region with the evangelical missionaries in the 1960s taught the Matsigenka of Manu to mix *kamarampi* with the shrub *orobamba*, which are different species of the genus *Psychotria*, called *chacruna* in Spanish. People in Tayakome seem to have named this plant *orobamba* referencing the region where they come from. Including corn in the process of making manioc beer was also taught by Matsigenka from Urubamba. However, it is not

Manu. Tomas recognizes the advantages afforded by this new knowledge of manioc cultivation because it constitutes a much more reliable strategy of food production than does complete dependence on the more-unreliable food that the forest provides. Aurelio, who is in his late 40s, recounted memories similar to those of Tomas. However, according to him, neither he nor his deceased father, who was a number of years older than Tomas (according to Aurelio's account), lived in the forest when they were young:

When I was a child I lived in a house. My dad also lived in a house. When my dad was a child, he also lived at his mom's house, he did not live in the forest... A long time ago, there were no swidden fields. The Matsigenka did not have machetes nor axes. They worked the field with stones [stone axes], my dad recounted that to me. There was a little bit of manioc, [people] planted a little bit, they cut trees with stones, and could not cut a lot. They ate a lot of *posiro*. A long time ago, the Matsigenka first lived in the forest. Later they left the forest to live in houses... It is good that we live in houses now. If we would live in the forest, the rain would get us wet. Now we live in the house, we are Matsigenka, we work in our fields, we have manioc and our fields. We are different than *kogapakori [hostile neighboring tribe]*, we do not live in the same place as them.

Aurelio's notion of "living in the forest" contrasts with Tomas'. For the latter, living in the forest seems to signify not having a swidden field. Therefore, when Tomas says that he used to live in the forest and in a small house, he means that he did not have a field when he was a child. Whereas for Aurelio, living in the forest seems to mean not having a house, which is conceived as an insult for the Matsigenka, since this implies being "uncivilized" like a *kogapakori*. Yet, I believe that both Tomas and Aurelio equate the house with having a field, which is what most people in Tayakome do, since making a clearing to build a house is equivalent, in a practical sense, to making a clearing for a field. In addition, Aurelio's father told him that *pairani*, "a long time ago," the Matsigenka did live in the forest. However, the imprecision of the term *pairani* (which locates events in a very distant past²⁴, vary between a

clear if this practice was introduced by those who came with SIL or by those who came with the Dominican missionaries, almost two decades later.

²⁴ The Matsigenka have three basic terms to refer to different moments in the past: *chapi* is used to address a lapse of time that has recently occurred, between yesterday and a couple of weeks ago; *karanke* encompasses the recent past that spans between a few months to a few years; and *pairani*, as explained in the text, makes reference to a faraway time, from many years ago to the remote past when everything was created.

number of years to decades ago, to primordial times, for instance, when the world was recently created) makes it unclear whether he refers to a mythical, remote time, or to a time when his father or his elder relatives were alive. In any case, he, as well as virtually all of the residents of Tayakome, including the elders, claim that they never lived in the forest (in contrast to Tomas). Some mentioned to me that they had heard that, even before the arrival of SIL, the Matsigenka already had small machetes, almost like knifes, probably acquired from the few loggers and hunters who ventured into the Manu forests before the Park was established in 1973. Thus, people always had manioc fields, but with these knifes they could make only small fields. It is very likely that with the arrival of SIL, the once-dispersed Matsigenka gained increased access to the large machetes and axes that allowed them to enlarge their fields.

Thus, contrary to what I initially expected, I learned that practically all the residents of Tayakome consider having swidden fields to be a defining Matsigenka feature. This could be a result of the process of evangelization carried out first by SIL, and later by the Dominican missionaries. As I discussed in Chapter 3, when I summarized the history of Tayakome, the objectives of such missionaries, as suggested by Comaroff and Comaroff (1989), transcended the purely religious aspect of converting a group of "heathens" into Christians, and, importantly, envisioned their transformation into "civilized" people in order to subdue and integrate them to the newly established capitalist order. In the case of Tayakome, the fact that residents currently see the manioc field as a particular place of identification that differentiates them from neighboring non-Matsigenka indigenous groups that they perceived as "uncivilized", may be a consequence of the influence of SIL, and then of the Dominican missionaries.

On several occasions, I heard Matsigenka claim that "only the *amihuaka* or the *kogapakori* live in the forest." In other words, only violent people, such as these other

indigenous groups do not have fields. Amihuaka, as mentioned above, is a term generally used to refer to the Yora, who, until the mid-1980s, frequently raided the Matsigenka (see Chapter 3). According to Rosengren, the term *kogapakori*, which can be translated as "those who do whatever they want," has a negative connotation because it alludes to the "amorality" or lack of self-control with which people behave. This, in turn, leads them to conduct violent acts without apparent motivation (Rosengren 2004:13). Snell, one of the Protestant linguists from SIL, adds that, in the Urubamba region, people in the headwaters who speak a language belonging to the Matsigenka family are labeled kogapakori because of their belligerent demeanor (B. Snell 2011:222). Similarly, a few people in Tayakome use kogapakori to refer to Matsigenka who live upriver, who were never contacted by the missionaries, and who are violent because they have not been "civilized". "They are like savages," Adriana (28), a Matsigenka woman who grew up in a Dominican boarding school, once told me in Spanish, using the term "salvajes." For a minority in Tayakome, this lifestyle is associated with their lack of soul, and therefore perhaps, of their inability to "think" like a "civilized" Matsigenka (see Chapter 6). Others consider the kogapakori to be a different ethnic group, because their language is said to be unintelligible for Matsigenka speakers. However, the majority of the people in Tayakome used both *amihuaka* and *kogapakori* interchangeably to allude to any of the indigenous groups living in *voluntary isolation*²⁵, generally in the headwaters of the Manu River. Such people are described as unable to cultivate a manioc field, because they do not have the required Western tools, e.g., machetes and axes, that Matsigenka use to make their fields. Some Tayakome inhabitants even mentioned that these groups do not use fire and that they either barely cook or roast the meat they consume, or they eat it raw. As 28-years-old Modesto put it:

²⁵ This term refers to the current situation experienced by indigenous groups, also called "isolated" or "uncontacted," who have been historically forced to move out of contact with the majority society, in the case of Amazonia, due to economic forces that threatened their existence (see Barclay and Garcia 2014).

The *kogapakori* live in the forest. They do not eat manioc. They eat something else, something similar to *magona* that grows by itself in the forest. They also do not cook their meat, they smoke it a bit, and sometimes they eat it bloody. They cook it a little bit, but they want it bloody. When they eat blood, they want to shoot [their arrows, or attack], they get really angry. My grandfather related this to me.

Here, Modesto was referring to the Yora, who, in effect, shot and wounded his grandfather, Amador, a man now in his late 70s or early 80s, and probably one of the few Matsigenka alive who has experienced a violent encounter with this group of people. Amador gave a similar account of the *kogapakori*:

The meat that they eat is *shakiriri* [the terrestrial yellow-footed tortoise, known in Spanish as *motelo*]. They open it and roast [the meat] with achiote branches, and then eat it almost raw. If they would make a *metaro*²⁶, they could boil and then eat their food cooked. [Because] they do not have pots; they eat it raw. They eat the tapir raw too [...] They have arrows, they sharpen peccary teeth, also capybara teeth, and use them to sharpen *piposhi* [a type of reed] into a sharp tip for their arrows.

Amador does differentiate between the *kogapakori* and the *amihuaka*, because they speak different languages, he says. However, they are similar in that they both eat barely-cooked *shakiriri*. He mentioned that he has seen their camps, with remains of burned turtle shells and bones with raw meat attached. A few other Tayakome residents also describe *amihuaka* (or *kogapakori*) camps, with their temporary houses made of palm tree leaves, and turtle remains. However, most people have not seen these camps first-hand, and, rather, heard these accounts from others like Amador. It is possible that some of these accounts deliberately exaggerate the difference that the Matsigenka perceive exists between these indigenous groups and themselves. Such attempts at establishing out-group differentiation is certainly common near ethnic boundaries (Barth 1998 [1969]), and, in this case, may be especially accentuated due to the historical conflicts between these groups, as well as the influence of missionaries, who tended to have a negative opinion of uncontacted people.

²⁶ A type of clay pot that the Matsigenka used for cooking, before obtaining aluminum or steel pots, allegedly, from the missionaries.

Nearly all of the elders who live, or used to live, in Tayakome have stories from when they were young about the times when they and their families had to flee the raids of the *amihuaka* and *kogapakori*. Thus, violent and aggressive behavior is deemed to be uncharacteristic of Matsigenka, who possess souls, and therefore, are able to "think," a notion seemingly associated with "self-control." In fact, when asked whether these non-Matsigenka groups who live in the forest have souls, Tayakome residents tended to answer "no, because they get angry," or "no, because they like to attack" (lit. they shoot arrows; see Chapter 6).

In addition, as briefly mentioned above, it is possible that people in Tayakome may have adopted the derogatory Western view that indigenous people who inhabit the forest are "savages" and "uncivilized," probably as a consequence of the presence of SIL and Dominican missionaries in the communities, or contact with these religious groups in other contexts (like Adriana, who grew up in a boarding school). Garcia and Barklay (2014) describe a similar conception held by the Matsigenka of the Urubamba region with regard to the so-called Nanti, or uncontacted Matsigenka. The Peruvian government established the indigenous Kugapakori Nahua Nanti Reserve in 1990, purportedly to defend these peoples and their territories from the spread of logging and other extractive activities taking place in the nearby Camisea region²⁷. These authors assert:

While at the national level, and from the urban centers of the region, the condition of being un-civilized is attributed in a generic manner to the aggregate of Amazonian peoples, at the local level, as it occurs in the Urubamba, this classification is usually reproduced by the native communities and applied to those who have not passed through the *evangelization–nuclearization–school attendance–adoption of Western clothes–use of money* process. In the lower Urubamba, people who live in remote areas and preserve their autonomy as a group, who do not speak Spanish, nor share values defined as 'urban' or 'Western,' and who do not live in nucleated settlements, are perceived as the epitome of non-civilized people. (Barclay and García Hierro 2014:19; my translation, emphasis added).

The Matsigenka of Tayakome are certainly not as integrated into the Peruvian

²⁷ In later years, the Peruvian government granted the Argentinian company Pluspetrol the sovereignty over the Lot 88 for hydrocarbon exploration, which overlaps with 23% of the Kugapakori Nahua Nanti Reserve territory. See Barclay and García Hierro (2014) for more details.

majority culture as are those Matsigenka who live in titled communities in the Urubamba region. Nevertheless, similar conceptualizations of neighboring ethnic groups are held in Tayakome, likely as result of evangelization that started with the initial founding of the community by the Protestant missionaries of SIL, and continued decades later by Dominican missionaries who took control of the management of elementary education. These actors may have intensified Matsigenka resentment against the amihuaka/kogapakori, initially developed during armed conflicts in prior years, by instilling prejudices against these peoples, and promoting their characterization as "barbaric." Additionally, some Matsigenka who work seasonally in *colono* towns around the Park, and, most importantly, teenagers who attend the boarding high schools located in Boca Manu and Shintuya (this latter run by Dominican missionaries), may be acquiring the condescending and discriminatory conceptions that priests and some *colono* settlers hold about the indigenous groups who live inside the Park, which includes the Matsigenka of Tayakome and Yomibato (see Bunce and McElreath 2017 for suggestive evidence of the adoption of some *colono*-typical norms by Matsigenka). Some of these younger Matsigenka, as well as others like Adriana (mentioned above), who have had more intensive exposure to such stereotypes, apply some of these same Western prejudices to Matsigenka who live in the headwaters. On many occasions, I heard Matsigenka in Tayakome referring to amihuaka and kogapakori, as well as to Matsigenka who live in the headwaters of the Manu River, as poor, based on the fact that they do not own Western clothes. Likewise, these Tayakome residents do not consider themselves to be poor because of their access to such clothes, which those who work in colono towns can buy themselves, and others receive from the Dominican priest who brings donated used-clothes on his visits to Tayakome twice a year. Highlighting these features, associated with a life far removed from the forest, points to the fundamental difference that the Matsigenka stress between themselves and neighboring indigenous groups who live in headwaters. For Tayakome

residents who are most influenced by the majority-culture Peruvian society that surrounds them, establishing and emphasizing such a difference is fundamental to avoid being stigmatized as "savages" themselves. For others in the community with less outside experience, their violent history of confrontation with *amihuaka* and *kogapakori*, and the resentment that has arisen from those experiences, has instilled a desire to distance themselves from the assumed lifestyle and bellicose behavior of these groups.

In addition to the dangers posed by other indigenous groups, the domain of the forest is also home to non-human beings that can potentially inflict spiritual and/or physical harm on the Matsigenka. In Tayakome, people believe in the importance of simultaneously cultivating a large farm and being able to visit the forest regularly. Despite the fact that they are very familiar with the forest that immediately surrounds the community, as well as with the more distant forest that is visited on occasional fishing and hunting trips, the Matsigenka recognize that they must be cautious with regard to the beings that they encounter there. Evil spirits associated with certain species of animals and large trees, which sometimes even take human form, can attack or spiritually harm imprudent or reckless Matsigenka. This does not imply that people are in constant fear of the forest, nor that there is a negative connotation associated with this domain as a whole. Rather, the Matsigenka seem to be vigilant about the potential for harm posed by the different types of subjects that they find in the forest, probably because it is considered to be an almost entirely untamed realm. For this reason, the vuimpuiyo (or sangariite), the good spirits who protect people's well-being in face of the dangers to which they are exposed in the forest (see above), play such an important role in Matsigenka life.

The ontological boundary between that which lives and grows in the forest and that which is cultivated in the domestic realm also manifests in the distinction that people make between the species of plants that grow in both domains. This is the case for *jayapa* (datura),

a flowering shrub which naturally grows on the shores of streams throughout the forest, but is also cultivated near the houses of those men and women who know how to brew it into the potent medicine used to treat severe illnesses. Tayakome residents believe that the wild *jayapa* is evil and extremely dangerous, and, therefore, no one collects or uses it. According to Amador, this variety of *jayapa* actually belongs to the *sangariite*, who have planted it throughout the forest. In any case, the Matsigenka affirm that only the *jayapa* cultivars that the *seripigari* have given to them can be trusted. This is similar to the case of domesticated species such as manioc or plantain. New varieties of these staple crops are provided by the *seripigari*, who in turn, obtains them from the *sangariite* or *vuimpuiyo* (see also Shepard 1999b; Shepard et al. 2001). However, these species differ from *jayapa* and *kamarampi* (ayahuasca), in that the manioc and bananas are rarely found growing by themselves in the forest. In general, it seems that useful species found in the forest may belong to someone else who is not a Matsigenka – because, as shown above, *no Matsigenka lives in the forest*. It is possible that all such useful species belong to the forest spirits, as mentioned by Amador (above).

Another context in which a fundamental distinction between the forest and the house is salient is in an account of the conversion of people into jaguars, which generally occurs among elders. This was narrated to me by Johan (22), who was explaining to me how such a transformation is associated with blowing tobacco powder into another person's nostrils, an activity generally conducted between men who are close to each other. He recounted for me what his grandfather explained to him when he was alive, regarding why elder Matsigenka turn into jaguars:

The jaguar's soul leaves its body and turns into a Matsigenka. When you go by yourself to the forest, faraway, [like for] ten or twelve hours, and you see it in the trail, you see it as a human, but he only has two arrows. He tells you "let's go hunting [lit. shooting arrows]," and you say "let's go." Then, he blows his seri [tobacco powder] into your nose. After this, every time you go to the forest, you always see the jaguar. When you return to your house, he does not go with you, he stays in the forest. But if you go again to the forest, as few as 50 meters

inside it, then you see him standing as a Matsigenka. He is never going to bite you, because he blew tobacco in your nose. Then, when you are old, you become a jaguar. Because you can see him [as a Matsigenka], he does not attack you.

In Chapter 6, I discuss in more detail the transformation of elders into jaguars, and the significance of such an intimate activity as sharing tobacco on the assimilation of one species (human) into the other (jaguar). Here, I stress the fundamental difference that seems to exist between the domain of the forest and the house in Johan's narration. He affirms that the jaguar, as a human, does not accompany the Matsigenka, who he is trying to convert into a jaguar, to his house. Rather, the jaguar stays in the forest, never crossing into the domestic realm. The jaguar tricks the man, who thinks he is spending time with a new human friend, and as such, he does not realize about his friend's jaguar form. Therefore, it is possible that this form would be revealed if the jaguar enters the domain of the house, because there, the perspective of the Matsigenka man prevails. Inversely, in the forest realm, the perspective of the jaguar-as-a-human prevails while the man is socializing with him by sharing his tobacco. In other words, each domain entails a particular ontological disposition established by the beings that inhabit it. Such an explanation for the conversion of elders into jaguars, though recounted by a few experts, is not widely shared in Tayakome. Still, it may be an indication of a perceived distinction regarding the realms of the forest and the house, expressed in other manners and contexts by the residents of Tayakome.

A notion that is widely shared in the community is the crucial role of the *seripigari* as an intermediary between spirits and humans, as mentioned by Shepard for other Matsigenka communities in Manu (Shepard 2002b). The *seripigari* is *ishaninka* ("of the same kind") as the forest spirits, and, as such, he can transcend the Matsigenka realm during hallucinogenic ceremonies, and procure cultivars from the spirit realm that are useful for humans. After returning to the Matsigenka world, he can share these cultivars, which people then plant in their fields. In this manner, the *seripigari* is able to filter out the potential harm or wickedness

of forest species, as a consequence of his ability to move through worlds (Shepard 1999b; Århem 1996; E. Viveiros de Castro 1998; Fausto 1999; Overing 1990; Thomas and Humphrey 1994; Whitehead and Wright 2004). Consequently, he is essential as a mediator between both domains, the sylvan and the domestic.

As a final remark I wish to emphasize the dependence that the Matsigenka have on the forest. Despite the fact that, as I explain above, the manioc field is fundamental for the existence of the Matsigenka, so too is the forest. People in Tayakome consider their wellbeing to be dependent on the many non-human beings that inhabit the forest. When I asked what would happen in the event of a hypothetical extinction of the forest, the immediate answer of virtually everyone in Tayakome I conversed with was that it would lead to their own extinction, principally, because of a lack of game meat. The forest, then, like the swidden field, is a place of plenty, but over which the Matsigenka do not have direct control. As such, they do not worry about its extinction, an impossible situation according to them. Since the forest is seen as a constant colonizing force (e.g., constantly encroaching on the realm of the house and field), the Matsigenka actually see themselves as the ones fighting for their own permanence. In this view, the forest does not need to be taken care of, and it is rather what Bird-David (1990) and Rival (1993) call a "giving environment."

In particular, it is through *correct* ways of relating with this realm that Matsigenka gain access to such abundance without fear of incurring harm. While this might suggest that the Matsigenka conceive of the forest as a source of "useful resources," it is actually the maintenance of different types of social relations with animals, plants and forest spirits that generates the particular Matsigenka form of conceptualizing this realm. Therefore, the forest realm/domestic realm contrast is not an equivalent to that of nature–culture, because aspects of the Western notions of nature and culture are intertwined in Matsigenka conceptions of the forest and the house (see conclusions below). Accordingly, it is impossible, and ultimately

useless, to attempt to fit Matsigenka *factishes* into Western ones. This is also evident in Chapter 6, where I discuss the different ontological statuses non-human beings in the Matsigenka environment. Beings that, for Western ontologies, may be considered as objects, like soulless plants and animals, are, for the Matsigenka, powerful beings with human-like agency and consciousness.

Oakue and Inkahare (The River and the Oxbow Lake)

The river and the oxbow lake are two realms that are considered to be distinct from both the forest and the house. The subsistence economy of the Matsigenka depends, to a great extent, on the seasonality of the river, since people's food production activities change dramatically according to the level of the river and the strength of the current. This dependence is manifested in the conception of time. For instance, the word for "year" in Matsigenka is *shiriagarini*, makes reference to the season of the year when the river's level is low, and fish are more available. Thus, the passage of time (or years) is measured on the basis of the number of times that the river has receded.

In Tayakome, the oxbow lake, or *inkahare*, is also more often visited during the dry season, when the level of the river goes down, and all the fish that have entered these bodies of water become isolated from the main river channel, and are therefore easier to catch them. A few elders in Tayakome, and some of their immediate relatives, mention that the *sangariite* actually reside at the bottom of oxbow lakes, where they live in a Matsigenka manner, with a house, a field, and their domestic animals. These animals, these people say, are the wild game species that the *sangariite* take care of and then release for the Matsigenka to hunt in the forest. Other authors mention similar conceptions of the *sangariite* among Matsigenka of this area and the Urubamba (Baer 1994; Shepard 1999b). However, apart from this small group of residents, these ideas regarding the *sangariite* are not widely shared in Tayakome

The river and, to an extent, the oxbow lake represent domains that are perceived as the sources of many animals that are principally conceptualized as food. As such, fish and other species that inhabit these aquatic realms are mostly regarded as agentless. This contrasts with the forest, that harbors different kinds of subjects, some of which are animals that were humans in a remote past (see Chapter 6). Thus, it is possible that the Matsigenka "objectification" of fish (or most species of them) solely as a food resource is associated with their origin, attributed to a mythical woman called *Parieniro* or *Parieni*. Juan Pablo (~42), a well-regarded and knowledgeable storyteller in Tayakome (who is also considered an expert, based on his previous *seripigari*-training), told me a version of Parieniro's story. Once again, the following is my lightly-edited translation:

Parieniro was a woman who looked like any other Matsigenka woman. She had a husband and a daughter. Her husband went to fish with *cogi* (fish poison), but he got nothing, only some small fish. Then, she went fishing and came back with different types of fish: *shima, omani, mamori, komagiri, jetari*, all types of fish. She brought them, cooked them, and everybody ate them. After this, the hummingbird, who was a human man, became suspicious and thought, "Where did she get the fish? Her husband said he went to use fish poison, and got nothing, there was nothing in the stream. Where did she go, where did she get the fish?" He then went to hide at her house in order to discover where she got the fish from. At her house, everyone left, the house was empty, and the hummingbird hid up high making a little hole in the roof. Then, Parieniro and her daughter came back. They had gone to get plantains. Then, Parieniro squatted and gave birth to a big omani [catfish], and put it aside, then, a *jetari, koviri, mamori, komagiri* [other types of fish]. The hummingbird watched and spit in disgust, and thought, "Gross! I don't want that. It came from her vagina!"

The hummingbird came down from his hiding place and ran away. He then came back, and saw the women smoking a lot of fish. He thought, "I saw those fish born out of her vagina. Now it is not tasty!" Then other men came back from working in the field, and they all ate the fish. Parieniro gave one fish to the hummingbird to eat and said, "Here, eat this fish." He told her directly, "I won't eat it. I saw you give birth to it from your vagina." Then, he spat. "It's not tasty!" "Good," she answered, "now, you won't eat it. You look like a hummingbird [because he was a picky eater]. What are you going to eat then? Will you eat plantain? You will turn into a hummingbird and fly away." Then, the next day he turned into a hummingbird. Then Parieniro decided to leave and go far away, where she transformed into a large rock. Because she made the fish long ago, we have all these fish now.

Juan Pablo's story is slightly more detailed than, and slightly different in certain aspects of the versions that other people recounted to me, but the main argument is similar: Parieniro gave birth to fish in order to feed her family and others around her. She is the protagonist and the agent who created the fish, and they are the passive beings that, since their origin, have always been conceived solely as food. In contrast to forest animals, then, these beings were never attributed with any kind of independent thought, volition, or consciousness. This sharply contrasts with the case of some forest animals, including those that are favorite game species, which have a particular kind of subjectivity based on their previous or current human condition. The only context in which a particular type of agency is attributed to certain fish is during the couvade, that is, when parents practice a set of restrictions on their behavior and in their diet in order to protect a newborn child. In this case, when parents eat, or interact with, a number of different species of fish (as well as other animals and fruits), people believe that these non-human beings are responsible for carrying off the souls of their infants. These fish species, then, have the capacity to affect the

Matsigenka, but it is not clear if they do this of their own volition. Furthermore, no other human-like dispositions are generally attributed to fish, and, therefore, they represent a different kind of subject relative to other beings. I discuss their situation in more detail in Chapter 7.

Conclusions

The exploration of Matsigenka *factishes* about the environment has unsurprisingly demonstrated that "nature," a Western conception that even Westerners struggle to define, does not exist as a concept in itself for the Matsigenka. As a result, it is not realistic to attempt to establish any equivalence between it and the Matsigenka concept of "*inkenishi*." Even the term "forest," that I have used as the English translation for *inkenishi*, does not convey the ensemble of meanings, conceptions, and relationships that inkenishi entails for the Matsigenka. Despite the fact that it is conceived as a domain in contrast to that of the house/field, and, in a manner, it establishes the limit of Matsigenka identity, *inkenishi* comprises different subjects with whom the Matsigenka maintain different kinds of engagements. This is explored in more detail in Chapters 6 and 7. Similarly, *oakue* and *inkahare*, are realms that differ from the Western notions of "river" and "oxbow lake." They are realms that provide the main source of food during a critical part of the annual cycle for members of Tayakome. However, as I will show in Chapter 7, the particular subjectivity of those beings (e.g., fish), which differs from that of most beings inhabiting *inkenishi*, implies a particular form of interaction with the Matsigenka.

As a further consequence, the distinction between *inkenishi* and *magashipogo/pankotsi* (swidden field/house) cannot be equated with the modernist nature-culture contraposition. Strathern defines this dichotomy in the following manner: "Western nature-culture constructs [...] revolve around the notion that the one domain is open to

control or colonization by the other. Such incorporation connotes that the wild is transformed into the domestic and the domestic contains within it primate elements of its pre-domestic nature." (Strathern 1980:181). For the Matsigenka of Tayakome, however, the relationship between the two realms is different.

For a start, from the Matsigenka perspective, human/non-human interactions cannot entail subjugation of domains outside of the house/field, since the forest is constantly invading the house, given that its growth is incessant. Domains such as *inkenishi*, and even *oakue*, are inexhaustible and ever-encroaching (oxbow lakes are conceived as resulting from the dynamics of the river/forest boundary, and, as such, lakes are a secondary domain). Matsigenka people consider themselves to be constantly "threatened" by this overwhelming forest that "grows by itself" rapidly and continuously (see Chapter 8). On the other hand, while *inkenishi* must, then, be "controlled" so that it does not invade and colonize the house and, importantly, the swidden field, it is not conceived uniformly as "wild," since it is inhabited by beings with differing types of subjectivities, some of them with Matsigenka-like soul that afford them livelihoods that are similar, socially, morally, and subsistence-wise, to that of the Matsigenka.

In addition, the spiritual world seems to transcend the limits of the material. In this regard, and as I will show in later chapters, the role of the *seripigari* is essential to link the domains of *inkenishi*, *oakue*, *inkahare*, and *pankotsi/magashipogo*, and make them intelligible to each other. He is the mediator between the common Matsigenka and his *ishaninka* (countrymen or kinspeople), comprising the *sangariite* (also known as *vuimpuiyo*), and other spirits, souls, and beings that inhabit the forest and the river.

The places where souls of the deceased go is another domain of great importance for the Matsigenka, and one that appears to be more contested. Ideas of *enokue* (the sky) and *morekakue* or *kamatirisekue* (the underground) seem to be intermingled, probably as a result

of the influence of Protestant and Catholic missionaries. As I have explained above, it is also possible that current configurations of "Matsigenka-hood," and the house/field as a place of self-definition, are also products of the missionary endeavor to "civilize" the Matsigenka, in addition to evangelizing them. However, it is also possible that Matsigenka of Manu held these ideas before contact with these most recent waves of missionaries. While the origins of ideas are certainly difficult to determine, we must keep in mind that the current configuration of Matsigenka *factishes* should be seen as the product of this people's entire history, transcending the arrival of missionaries in 1950s. I have shown in Chapter 4 that the Matsigenka of Manu have had relatively continuous, contact with missionaries and "Westerners" since at least the 18th Century. Before that, they were in constant communication, and often conflict, with non-Matsigenka groups. Consequently, attempting to imagine a "pure" Matsigenka ontology is futile. In accord with this line of thinking, while most of the conceptions presented in this chapter seem to be widely shared among Tayakome residents, as I mention above, variation exists, especially among some younger adults with more exposure either to colonos or to missionaries in boarding schools outside of Manu National Park. The different views held by these subgroups of residents will be explored in more detail in the following chapters, since it is through particular interactions with certain non-human beings that such a conceptual particularities are made salient.

In sum, the places that compose the Matsigenka world are *factishes*, since they are both material and abstract, comprising both physical elements and non-human beings that, through processes of engagement, are converted into concepts (e.g., possessors of distinct kinds of souls), and that now constitute a variety of Matsigenka ontological configurations. Ingold's phenomenological approach holds that exposure to environmental stimuli during people's individual "dwelling" experience prompts them to conceptualize their surroundings in a particular manner (Ingold 2000; Ingold 2011). While the inputs of environment stimuli

may influence the way in which people conceptualize their world, an important component of an individual's conceptualization is developed on the basis of socially transmitted ideas and socially guided attention in the society where she grows up and dwells. Matsigenka *factishes* of their environment have developed as a consequence of both individual and collective history, entailing personal experiences with other indigenous groups, Protestant and Catholic missionaries, and *colonos*, as well as recounted tales of other people's experiences. As a result of such differences in personal experience and socially transmitted knowledge, expectations, and oral history, we should expect the Matsigenka to be attuned to particular stimuli, and thus to interact with the forest in particular manners that may differ from the manners of other groups (including ourselves) who have different histories.

CHAPTER 6: THE DIFFERENT WAYS OF THE SOUL: MATSIGENKA ANIMISM, AND ITS IMPLICATIONS FOR RELATIONALITY

Salomon, one of the oldest men in Tayakome (he was probably in his late 70s) died one afternoon in March after a prolonged illness. Born in the Manu River headwaters, he came to Tayakome while the community was being established by the protestant missionaries of the Summer Institute of Linguistics in the 1960s (see Chapter 3), and became one of the few teachers trained by the missionaries in bilingual education. After the establishment of Manu National Park and the expulsion of the evangelical linguists from the area by the government, Salomon continued living in the community, first with his two wives, and, after their deaths, in a house next to Carmela (~45), his only daughter. Salomon was one of the first Tayakome members that I met, when he visited Cocha Cashu Biological Station while I was working there in 2004. He often visited the station, driven by his curiosity about the *gringo* researchers and (mostly) by a desire to exchange fish and the produce of his field for some sugar, rice, and other Western goods. After we started working in Tayakome in 2010, he continued to associate me and my husband with his visits to Cocha Cashu, always joyfully recalling past stories and characters from the station every time we visited him at his house or he visited us in ours.

No one knew the exact cause of the illness that confined him to bed for several weeks, not even the nurse technician who worked at the community health post. The day Salomon died, I went to see him, along with others including Mateo, his oldest grandchild who took charge of his funeral as requested by Mateo's mother (and Salomon's daughter) Carmela. When I arrived, Salomon's body was lying on the roofed platform of Carmela's kitchen, under his mosquito net as if he were sleeping. When Mateo lifted the mosquito net we could see his bony face and body. The last time I saw Salomon was a few days before his passing. I had been visiting Carmela, and I spoke with him for a few minutes in Carmela's kitchen. He

better, but he insisted, saying that he was fine, and I stayed for a while, sitting by his side. It was really sad to see him in that state. He barely had strength to talk, and I could literally see the bones in his arms and face. I asked him if he was eating well and he assured me that he was. When I returned home that day, however, Ignacio told me that he was lying. Carmela mentioned to him and Jacinta that Salomon did not want to eat *parianti* (plantain), or anything that is good food (that is, Matsigenka food). Ignacio believed that he was actually eating white-collared peccary or deer in the forest because "he transforms into a jaguar," he asserted. Ignacio and his 22-year-old daughter, Gaby, told me that, even though Salomon was still alive (*aitio yani*, lit. "there is life in him"), his soul was already in the sky, and that what was left at Carmela's kitchen was just his bones and skin. They were surprised when I told them that I conversed with him for a few moments. Ignacio thought that that was not good. He said that it was probably the jaguar in him talking to me.

On the day of Salomon's death, Ronald, Salomon's son in law who was visiting Tayakome with his wife, Salomon's daughter Ines (they live in the smaller community downriver, Maizal), proceeded to place *taviri* on Salomon's body. *Taviri* is a mixture of bee wax and white, viscose sap of a tree called *erapatsa*, boiled down into a tar and formed into blocks or bars. It is used by men during the fabrication of arrows to glue different parts together, such as the feathers onto the shaft. Ronald melted the *taviri* and smeared it on Salomon's mouth, eyes, ears, elbows, palms, fingernails, knees, toenails, and anus. This would prevent Salomon from turning into a jaguar after being buried. After he finished, Mateo lit white candles, and placed them in a circle around Salomon's body. He said that by placing the candles in this way, Salomon's soul would not wander around and make his daughters sick. It was already dark when Mateo finished setting up the candles, and we returned home. Mateo told us that, earlier in the day, he had stopped by Nestor (55)'s house to ask for the candles, and also because it was important to let him know that Salomon had

died because "he [Nestor] knew what to say on these occasions." Mateo is one of the few young adults who has spent several months working in the colono towns around Manu National Park and values the manner in which certain things are done by *colono* people, including performing certain Christian customs. In this regard, Nestor's opinion about the "proper" way to bury a person, based on his experience with Catholic customs growing up in a Dominican boarding school in the Urubamba region, was important for Mateo. On this occasion, however, he could not find Nestor because he and his family were camping upriver for a few days, on a fishing trip.

The following morning, Mateo obtained some wooden boards for Salomon's coffin, and transported them by boat to the port closest to Carmela's house. He later told me that it was important to bury Salomon in the ground with a coffin, because "that is how people do it outside [of the Manu National Park]," and burring him in the bare ground would open the possibility of Salomon turning into a jaguar. At Carmela's, the candles had burned out from the previous night. German and Eugenia, Mateo's parents-in-law, had arrived. German put tufts of Carmela's cotton on Salomon's eyes and mouth. He said that this, in addition to the fact that Salomon was baptized, would ensure that Salomon's soul would go to heaven. German inspected the body to make sure that Salomon's feet were not swollen, which would indicate witchcraft. Simultaneously, Ernesto (20), Mateo's brother-in-law and German's son, was looking through Salomon's few personal items and papers. As one of the bilingual teachers trained by the missionaries of SIL (see Chapter 3), Salomon kept many of the teaching documents and notebooks that he used for his classes. Ernesto wanted to keep some of the items as a remembrance, but Mateo and German thought that they shouldn't keep anything because, according to Matsigenka tradition, the deceased should be buried with all of their belongings. Later, we learned that Carmela and Ines had, in fact, kept some of those papers, as well as some of Salomon's photos, as remembrances.

Some of us (ten men and women) accompanied Mateo with Salomon's body to the cemetery, referred to by everyone with the Spanish word panteón. It consisted of a patch of ground under a large *shirigari* tree (kapok tree, one of the largest and tallest trees that grow in Amazonian forests) located ten minutes downriver by *peque-peque* motor from Tayakome. After picking out a spot under the kapok tree, the men dug a hole such that the head would be aligned with the rising sun, in order to avoid attracting evil spirits (see also Shepard 2002b) while the women sat on one side, telling stories about buried dead people whose bodies had later disappeared mysteriously, and pointing out where other Matsigenka were buried around the kapok tree. In the finished grave, about two meters deep, Mateo and the rest of men placed the coffin, built from the wooden ladder used to transport Salomon's body, as well as the wood boards. Ines put Salomon's clothes, papers, and few personal items inside of the coffin, around his body, and the men nailed on the lid and filled in the grave. Edwin, Mateo's 17-year-old brother, made a cross with a pair of branches that he found on the ground and stuck it near the head of the coffin, while Mateo nailed Salomon's plastic mug to the cross because, he said, he had seen Nestor's wife, Magali, doing that once. During this last part of the interment process, no one said anything. Neither Mateo nor Edwin displayed outward signs of grief over the passing of their grandfather. Only Ines appeared to be sorrowful, and quiet. After Salomon was buried, Johan (22-year-old nephew of Jacinta) said "good bye, Salomon!" aloud, and we all left without any further ceremony. On our way back, Johan threw the woven mat that was covering Salomon's body into the river because, everyone said, if it were buried, snakes would come out of the ground and could bite people. At home, Jacinta and her family also took precautions to protect us from Salomon's soul. The women boiled a big pot full of water, and when the water was warm enough, all of us who went to bury Salomon were forced to bathe. Between laughs and shrieks because of the high temperature, Jacinta and her daughters took turns pouring the hot water over everyone (with

our clothes on), which felt comforting after all the tension from the previous events of the day. After everyone was soaking wet, Gaby said that we would be ok, since Salomon's soul would not come to bother us and make us sick.

Matsigenka conceptions of soul are situated and contingent. The instances in which the Matsigenka most commonly employ this term - in Matsigenka osire (her soul) or isire (his soul) – are those that concern their health and wellbeing. In reference to humans, the soul is invoked when someone is ill, and has therefore lost her/his soul, as was the case of Salomon. When referring to non-human beings, on most occasions the objectification of the soul (i.e., referring to the soul as a thing that beings have) indicates malevolent qualities and intentions, generally attributed to dangerous forest spirits that can potentially harm any person, or that are particularly harmful to infants. Therefore, when, in daily life, people use the expression "aitio osire/isire" - literally "there is soul in her/him" or "she/he has a soul" -, that is, in a context different from that of my own inquiries, they are often actually referencing an interaction between the agentive owner of the soul, which grants it a capacity to inflict damage, and the receiver of the damage, that is, a human. However, the association of this capacity with the notion of soul is certainly not the only manner in which "isire" or "osire" are conceptualized in Tayakome. Rather, notions of soul differ depending on the subject to which it has been attributed, and instantiate specific kinds of engagements between humans and non-humans. As such, I considered it pertinent to explore Matsigenka conceptions of non-human beings' interiorities, as expressed in their souls and in the absence of them, and the implications of these ideas for interactions between the Matsigenka and these entities, in order to investigate Matsigenka conceptualizations of their world.

After the revival of interest in animism at the end of the last century (Descola 1992; 1996; Bird-David 1999), the term has been revised and reinterpreted in a variety of ways (see

Rival 2012). Understood as the tendency to attribute human-like agency, intentionality and/or consciousness to non-human entities, animism certainly underlies the construction of Matsigenka environmental conceptualizations and engagements, as it does in other Amazonian societies. This is reflected in the first excerpt of this chapter, in which I narrate the passing of Salomon, one of the eldest men in Tayakome, and illustrate one of the many instances in which the lives of Matsigenka and other non-human entities mingle and affect each other in manners that transcend the purely physical aspect of these engagements. Importantly, not all of the living entities that populate the Matsigenka world are endowed with the same type of agency, intentionality, and consciousness, as proposed in other studies of indigenous groups of the Americas. Thus, the objective of this chapter is to explore the particularities of Matsigenka animism, as expressed in the ontology(ies) held by Tayakome residents, in order to attempt to elucidate their implications for Matsigenka day-to-day engagements with their world.

In the previous chapter I laid out the general conceptual dispositions of the Matsigenka world, emphasizing the contraposition of the house (also equated with the manioc field), the forest, and the river/lake, as domains that ontologically define the beings that inhabit them. In this chapter, my purpose is to address in more detail the Matsigenka relational order that structures those realms. For this purpose, I explore current notions of the Matsigenka concept of *osire/isire*, that the Matsigenka themselves translate into Spanish as *alma* or soul. Despite the fact that the diverse meanings of the English term "soul" only partially map on to the different conceptualizations of the Matsigenka term *osire/isire*, for ease of exposition, I will use "soul" as the translation of the Matsigenka term. However, it is important to keep in mind that these concepts are not entirely synonymous.

Before presenting an empirical account of Matsigenka animism, I first review theoretical approaches to animism, emphasizing their consideration of indigenous ontology or

epistemology in an attempt to understand the societies under study from the societies' own points of view. In particular, I discuss the main arguments of Viveiros de Castro's perspectivism, as well as its limitations, as this is still a pervasive theory, widely applied in studies of Amazonian peoples. Next, using a combination of ethnographic and quantitative analysis, I interpret the diverse ontological configurations of non-human beings for the Matsigenka. This is partially based on a survey that I conducted among 88% of Tayakome adults (63 out of 72), in which I inquired about aspects of the ontological status of 82 animal and plant species (see below and Chapter 4). This analysis of people's responses facilitates a better understanding of the organization of the Matsigenka cosmos in general, and the variety of conceptions held by the Matsigenka who live in Tayakome.

Through both my ethnographic experiences and the results of this survey, I show how the different manners in which the term soul is conceived determine the varying degrees of agency, consciousness, and intentionality that are attributed to various animals, plants and other environmental elements. Here, I define agency as the ability to act in a particular manner, intentionality as the willingness to exert agency, and consciousness as the possession of both of these qualities in addition to human-like reasoning and judgment. Furthermore, I illustrate the variety of opinions that exist in the community. In particular, I make reference to a subgroup of Matsigenka mentioned in the previous chapter, who are considered experts by the majority of the community members regarding the metaphysical Matsigenka world, based on their different backgrounds (see Chapters 4 and 5). In this chapter, I provide evidence that perspectivism is only one of the possible ways in which people from the Amazon, in this case the Matsigenka, conceptualize and engage with their surroundings, as it happens in other Amazonian societies (e.g., Rival 2012).

Animism and the Ontological Method

Animism is a term that has regained the attention of academics in recent decades, demonstrating a renewed interest in addressing indigenous conceptualizations of, and engagements with, their environment (M. Brightman, Grotti, and Ulturgasheva 2014; Harvey 2015). The diverse scope of these interests is reflected in the variety of terms that have been used in animist research, such as personhood, subjectivity, agency, intentionality and the myriad of synonyms associated with them (see Rival 2012). This, in turn, reflects the complexity and detail with which these anthropologists have interpreted animist ontologies.

One of the first researchers to attempt to address animist conceptions from the point of view of the people under study was Irving Hallowell. His research in the 1950s among the Ojibwa of Canada was pioneering and influential in attempting to explore non-Western ontological orders, or ethno-metaphysics as he called them, by giving them legitimacy in their own terms, and by recognizing the existence of alternative animist concepts (Hallowell 1960). His studies reveal that a notion of "person" that transcends human beings is essential to understand Ojibwa interactions with the elements of their world. For these people, certain plants, animals, stones, and celestial elements are non-human persons because they engage in social relations with humans. In addition, Hallowell suggests that the Ojibwa practice a "personalistic theory of causation," through which the reason for the occurrence of phenomena is always attributed to a subject, or in Ojibwa terms, to a human or non-human person. Therefore, understanding Ojibwa *factishes* (in Latour's parlance) of "person" and "social relation" requires a broader, more-inclusive meaning in order to better comprehend the Ojibwa world.

Ingold's phenomenological take on animism contrasts with Hallowell's in that he gives primacy to the individual experience, rather than to the social conceptualization of other beings and the environment. Being alive, as conceived in animist societies according to

this author, is not a condition that can be attributed to things, but an immanent status that exists through the process of dwelling in the world. Leveraging a variety of ethnographic accounts, he affirms that "[t]he anomaly of the lifeworld," that is, a world in which everything is alive, "is not the result of an infusion of spirit into substance, or of agency into materiality, but is rather ontologically prior to their differentiation" (Ingold 2006:10). If, for the Ojibwa according to Hallowell, the animistic condition of "person" is a potential feature of the different elements that populate the world, for Ingold, this condition, more closely related to a broader notion of being alive than to personhood, is both a fact and the innate default of everything that comprises the immediate environment surrounding the dweller. Consequently, from this author's perspective, the self (selves) is (are) relational and are constituted as one lives and develops in the world, and the status of beings in animist ontologies is in "perpetual flux" (Ingold 2011).

Also following a phenomenological approach, and partially inspired by Ingold, Bird-David describes the animist epistemology of the Nayaka of India, and its relation to their notion of person. She is clear in not considering it an ontology, because, in her opinion, ontologies are only transmitted representations, and this is not the manner in which the Nayaka (and perhaps other groups, she affirms) create subjects (Bird-David 1999; 2006). Instead, Bird-David affirms that the Nayaka practice a relational epistemology - i.e., to relate/interact is to know - in which a self is only constituted when he/she is engaging with another interlocutor: "Recognizing a 'conversation' with a counter-being—which amounts to accepting it into fellowship rather than recognizing a common essence— makes that being a self in relation with ourselves" (Bird-David 1999:S78). Thus, rather than conceiving of a person as an individual, Bird-David argues, the Nayaka think of themselves as "dividual," or subjects constituted at the moment of establishing relationships with others – a term coined by Strathern (1988). In contrast to Ingold, she acknowledges the relevance of interacting with

other humans, in addition to non-human beings, and with the environment in general. However, similar to Hallowell, Bird-David affirms that, in order to be engaged in a communicating process, and to become a self or a subject, it is not necessary to share a common essence.

Descolas's anthropological research among the Achuar of Ecuador (Descola 1994), and his initial theorization of animism is similar to these authors' conclusions, in that humanlike qualities and dispositions attributed to non-human beings allow communication with human beings (Descola 1992; 1996). More recently, however, he has suggested that, rather than personhood, humanity is attributed to non-human beings as a uniformizing condition (Descola 2006; 2013). He asserts that, in animist societies, the limits between nature and culture are blurred because of the establishment of spiritual and material social relations between humans and non-humans, enabled by the shared universal humanity. In a more general typology of ontologies²⁸, Descola suggests that animist ontologies grant a human interiority to non-humans, substantiated in the notion of the soul, while simultaneously presenting different physicalities (Descola 2006). Having a human soul allows these beings not only to behave as humans, but also to maintain human-like social relations and communication among themselves and with "real" humans (Descola 2013:129).

Descola's research into the "anthropology of nature" has had important repercussions for subsequent Amazonian studies of human-environment interactions, and anthropology in general. This is also the case for Viveiros de Castro (VDC)'s theory of perspectivism, which has intellectual roots in Levi-Strauss' structuralist approach to Amazonian ontologies (E. Viveiros de Castro 2014). VDC initially developed perspectivism in collaboration with Lima, based on her work among the Juruna, in which she suggested the possibility of conceiving

²⁸See an explanation of Descola's typology in Chapter 2. Descola admits that the categories of world ontologies that he created by different combinations of those two characteristics - interiority and physicality - are not rigorously followed by particular cultural groups, but rather have aspects of each of them.

alternative perspectives of the same event depending of the actors involved in it (Tânia Stolze Lima 1996; 1999). Later, VDC expanded this rigorous ethnographic account of the Juruna, into a broad and sophisticated philosophical interpretation of Amerindian perspectivism in general, utilizing diverse ethnographic sources. The theory of perspectivism, in turn, inspired a more encompassing proposition that arises from applying multinaturalism beyond the ethnographic setting where it was formulated, namely, that not only different species, but also different human social groups, construct their world according to their own point of view. A corollary of this philosophical expansion is the realization that difference should be understood in ontological rather than in epistemological terms - as VDC indicates in his critique of the epistemological approach of Bird David's study of Nayaka (see Bird-David 1999) -, with the direct implication that people conceive different things, instead of simply having different knowledge about the same things. Thus, though Hallowell was one of the first researchers who explored this issue ethnographically (see above), VDC is generally regarded as having had a greater influence on current ontological developments in anthropology (e.g., Holbraad and Pedersen 2017). Below I more directly address those ethnographic repercussions of VDC's perspectivist theory that are most relevant for the purpose of this chapter (the broader philosophical proposition is discussed in Chapters 1 and 2).

Perspectivism

In her ethnographic research among the Juruna of Brazil, Tania Lima determined that, for this group of people, certain animals perceive reality from their own perspective as humans, implying that events occur from different points of view simultaneously. VDC drew from Lima's findings, as well as from other Amerindian ethnographies (e.g., Århem 1993; 1996; Reichel-Dolmatoff 1971; 1976; Hallowell 1960; Chaumeil and Chaumeil 1983; E. B.

Viveiros de Castro 1992; C. Scott 1989; Gregor 1977; R. Brightman 1993; Baer 1994), and, building on Descola's analysis of animism, he proposed perspectivism as an encompassing ontology shared among Amerindian societies. According to this rendition of perspectivism, animals, especially game animals, and spirits are persons, which means that they possess human-like capacities that include "conscious intentionality and social agency" (E. Viveiros de Castro 1998:476; E. B. Viveiros de Castro 2004:467). These capacities, in turn, establish their existence as subjects. For VDC, then, being a subject implies being human or humanlike, a quality that necessarily entails the existence of a human soul. VDC affirms: "Whatever possesses a soul is capable of having a point of view, and every being to whom a point of view is attributed is a subject" (E. B. Viveiros de Castro 2004:467). In practical terms this implies that those animals (it is not clear how this functions for spirits) that have a human soul see the world from a human perspective: A tapir, for instance, sees herself and her folk as humans, sees humans (tapir predators) as jaguars (human predators), and sees the grasses and wild-cane that she eats as manioc, or some other kind of human food. The human perspective, then, is a consequence of the human soul. In addition, responding to some ethnographies suggesting that particular animals do not manifest human-like consciousness or spirituality (Baer 1994; Overing 1986), VDC asserts that, in such cases, master spirits spirits in Amerindian worldviews that take care of and govern particular species - instead play the role of the subject with which humans socially engage, and thus, such beliefs are still consistent with animism.

In order to explain the origin of this universal humanity, VDC describes the mythical stories, common in many Amerindian traditions, that recount the human origin of many animals. Based on this, he states: "Amerindian thought holds that, having been human, animals must still be human, albeit in an unapparent way," and, in contrast to "Westerners," who consider humans to be possessed of an essential and unique nature, for Amerindians

"animals have a human, sociocultural inner aspect that is 'disguised' by an ostensibly bestial bodily form." (Viveiros de Castro 2004a:465). From a structuralist standpoint, this bodily form is, for VDC, a contraposition of the soul. Thus, in contrast to the soul, which is the unifying, universal condition that allows for communication and interaction between subjects, VDC asserts that the body is the place where difference or alterity is established. However, for VDC, the corporeal form is not solely a material object. He rather defines it as the "affects, dispositions or capacities which render the body of every species unique: what it eats, how it communicates, where it lives, whether it is gregarious or solitary, and so forth." (Viveiros de Castro 2004:478) In other words, the body conditions a particular "habitus" (Viveiros de Castro 2004:475). Consequently, if the possibility of having a point of view is given by the human soul, that grants the same perspective to humans and non-humans because their soul is "identical" (Viveiros de Castro 2004:474), the differences in points of view lie in the different bodies.

Based on this interpretation, VDC argues that Amerindian ontology is "multinaturalist," because it conceptualizes the world as composed of a variety of bodies, or "natures," and an inner human uniformity, or "culture". This configuration is diametrically opposed to the "modern West," for whom, VDC affirms, the unifying condition is animality, and, therefore, the idea of one single objective nature. Difference, then, is established by the diversity of subjective perspectives of the same world, resulting in a Western "multiculturalist" ontology (Viveiros de Castro 1998, 2004).

VDC elaborates further on epistemological differences between both ontologies (Viveiros de Castro 2004), suggesting that for modern societies, objectification is the manner of knowing the true nature of the world. This happens when one *desubjectifies* the object, that is, when one strips it of any subjective attributions made by the observer and uncover its inherent nature. In contrast, the author argues that Amerindian societies practice a subjectivist

epistemology, based primarily on shamanism. He draws on the capacity of the shaman to transcend the other's world, and see and interact with non-human beings in their true form, that is, as subjects or humans. Therefore, it is necessary to personify non-human beings in order to know them, because, by seeing these beings in their true form, the shaman is assuming their perspective and can thereby grasp what the world is for them. For VDC, the "Amerindian animist cosmology" is that which is believed, known, and practiced through shamanism, ignoring the experience of lay people, and other contexts in which the shaman does not directly participate.

Similarly, by affirming that an object is not known until it becomes a subject, one might have the impression that VDC is suggesting that all things in the world are conceived of equally as potential subjects. He seems to address this issue by recognizing the possibility of diverse subjectivities, as he affirms in the following statement:

[A]n important qualification must now be made: Amerindian cosmologies do not as a rule attribute personhood (or the same degree of personhood) to each type of entity in the world. In the case of animals, for instance, the emphasis seems to be on those species that perform key symbolic and practical roles, such as the great predators and the principal species of prey for humans. Personhood and "perspectivity"—the capacity to occupy a point of view—is a question of degree and context rather than an absolute, diacritical property of particular species. (Viveiros de Castro 2004:470)

However, VDC still believes that, in order for a being to become a subject, there must be some humanity involved in the process. He illustrates this point by citing Gell's discussion of the animist condition of idols and the socialization of non-human beings. Gell explains the logic followed by worshippers of idols to reconcile the ontological condition of idols as objects with their person-like intentional agency:

They cannot confuse the two, but it remains possible that persons have attributes which can be also possessed by stocks and stones without prejudice to their *categorical* difference from persons. That is to say 'social agents' can be drawn from categories which are as different as chalk and cheese (in fact, rather more different) because 'social agency' is not defined in terms of 'basic' biological attributes (such as inanimate thing vs. incarnate person) but is relational — it does not matter, in ascribing 'social agent' status, what a thing (or a person) 'is' in itself; what matters is where it stands in a network of social relations. (Gell 1998:123, emphasis in original).

Here, Gell asserts that an object only needs to be part of a "network of social relations," and in particular, to be "in the neighborhood" of human persons to become a subject (Gell 1998:123). He is clear in affirming that a similar essence is not fundamental to becoming an agent. However, despite acknowledging Gells's interpretation, VDC argues that, "what cannot be conceived as a primary agent or subject in its own right must be traced up to one" (Viveiros de Castro 2004:470), which for him entails associating species with some sort of humanity. Thus, in the cases that human-like souls are not attributed to animals and plants, these beings are instead associated with intentional anthropomorphic master spirits.

Is Perspectivism Sufficient for Understanding Animist Ontologies?

A number of scholars have pointed out limitations of VDC's perspectivism, suggesting that the author misrepresents many aspects of Amazonian ontologies (Turner 2009, Bessire and Bond 2014). Rather than ontological homogeneity, some suggest that a diversity of conceptions of soul and subjectivity exist in different ethnographic settings (M. Brightman, Grotti, and Ulturgasheva 2014; Turner 2009; Ramos 2012; Rosengren 2015b). Rivière demonstrates this diversity through his analysis of a prolific compilation of studies that address the soul in Amazonian societies (Rivière 1999). For instance, he cites Chaumiel's research among the Yagua of Peru, that suggests that, for this people, there are five types of soul, which, according to bilingual Yagua (Spanish-Yagua speakers), can be translated differently into Spanish: two are "spirits" that constitute the vitality internal to the body, one of them representing the movement of the body, and the other intelligence. The other three are "souls" external to the body and ephemeral because they are only present at death. These external souls are conceived of as malign and dangerous for the living Yagua. Turner, in particular, challenges the concept of soul proposed by VDC, asserting that "the mere possession of a spirit or subjectivity does not in and of itself indicate that an animal or plant therefore identifies itself as human (as it would if spirit and subjectivity were intrinsically human qualities)" (Turner 2009:39). He rather suggests that the powers and senses non-human beings possess in themselves might grant them such subjectivity and soul, making the anthropocentrism that VDC claims unnecessary. This is consistent with Lima's account of the Juruna of Brazil, that VDC uses as one of the ethnographic pillars for the elaboration of perspectivism. In her study, Lima determined that some species, such as whitelipped peccaries, are considered to be subjects of a type different from humans, because their souls are distinct (Lima 1999; 2000). Similarly, while reflecting on the differences in intentionality attributed to manioc by the Huaorani and Makushi, Rival highlights the uniqueness of the souls of plants in their essence, as well as their manner of communicating and interacting, compared to the souls of humans, animals, and spirits (Rival 2014).

Turner adds that VDC is mistaken when he affirms that myths recounting the human origin of certain animals are proof of their shared humanity in the present. Instead, he suggests that origin myths actually serve to explain the difference between humans and animals: "The whole point of these myths is not how animals became and continue to be identified with humans, thus subverting the contrast between nature and culture, but how animals and humans became fully differentiated from each other, thus giving rise to the contemporary differentiation of nature and culture" (Turner 2009:20). While VDC's intent is not to assert that Amerindians collapse the categories of nature and culture, but rather to propose a conceptual reconfiguration of these terms from an Amerindian perspective, the point made by Turner is valid in that origin myths may be explaining current differences rather than ontological similarities. Still, it is also possible that it is not an either/or situation, and some differences may be explained by different origins (see below). Others have

specifically criticized VDC's maintenance of this modernist duality - i.e., the contraposition of nature and culture - to explain indigenous ontologies of the Americas, when his proclaimed purpose is precisely to overcome the primacy of Western conceptions (e.g., Bessire and Bond 2014).

The larger implication of these imprecisions is a lack of empirical support, as pointed out by some scholars, in the development of perspectivism. This is observed in the emphasis placed by VDC on game and predator animals (and similarly, on hunting over other contexts of interaction), neglecting the ontological status of other beings (Rival 2005). VDC claims that these animals, to a greater extent than plants, are physically and behaviorally reminiscent of humans, and for this reason they are spiritualized and considered a "prototypical extrahuman Other" (Viveiros de Castro 2005:41). This demonstrates his bias towards anthropomorphic subjectivities, ignoring the numerous ethnographic studies that suggest that other non-human beings, such as plants, insects and certain other objects, are also different kinds of subjects for a diverse array of Amazonian groups, as reflected in their own origin stories, ritual practices, and quotidian behavior (Santos-Granero 2009; Turner 2009; Grotti and Brightman 2014;Rival 2014).

It is also remarkable that, since perspectivism was first developed at the end of the 20th Century, VDC has not considered the possibility that the nature of ontologies is dynamic and contingent. Indeed, a pervasive feature of the manner in which perspectivism has been presented (and also other ethnographic accounts of non-Western societies) is the assumption that indigenous groups of the Americas possessing this ontology are untouched by modernity, self-contained, and atemporal. VDC presents Amerindians in the same manner that, for instance, modernist anthropologists from the early 20th Century presented their objects of study by describing "the Nuer', [rather than] 'the Nuer in 1936'" (Eriksen and Nielsen 2013:175). Postcolonial and postmodernist scholars, among others, have notably criticized

the portrayal of indigenous groups as exotic, static, and ahistorical societies (e.g., Fabian 1983; Said 1978). However, VDC seems to have ignored such criticism and neglects the effect that global events, such as colonialism - exemplified by the influence of Christian missions - may have had on the history of Amerindian groups. In doing so, he has constructed a sophisticated philosophical theory, that intensifies the distinction between "us," Westerners, and "them," the Amerindians, favoring the idea of radical alterity without considering the possibility of its contingent emergence. In the process of choosing the elements that can lend support to such an ambitious argument, VDC chose not to include those that might look "hybrid" and less "authentic". This is clear in the privileged focus given to the context of shamanism, which highlights an exotic aspect of indigenous societies, without giving the same importance to more common, quotidian life activities (Overing and Passes 2000). Furthermore, VDC's attribution of a subjectivist epistemology to Amerindian groups suggests that these societies are internally homogenous, based on the projection of the special abilities of the shaman - that include perceiving non-human beings in their supposed spiritual human form - to the rest of the people that compose such societies. However, VDC does not consider that "lay people tend to have a passive relationship with the [spiritual] world compared with the shaman's active involvement with it" (Rivière 1999:73).

VDC's essentialist version of Amerindian societies and lack of attention to the dynamics of cultural (or ontological) processes highlights one of the limitations of structuralism pointed out by Turner, namely, to conceive of "the approach to structure as a synchronic pattern abstracted from the transformational processes of its production" (Turner 2009:13). Indeed, in his effort to illustrate the mental constructs of Amazonian indigenous groups with regard to non-human species, VDC overlooks how these conceptions are the result of complex processes that involve constant feedbacks between transmitted ideas, actual engagements with those entities, and new ideas generated by those interactions. Other

authors, generally relying on more meticulous empirical ethnographic research, have explored in more detail, from their respective approaches, the conditions under which particular ontological features, such as animist beliefs, are enacted, produced, and reproduced. One example is Hallowell's interpretation of the Oiibwa notion of "person" as the "loci of causality in the dynamics of their universe" (Hallowell 1960:44). Agency, in the form of personhood, is attributed to animals, trees, and stones, because they are believed to be the subjects which provoke the occurrence of an event. The emphasis made by Bird-David (1999) on relationality as the reason why subjects of different natures are created equally, makes allusion to the manner in which an ontology is reproduced²⁹, similar to Gell's assessment of how "social agents" arise when they are part of a social interaction (1998). I would also add that an individual's direct experience is only one manner in which conceptions are generated, and social transmission (and the complexity that it entails) plays an essential role in guiding our attention to determine how things are conceptually apprehended in the first place. It is through the practice of interaction that conceptions are reproduced, reaffirmed and sometimes modified. It is true that VDC's concern is different, in that he aims to elucidate the intricacies of current ontological configurations. Still he does not consider the dynamic nature of ideas, and furthermore, he ignores the influence that interaction with majority-culture groups may have had on such Amerindian ontologies.

Some of VDC's defenders contend that perspectivism is more of a thought-provoking experiment than a theory intended to explain Amerindians ontologies. For instance, according to Taylor (2013), VDC is aware of the risks he is taking in the interest of his ultimate objective to transform this initially-ethnographically-grounded theory into a political claim against "modern naturalism." VDC himself has declared this intention, arguing that his initial

²⁹ As mentioned above, Bird-David speaks of a relational epistemology instead of ontology. Here I agree with VDC's criticism in that she gives primacy to the learning experience (by relating with others), instead of problematizing the fact that what is understood and known is conceptualized differently by different people.

essay was an exercise of anthropological fiction (Viveiros de Castro 2014). However, in the face of criticism for his misrepresentation of Amerindian (mostly Amazonian) societies, he still defends his theory as an accurate, ethnographically-grounded, and valid interpretation of a pan-Amazonian ontology (Viveiros de Castro in Bond and Bessire 2014; see also Holbraad and Pedersen 2017). In this he is followed by many other authors, who view perspectivism as a guiding ethnographic principle for their research. In my view, VDC not only advances an ethnographically-inaccurate account of Amerindian ontologies (or ontology, as he proposes), but also overlooks the nuances present in the so-called Western ontology (Turner 2009), and the similarities between both.

With this in mind, I contend that perspectivism is not a sufficient paradigm for understanding animism as practiced by the Matsigenka. Similar to what has been shown for other indigenous societies, Matsigenka conceptualize the soul in more ways than a single, homogeneous human-like entity, and this results in a constellation of fluid and contingent ontological forms. Furthermore, the fact that some non-human beings do not possess souls at all, indicates that there are varying conceptions of subjectivity, agency, and intentionality, and also that some Matsigenka *factishes* are not fundamentally different from Western ones.

Eliciting A Matsigenka Relational Order

Animals, plants, and other beings that inhabit the world emerge as social agents from the particular engagements that the Matsigenka maintain with them. These relationships, in turn, entail the attribution of ontological statuses to non-humans, which vary in the degree of agency, intentionality and, in some cases, personhood. In order to explore how animism is understood and performed among the Matsigenka, I began by examining the meaning of "animate." According to scholars who work among the Matsigenka, the verbs *aiñio* and *aitio*, both of which literally mean "there is/are," denote nouns that are animate and inanimate,

respectively. *Aiñio* is used for nouns such as animals, celestial beings that are or were humans, and spirits, while *aitio* is used for things that cannot move of their own volition, such as most plants, and elements of the environment like water and stones (Izquierdo, Johnson, and Shepard 2008; Johnson 2003; Shepard 2002b). Shepard goes further by affirming that being animate entails the possession of a soul:

In its final, most inclusive sense, Matsigenka appears to distinguish animate things - that is, things imbued with a soul - from inanimate, soulless things. The Matsigenka consider all animals, some plants, most celestial bodies and certain meteorological phenomena, and illnesses to have a life essence or soul (*isure*³⁰) that is human in appearance. As related in Matsigenka myths, all such entities walked the earth in human form long ago, but their human essences are visible today only to those in altered states of consciousness such as dreams and trance. (Shepard 2002b:202).

Conceptions of the Matsigenka of Tayakome appeared to be less clear-cut than these researchers imply. When I inquired about notions of *aiñio* and *aitio* in Tayakome, people indeed seemed to associate the former term with the possession of a soul. However, this was not consistent, as not all animate beings were thought to possess souls or a Matsigenka-like disposition (see below). It was also apparent that, for the Matsigenka, having a soul means different things depending on the being to which one refers. Furthermore, some plants have souls, and nouns that are referred to with *aiñio* have a more complex status than simply being classified as animate.

Formally Exploring Matsigenka Environmental Notions

While ethnographically exploring the animate-inanimate contrast, one aspect that seemed to be especially salient among Matsigenka notions of being animate – and the respective association of this term with subjectivity, agency, and intentionality – was that the different meanings of **soul** apparently mapped onto particular modes of interaction between

³⁰ In Tayakome, people use the term *isire* or *osire* (translated as "his/her soul") that contrasts with the term used in the Urubamba region, *isure* or *osure*. The replacement of "u" for "i" or "ui" seems to be one difference between the Matsigenka dialect of Manu and that spoken in the Urubamba region (based on the Matsigenka dictionary elaborated by the SIL and on publications of scholars working in the latter area).

various non-human beings and the Matsigenka. Consequently, exploring these varying notions of soul seemed to be a fruitful strategy to better understand Matsigenka perceptions of animals, plants, and other elements of the environment, and the types of engagements that people in Tayakome have with them. For this purpose, I conducted a formal interview inquiring about this and other attributes that could shed light on the ontological condition of non-human beings and other elements. I conducted this interview with 88% of the adults in Tayakome (63 of the 72), asking them whether certain entities: 1) are alive; 2) are able to think; 3) were humans in the remote past, and still are; 4) are taboos during the couvade³¹: and 5) have souls or not, and why. I developed a list of 82 items based on salient non-human species reported in free-listings (see Chapter 4). In addition, based on my ethnographic experience, I added some species that are not very salient in daily life or quotidian conversations in order to explore whether Tayakome members think of them in a different manner than salient species (e.g., being more agentless or "object-like"). I also included the names of neighboring indigenous groups in order to test the ontological status attributed to these people, since, as mentioned in Chapter 5, some Matsigenka seem to discriminate against them, and refer to them as "less" than Matsigenka people. Finally, based on my experience in the community, I included other elements of the environment (e.g., celestial objects) that some people perceive as sentient, as well as others that are generally seen as inert, for the purpose of gaining a better understanding of the extent and nature of Matsigenka animism (see more in Chapter 4). As mentioned in Chapter 4, during initial interviews, the participants affirmed that all species of animals and plants are alive. Therefore, I only asked the question regarding being alive for a reduced list of elements that were neither animals nor plants (e.g., stones, water, moon; see Appendix B).

³¹ I asked this question for a subset of this list. I discuss these results in more detail in the next chapter.

In order to determine whether there are general agreed-upon conceptions among the people interviewed for this task (who comprise nearly the totality of the adults of the community), I analyzed people's responses using the Cultural Consensus Model (CCM), a factor analytic statistical method that explores the agreement shared among a group of people according to their answers to different questions. As mentioned in Chapter 4, the factor analysis calculates a single model that represents the "ideal informant" or the majority of agreement among the participants. As a convention, this model is accepted as representative of the agreement of the participants when three conditions are met: 1) the variance of the agreement represented by the first factor (*eigenvalue*) of the factor analysis is at least three times greater than the eigenvalue of the second factor; 2) the first factor explains a large amount of variance of the participants' responses (i.e., its eigenvalue is a large proportion of the sum of all factors' eigenvalues); and 3) every person's competency scores on the first factor are high and positive (see Chapter 4). I also explored the agreement not captured by the model by performing a residual agreement analysis, when these conditions were met.

Results of CCM

Being alive

While there was no general agreement according to the CCM regarding what items are alive (among items that are neither animals nor plants), all Matsigenka interviewees affirmed that the moon and the sun are alive, and to a lesser extent, the rain. The former two are also believed to have a Matsigenka soul, which I explain in detail below. In the case of rain, a few people told me that it has a soul because it was originally a human, and then it was turned into rain by Tasorintsi. However, this was not a widespread conception, and no one could provide me with more details about the anthropomorphic past of rain.

The ability to think

In Matsigenka, the root of the word "soul," -sire, is also used in the verb "to think," siretagantsi. However, as I discuss below, it is a manner of thinking that seems to be associated with humanity. I explored this meaning by asking if non-human beings (in addition to humans) possessed this capacity to think, and by examining the animism that the Matsigenka practice in daily life. I was also interested in determining whether members of other indigenous groups are considered capable of thinking, since, on several occasions when someone recounted a story about his or her encounter with individuals from one of the neighboring groups, they associated these groups' bellicose behavior with an incapacity to think, that is, to think like a Matsigenka. However, the answers of most interviewees to this question, i.e., whether the items on the list can think or not, were mostly negative. On only a few occasions did people affirm that some items on the list can in fact think. I further explored the connection between being able to think and possessing a soul by performing a correlation analysis between these two variables, which resulted in a strong correlation at the level of the population (Pearson Correlation Coefficient, r = 0.9047). However, due to individual variability of answers there was no agreement, according the CCM analysis, with regard to which species can think.

Being human in the remote past

For this part of the survey, I asked the 63 adult interviewees if they believed that 77 non-human beings (from the original list of 82 – see Chapter 4 for details)³² were humans in a remote past. The CCM analysis for this question indicated that there is consensus among the interviewees (1st factor eigenvalue= 25.48, 2nd factor eigenvalue= 7.16, proportion of

³² I eliminated 5 items (gasoline, money, bottled water, Matsigenka, and bamboo) on the original interview list, leaving 77 items in this new list. I proceeded in this manner because it was generally viewed as absurd to ask if these items were Matsigenka in the past.

1st/2nd eigenvalues= 3.56; proportion of variance explained by 1st factor=76.94%; invariantly positive competency scores for interviewees). Participants agreed that 23 of the 77 items included in the list were indeed human beings in the past, and some of them still are (Table 1). The residual agreement analysis was not significant with respect to sex/gender, or age (younger or older than 35 years old³³), suggesting that all adult men and women hold similar beliefs with respect to this topic. Below I discuss these results in combination with results regarding the possession of souls, because, for some items on the list, these characteristics are related.

| Species | Soul All Interviewees | Soul Majority Subgroup | Soul Minority Subgroup | Formerly Humans* |
|------------|--------------------------|---------------------------|---------------------------|---------------------|
| Jayapa | 1.00 | 1.00 | 1.00 | always |
| Kamarampi | 0.97 | 0.96 | 1.00 | always |
| Matsigenka | 0.95 | 0.94 | 1.00 | - |
| Yairi | 0.95 | 0.94 | 1.00 | always |
| Vuimpuiyo | 0.89 | 0.86 | 1.00 | always |
| Kashiri | 0.86 | 0.85 | 0.91 | yes |
| Poriatsiri | 0.84 | 0.85 | 0.82 | yes |
| Kovieni | 0.75 | 0.70 | 1.00 | - |
| Matsonsori | 0.73 | 0.67 | 1.00 | yes |
| Oeinti | 0.68 | 0.61 | 1.00 | - |
| Amuihuaca | 0.68 | 0.65 | 0.82 | - |
| Etini | 0.67 | 0.60 | 1.00 | yes |
| Kinteroni | 0.67 | 0.60 | 1.00 | yes |
| Kogapakori | 0.67 | 0.64 | 0.82 | - |
| Jeroroni | 0.65 | 0.62 | 0.82 | always |
| Mashco | 0.63 | 0.58 | 0.91 | - |
| Tsonkiri | 0.62 | 0.56 | 0.91 | yes |
| Kuimpe | 0.61 | 0.54 | 0.91 | - |
| Pakitsa | 0.59 | 0.52 | 0.91 | yes |
| Shakiriri | 0.57 | 0.47 | 1.00 | - |
| Maranke | 0.56 | 0.50 | 0.82 | yes |

Table 1: Attribution of Souls and Former Humanity to non-human beings and things.

³³ Based on ethnographic research, I considered 35 years old to be a reasonable threshold with regard to external (mostly *colono*) influence on Matsigenka adults, a such influence appeared to lower for people who are younger than this age.

| Shirigari | 0.54 | 0.46 | 0.91 | - |
|--------------------|------|------|------|--------|
| Imarapague | 0.52 | 0.43 | 0.91 | yes |
| Tampia | 0.51 | 0.46 | 0.73 | - |
| Kamana | 0.49 | 0.42 | 0.82 | - |
| Otsiti | 0.48 | 0.38 | 0.91 | yes |
| Ivienkeki | 0.48 | 0.38 | 0.91 | - |
| Kipatsi | 0.47 | 0.45 | 0.55 | - |
| Toroshoke | 0.47 | 0.36 | 0.91 | - |
| Shiani | 0.47 | 0.34 | 1.00 | - |
| Maniro | 0.46 | 0.35 | 1.00 | always |
| Kemari | 0.45 | 0.35 | 0.91 | yes |
| Kimaro | 0.45 | 0.32 | 1.00 | yes |
| Tsiaro | 0.43 | 0.32 | 0.91 | - |
| Potogo | 0.43 | 0.35 | 0.82 | - |
| Saniri | 0.43 | 0.33 | 0.91 | - |
| Katsari | 0.42 | 0.28 | 1.00 | yes |
| Oakue | 0.40 | 0.37 | 0.55 | - |
| Karieti | 0.40 | 0.37 | 0.55 | - |
| Chogotaro | 0.40 | 0.32 | 0.73 | - |
| Komaguinaro | 0.38 | 0.26 | 0.91 | yes |
| Oati | 0.38 | 0.26 | 0.91 | - |
| Kapieshi | 0.38 | 0.23 | 1.00 | - |
| Yaniri | 0.37 | 0.27 | 0.82 | yes |
| Inkani | 0.37 | 0.35 | 0.45 | yes |
| Seri | 0.37 | 0.29 | 0.73 | - |
| Mavoro | 0.36 | 0.26 | 0.82 | - |
| Mao | 0.36 | 0.23 | 0.91 | - |
| Chambira | 0.33 | 0.26 | 0.64 | - |
| Kuitapoari | 0.33 | 0.21 | 0.82 | - |
| Soroni | 0.33 | 0.21 | 0.82 | - |
| Osheto | 0.30 | 0.17 | 0.91 | yes |
| Kitoniro | 0.30 | 0.24 | 0.55 | - |
| Iveto | 0.29 | 0.17 | 0.82 | - |
| Pigiro | 0.29 | 0.17 | 0.82 | _ |
| Tonche/Tsinaro | 0.29 | 0.23 | 0.55 | - |
| Santari | 0.29 | 0.19 | 0.73 | - |
| Omani | 0.29 | 0.15 | 0.91 | - |
| Shintori | 0.29 | 0.15 | 0.91 | _ |
| Parari | 0.29 | 0.13 | 1.00 | - |
| Samani | 0.28 | 0.15 | 0.82 | - |
| | 0.26 | 0.11 | 0.91 | - |
| Manke | | | | |
| Manke Komaguiri | 0.26 | 0.10 | 1.00 | _ |

| Menkori | 0.22 | 0.19 | 0.36 | - |
|-------------|------|------|------|---|
| Muishi | 0.22 | 0.15 | 0.55 | - |
| Chompita | 0.21 | 0.10 | 0.73 | - |
| Joma | 0.19 | 0.04 | 0.82 | - |
| Shakami | 0.17 | 0.09 | 0.55 | - |
| Tsiticana | 0.17 | 0.04 | 0.73 | - |
| Kapiro | 0.16 | 0.12 | 0.40 | - |
| Ampei | 0.16 | 0.10 | 0.45 | - |
| Potsoti | 0.16 | 0.06 | 0.64 | - |
| Atawa | 0.15 | 0.02 | 0.73 | - |
| Tsigaro | 0.14 | 0.06 | 0.45 | - |
| Charagua | 0.14 | 0.04 | 0.55 | - |
| Paguiri | 0.14 | 0.04 | 0.55 | - |
| Tsomiri | 0.13 | 0.02 | 0.64 | - |
| Koriki | 0.11 | 0.12 | 0.09 | - |
| Mapue | 0.11 | 0.10 | 0.18 | - |
| Nia Botella | 0.08 | 0.08 | 0.09 | - |
| Gasolina | 0.03 | 0.04 | 0.00 | - |

*always: Entity that was not created by Tasorintsi. It has always been a human and it still is one

Being harmful for infants

The results of the CCM analysis demonstrated that there is overall agreement among the interviewed Matsigenka regarding those species that are dangerous for infants when their parents interact with them (1st factor eigenvalue= 23.24, 2nd factor eigenvalue= 6.09, proportion of 1st/2nd eigenvalues= 3.81; proportion of variance explained by 1st factor=77.27%; positive competency scores for all interviewees). As a consequence of the potential harm caused by these species, extensive food and behavioral taboos are observed. Due to the particularly complex circumstances of these taboo species, I discuss them in more detail in the next chapter. Here, I simply point out that, while a few of these species of animals and plants are consistently thought to possess souls, people mentioned that a considerable number of these harmful beings are soulless. Therefore, the ability and intention to harm humans is not necessarily related to the presence of a soul, suggesting variation with regard to notions about this concept (see Chapter 7).

Possessing a soul

The CCM analysis revealed no agreement among interviewees with regard to which species do and do not possess a soul (1st factor eigenvalue= 20.42, 2nd factor eigenvalue= 9.45, proportion of $1^{st}/2^{nd}$ eigenvalues= 2.16; proportion of variance explained by 1^{st} factor=66.34%; 11 interviewees' competency scores were negative). This is likely related to the differing kinds of souls attributed to the items of the interview, and also reflects varying degrees of agreement among the participants (see below). For the purpose of further exploring people's answers regarding possession of a soul, I separated the "most different people" or outliers according to the CCM analysis from the rest of the participants. As mentioned above, one of the conditions for finding agreement using the CCM is that interviewees' competences in the model – i.e., their loadings on the first factor of the factor analysis used in the CCM – must be positive. Therefore, I separated the 11 people whose competences in the model where negative from the rest of the interviewees, and analyzed each subgroup independently with the CCM.

Results suggests the existence of agreement within each subgroup. Interviewees with positive loadings, referred to as the "majority subgroup" from now on, had the following indicators of consensus: 1st factor eigenvalue= 19.61, 2nd factor eigenvalue= 5.17, proportion of 1st/2nd eigenvalues= 3.79; proportion of variance explained by 1st factor=76.34%; positive competency scores for all interviewees. Consensus indicators for individuals with negative loadings, referred to from now on as the "outliers," were: 1st factor eigenvalue=5.47, 2nd factor eigenvalue= 0.59, proportion of 1st/2nd eigenvalues= 9.23; proportion of variance explained by 1st factor=90.78%; positive competency scores for all interviewees. A relatively low number of elements presented in the interview were attributed with a soul by the majority subgroup (52 of 63 people): Only 20 of the 82 items have a soul according to at least 50% of the members of this subgroup (Table 1). In contrast, outliers (11 individuals) indicated that a

larger number of items have souls: 72 out of the 82 items (including the 20 items indicated by the majority subgroup, see Table 1) were considered to have souls by at least 50% of the outlier subgroup.

The reasons mentioned by the majority subgroup for attributing a soul to the 20 items were the same reasons mentioned by the outliers for these same species. According to the majority of total interviewees, these items have a soul because: 1) they are human beings (Matsigenka and non-Matsigenka); 2) they were human beings in a remote past; 3) they are powerful beings (as people affirmed) who are benevolent and helpful to the Matsigenka, or 4) they are powerful evil spirits who can harm people; 5) they are less-powerful beings who are harmful for infant children; or a combination of reasons 2, 3, 4, and/or 5.

The difference, then, between the majority and the outlier subgroups is the fact the outliers attributed a soul to additional items in the interview that were not attributed with a soul by the majority. These additional items are mostly animals and plants, however, members of the outlier subgroup assigned them souls for different reasons. Some, like Tito (~45), who came to Tayakome as an adult from the lower Urubamba region, affirm that all of the animals that were humans at the beginning of the world still have human souls (see below for an account of other people of Tayakome). Nestor (55), who also came from the Urubamba region as an adult, provided a similar reasoning. However, he added that the other animals and plants that were not humans in the past also have souls. These include earthworms, cockroaches, and other insects, that, in the opinion of the majority group, are soulless. Nestor asserted "everything that lives in the forest [*inkenishikuinirira*] is alive and has a soul, because Tasorintsi [the creator god] created them." Salomon, who was probably in his late 70s (he passed away in 2014), affirmed that all animals and plants have souls, since that is the vital force that allows them to live, grow and become larger. Other outliers shared the same opinion as Salomon. However, there appear to be no characteristics of this diverse subgroup

(composed of 4 women and 7 men, whose ages range between 18 and late 70s), other than their answers, that serve to differentiate them from the majority subgroup, nor are their justifications for their answers similar among themselves. Consequently, these differences seem to be more idiosyncratic than representative of a cohesive subgroup, and are telling with respect to the variation, or lack of agreement, that exists regarding the attribution of a soul for the majority of items presented in the interview.

As a result, and despite the fact that the majority subgroup seems to have consensus, I believe that a more cautious interpretation would be that the lack of general agreement (reflected in the lack of initial consensus) is indicative of varying notions of souls that, only in the more salient cases, represent similar kinds of subjectivity attributed by the Matsigenka of Tayakome to the entities with which they interact.

These interview results suggest that possession of a soul is just one of several dimensions considered in the construction of subjectivity for non-human beings. Based on these results, on the explanations that each interviewee gave for each of their answers, and on qualitative ethnographic research, I believe that Tayakome members: 1) share the same conceptions of soul and soullessness when referring to a few specific species and environmental elements; and 2) conceive the majority of items in the list in more variable manners, and, in some cases, attributing them different conceptions of soul. While these results are still exploratory, they, in conjunction with my ethnographic research, suggest that, for the Matsigenka, there exists no homogenous category of human-like beings or beings with human souls (contrary to Viveiros de Castro 1998, 2004, 2005). Rather, a diversity of ontological statuses are attributed to the non-human beings that populate the Matsigenka world, relating to varying notions of souls and their absence, with some such notions exhibiting considerable variation among people.

Widely Shared (Apparently Permanent) Conceptions of Non-Human Beings

My inquiries about the souls of non-human beings were inspired by people's spontaneous mention of this concept, and also by my general interest in exploring the relevance of this concept for the animism practiced by the Matsigenka of Tayakome. Based on my experience in the community, salient notions of soul (notions shared by the majority of the adults in the community) seem to reify specific kinds of relationships that the Matsigenka maintain with particular entities. The nature of these relationships, in turn, entails the attribution of varying kinds of agency, intentionality and/or consciousness that create particular types of subjects.

Since I did not find consensus among participants in this interview, in this section I only examine the more salient instances of agreement (according to frequencies of responses) that suggest the existence of shared notions of soul, as well as soulless beings and elements. These instances include species that at least 70% of all the interviewees (63) indicated as having a soul, which comprises 9 items of the 82 considered in this part of the survey. I contend that the interviewed Matsigenka considered these items to have different kinds of souls that fall into one of the following categories (items are indicated with their respective proportions of interviewees, see also Table 1): 1) a soul attributed to the Matsigenka themselves (95%), granting these non-human species a human condition; 2) a soul that represents a super-human (i.e., more powerful than common Matsigenka) ability usually employed for the benefit of the Matsigenka, establishing an ontological similarity with the Matsigenka healer, or *seripigari*, and attributed to the plants *jayapa* (100%), *kamarampi* (97%), and the bird *vuimpuiyo* (89%); 3) a soul that reifies a super-human capacity to harm the Matsigenka, usually associated with demons, or kamagarini, the bee yairi (95%) and the jaguar (73%); 4) a soul associated with a primordial human-Matsigenka condition, continuously maintained into the present by some of these beings (e.g., the moon -86%, and

the sun-84%), yet different from the soul that current Matsigenka have; and 5) a soul that instantiates the ability to harm infants if their parents interact with these species, attributed to the fruit tree *kovieni* (75%), discussed in more detail in the next chapter. Those species and items that were usually considered to be soulless - that is, considered to have a soul by less than 20% of the participants (15 items) are also heterogeneous in terms of the type of agency that they possess, and consequently, in terms of their ontological status. I analyze these soulbearing and soulless categories in more detail below, and discuss the results of the observed consensus regarding species that were humans in the past through analysis of the case of the moon and the sun.

1) The Matsigenka Human Soul as the Place of Thought

When the Matsigenka refer to the soul that they themselves possess, people have in mind notions of vital energy, thought, consciousness, and good health, which appear to be influenced by Christian beliefs. Many people in Tayakome think that a newborn acquires her soul at conception. It is both created by her parents and granted by a creating deity named Dios (God), *Cristo* (Christ) or *Tasorintsi* (the Matsigenka creator god). People's reasoning seems to be that, while the parents are responsible for the *material* fabrication of the soul - related to the physical and even biological task of producing a human being -, *Tasorintsi* is the powerful entity who decides to endow new bodies with this vital force. Therefore, the soul comes from the sky, where Tasorintsi lives.

Most Matsigenka combine the Christian notion of Tasorintsi with a different notion prevalent in Matsigenka creation myths. They declare that Tasorintsi, the creator god who has the form of a Matsigenka man, granted people their souls at the beginning of time, when he created all of the beings that populate the earth (see previous chapter). Segundo (~65), a recognized storyteller and regarded expert, narrated the following to me:

My soul comes from my dad and my mom. Tasorintsi gave me my soul. He lives in the sky [lit. up there], but now he is here, controlling everything. Tasorintsi gave everybody their souls. He first made the Matsigenka. Then, a Matsigenka climbed the *pocharki*³⁴ tree to eat its fruits, and Tasorintsi transformed him into a spider monkey, so that the Matsigenka could have food to eat. Tasorintsi created the giant river otter so that it could eat *shima*³⁵, armadillo so that he could eat *pagiri*³⁶, and so on.

Similar statements were common among Tayakome members, namely, that Tasorintsi granted them a soul during this primordial time of creation, referring to themselves as the human species rather than as individuals who were born well after this period of the mythical past. This may indicate an ontological condition similar to that of other animals that Tasorintsi created during this time. However, as I explain below, the soul attributed to humans manifests as qualities and types of actions that differ from those associated with the kinds of souls ascribed to non-human beings, which, rather, appear to instantiate the effects that these beings can exert on the Matsigenka.

After a person dies, her soul becomes a source of danger for the living, especially for those who are her relatives, before it travels to the land of the dead, which, according to some, is in the sky, and to others, in underground (see Chapter 5). Others affirm that the soul of recently deceased people first returns to the places where a person has recently lived before heading to the land of the dead, while a few people are of the opinion that the soul travels back where one's placenta was buried. According to Eugenia (~50), known in the community for being a knowledgeable midwife and herbalist, the person's soul does not wander around, and goes straight to where the placenta is buried. Some days after Salomon's passing, she told me that his soul should already be in Serajali, a river in the headwaters of Manu, where he was born, "to reunite with his placenta." While burying children's' placentas

³⁴ *Pocharki* is the name of a tree, called *chimicua* in Spanish (*Pseudolmedia laevis*), and its fruits, which are eaten by numerous animals and humans in Amazonian forests.

³⁵ Shima, boquichico in Spanish (Prochilodus nigricans) is an approximately 40cm-long scaled fish

³⁶ *Paguiri* is the generic name given to the large beetle larvae belonging to different species of the family Curculeonidae that feed of palm trees trunks and fruits that are consumed by armadillos and Matsigenka.

near their birthplace is still practiced in Tayakome, very few people, apart from these elder "experts", mentioned this connection between the soul and the placenta to me.

Rosengren affirms that for the Matsigenka, as for other Amazonian peoples (cf. Gow 1991; Sulkin 2005; Rosengren 2003; Santos-Granero 1991), "humanity is seen principally as a moral condition" (Rosengren 2006a:91). I would add that humanity, in this sense, is associated with possessing a particular type of soul that allows one to think in a "Matsigenka" manner, which, in turn, is related to being in good health. In Matsigenka, the root of the word "soul," -sire, is also used in the verb "to think," siretagantsi. For a few experts, the physical location of the soul is in the head, associating the action of thinking with the brain (igesa, which also means bone marrow, and spinal cord). Others suggested that their soul is in their hearts (*iranigake*), or distributed all over their bodies, and does not have any particular association with the head. The connection between the process of thinking and the heart, or the core of the body, has also been pointed out for the Matsigenka of Urubamba (Baer 1979; Rosengren 2006a; see also Belaunde 2000 for other societies). According to virtually all adults in Tayakome, thinking affords people the capacity to be a proper, "rational" Matsigenka,³⁷ which is related to conducting the duties that correspond to that person's gender. Thus, men who have a soul think about going hunting, making arrows, or building their houses, while women think about taking care of children, spinning cotton, or making manioc beer.

In Tayakome, being a proper Matsigenka also involves not showing rage or anger, and maintaining good social relations, often characterized by humor. Other scholars have reported similar accounts (2002a; Izquierdo, Johnson, and Shepard 2008; Johnson 2003; Rosengren 2006a), namely, the tendency of the Matsigenka to avoid conflict, deprecating displays of

³⁷ Rosengren (2006a) equates having a soul with being rational. However, he also mentions the existence of two types of souls: the bone soul (*itonki*) and the free soul (*isure*, equivalent to isire in Matsigenka of Manu). Baer mentions a third type of soul, the eye soul (*ishigentiaarite*). In my experience in Tayakome, I only have heard people referring to *isire* or *osire*, and *itonki* is just used to refer to bones (lit. his bones).

aggression and bellicosity. Consistent with this view, because of the history of violent encounters initiated by neighboring ethnic groups of kogapakori, amihuaka and mashco-piro, some community members indicated that these people do not have souls (between 32% and 37% of the 63 adults that I asked, see Table 1). As Carmela explained: "they always shoot arrows at the Matsigenka, they don't think [isiretaka], they are murderers. They don't get scared. They are terrifying. We get really scared of them. They don't think because they shoot a lot at us." For this minority of Tayakome interviewees, other ethnic groups' irrational behavior is explained by the absence of a soul. The majority of interviewees who believed that members of these other ethnic groups do have souls, also described them as being cruel and aggressive. However, for them, these characteristics are not necessarily linked to a lack of thinking, and consequently, they are not related to the notion of soul. Rather, these interviewees recognize that other neighboring indigenous groups are similar to the Matsigenka, and, as such, they have a similar soul. In this regard, their notion of soul seems to be related to a general conception of humanity, rather than referring specifically to a peaceful demeanor. I cannot characterize each of these subgroups of interviewees, as both are composed of a diversity of people of both sexes and a wide range of ages. The only characteristic shared by some in the subgroup that does not attribute souls to neighboring ethnic groups (more frequently than in the other subgroup) is previous violent experience with these neighboring groups, either personally, or on the part of their parents. Consequently, these interviewees may have more resentment against them and, in a way, tend to stereotype their warlike behavior. Still, this seems to be an incomplete explanation, as such violent experience is not widespread among participants who did not attribute soles to these neighboring groups.

The association between the notion of a soul and the action of thinking may be changing among younger generations. It was common for young adults who had attended

elementary school in Tayakome and high school in Boca Manu and Shintuya to correct my translation of "to think" as *siretagantsi*. Instead, they translated "to think" as *gotagantsi*, which, according to older Matsigenka and to the dictionary elaborated by SIL (B. Snell 2011) literally means "to know" or "to learn." Some of these younger Matsigenka also did not make a direct connection between possessing a soul and being able to think, which may indicate that Western-style schooling is having an effect on how younger generations of Matsigenka conceptualize the soul. In my experience in the state high schools located in the colono towns surrounding Manu National Park, where many Tayakome teenagers attend, the low quality of education that children receive in these schools is based on memorizing content and facts, rather than developing abilities to process new information (e.g., critically understanding what one is reading, examining causal processes of historical and natural events). Therefore, in my opinion, teachers who employ such a style of education, consider that intelligent students are those who learn (gotagantsi) new content and accumulate knowledge, rather than those who think and reflect (siretagantsi) on what they are being taught. Consequently, it is possible that "thinking," i.e., what teachers instruct students to do in school, is associated with this notion of accumulating knowledge in the limited sense of learning content.

2) Species Associated with the Seripigari

Interviewees were overwhelmingly in agreement that three species associated with the Matsigenka healer, or *seripigari*, possess souls that physically look like Matsigenka people: the bush *jayapa* (datura in English); the vine *kamarampi*, widely known in the Amazon region as ayahuasca; and *vuimpuiyo*, a small bird called the screaming piha in English (*Lipaugus vociferans*), which produces a characteristic whistle in the forest and is associated with benevolent, powerful forest spirits. For the Matsigenka, these species are linked, in various ways, with the *seripigari*. Often people affirm that these species' souls are "*oshaninka/ishaninka seripigari*, *iragaveake/agaveake towaiti*," or "of the same kind as the

seripigari, it is powerful [lit. 'it can do a lot']," and they establish a hierarchy among these species, asserting that *jayapa*, and to a lesser extent *kamarampi*, are more powerful than the *seripigari*. These two plant species were the two items on the list most consistently recognized as having souls (100% and 97%, respectively, of the 63 interviewees indicated that these plants have souls, see Table 1) and were attributed with the capacity to cure serious illnesses (*jayapa*) and common diseases (*kamarampi*). As such, these two plants are considered essential for Matsigenka life.

All interviewees agreed that *jayapa* has a soul, and that it is the most powerful being that maintains regular contact with the Matsigenka. The consumption of the *jayapa* beverage, made with the boiled inner bark of its branches, makes the patient fall into a deep sleep, potentially lasting several days, during which her soul leaves her body behind as an empty envelop, and meets the soul of *jayapa*, who is responsible for healing process³⁸. It is used to treat conditions such as bone-fractures, snake bites, or witchcraft (which generally manifests as chest or body pain), or any other unexplainable and serious unease or physical discomfort. In Tayakome, people refer to *jayapa*'s soul (*osire*, sometimes called "her owner" or *otinkame*) as a Matsigenka-like person, sometimes a man, a woman, or a group of Matsigenka men, women and children. *Jayapa*'s soul remains in the place where it is planted, and only reveals itself to the patient during the hallucinogen-induced sleep. When this happens, *jayapa*'s soul takes the ill person's soul on a long narrow trail through the forest, walking together until they reach the very distant place where *jayapa* lives. Then, *jayapa*'s soul asks the person what her health problem is and proceeds to treat it. Occasionally, depending on the illness, the plant's soul will show the patient the cause of her illness. Forty-

³⁸ According to Shepard (1998), the entities that cure a sick person when she drinks *jayapa* are the *sangariite* forest spirits, rather than the plant's own spirit. In Tayakome, people indeed note that there is a similarity between these spirits, and on some occasions, they are equated with each other. However, the majority of people affirmed that it is indeed the spirit of *jayapa* which cures, and the *sangariite*, associated in most cases with the bird *vuimpuiyo*, are mostly perceived as helping the Matsigenka when they walk in the forest by themselves.

eight-year-old Magali, one of the few people in town who knows how to prepare the *jayapa* beverage, explained to me how the plant can cure snake bites:

[...] For instance, if you have been bitten by a snake, you drink *jayapa*. Then, you see that it was not a snake which bit you. You see the bamboo of the arrow³⁹ that somebody has shot at you. The *kamagarini*⁴⁰ that is in the forest is the one who shot [his arrow] in the shape of snake. That is what [*jayapa*] makes you see. Then, he takes the bamboo out and you get better. After five days you are healthy, no need of antivenom nor antibiotics. For that, you have to sleep for a couple of days, so that it takes control of your body.

In cases like this, the soul of *javapa* allows the patient to see what *in reality* is affecting her body, which, in turn, demonstrates that *jayapa*'s nature is superior to that of the common Matsigenka, and more similar to the Matsigenka seripigari. In the case of witchcraft, or *gagitarentsi*, people in the community believe that *jayapa* reveals the identity, and the mode of operation, of the *matsinti*, *brujo*, or witch, who is responsible for producing the patient's pain or discomfort. Witch-induced illnesses appear to be less frequent in Tayakome than they are in Matsigenka communities in Urubamba and outside of Manu National Park, where witchcraft accusations are common (see Izquierdo et al 2008). Instead, people usually drink *jayapa* to treat seemingly-incurable physical conditions, this being the last resort before visiting the *seripigari*, who provides more specialized treatment. Using *jayapa*, then, is a fairly simple strategy to treat serious illnesses: While the knowledge of *javapa*'s preparation is shared among less than ten men and women who are considered "experts" in the community (elders, or those with special knowledge, see above), the treatment and healing process in itself is attributed to the plant's soul. In that way, the person who prepares and administers the beverage is, at most, only responsible for caring for the patient's body during her intense time of sleep, stopping her from hallucinatory sleepwalking and potentially getting lost in the forest.

³⁹ The tips of some Matsigenka arrows are made of bamboo.

⁴⁰ *Kamagarini* is the generic word that the Matsigenka use to refer to evil spirits or demons, which I explain in more detail below.

Kamarampi is the hallucinogenic vine known as ayahuasca in other parts in the Amazon. In Tayakome, people regard kamarampi as an important species (see Chapter 8) because, when prepared by experts in the community, it cures minor illnesses, such as respiratory diseases (generically referred as *mierentsi*), diarrhea, and minor body pain. As such, it is a remedy that is used for both adult and child patients. In addition to its capacity to cure, people affirm that kamarampi can also be drunk for other reasons, as twenty-five-yearold Modesto asserts: "You just drink [kamarampi] whenever you want. You can see little. It's not like *jayapa*. It has a soul, but it can cure you just a little bit." Indeed, in Tayakome, people drink kamarampi to see what the plant, and the forest spirits that she reveals, can tell them about themselves and their future. However, the majority of community residents agree that one must be cautious about believing whatever kamarampi reveals as a potential future, because, they assert, the plant sometimes lies. People do not seem to relate this capacity to lie with a willing act of tricking people. Instead, the Matsigenka-like soul possessed by this plant is regarded as a benevolent spirit that the Matsigenka see as one or more individuals, who cure them by taking them far away. The fact that kamarampi's soul "lies" is related to the less powerful status of this plant in comparison with *jayapa*. In contrast to *jayapa*, kamarampi can only cure minor illnesses, which in turn explains the inaccuracy of the kamarampi-induced visions. Once, German (~50), a well-known herbalist in Tayakome, told me: "[Kamarampi] is different from javapa. It is less powerful. She knows a bit, because there is a little bit of soul in it." When German affirms that kamarampi has only "a bit of soul," he is referring to the lesser capacity of *kamarampi* relative to *javapa* with regard to the truth and potency of the visions it induces, and its ability to cure serious illnesses. In this case, the degree of "soul" is a measure of power that distinguishes these plants.

Similar to *jayapa*, *kamarampi*'s soul appears in the form of Matsigenka women, men, and children, dressed in *magatsi*, the traditional woven-cotton tunic with stripes (horizontal

for women and vertical for men), and, for men, a *matsarientsi*, a crown made with toucan and curacao feathers. When the plant *agaveakempi*⁴¹ (lit. "overpowers you"), that is, when its effect on you is strong, generally after drinking quite a few cups of the strongly bitter, astringent beverage, one can see these spirits, who sometimes take you on a walk with them into forest, or, on other occasions, just sit with everyone who is drinking, sing along, and make everyone sing in turns or together.

In Tayakome, drinking *kamarampi* is most frequently done by men. Women generally drink only when they or their children are sick with minor illnesses, like colds and other respiratory diseases, diarrhea, or body pain, and, even then, I have observed them drinking relatively little. Many women prefer to avoid *kamarampi* because, they say, they do not like the vomiting effect that it has, while others told me that they are a bit scared of it, though they recognize that it is a good medicine. In this regard, when men drink *kamarampi* for reasons other than curing a particular illness, they tend to drink more and are more prone to experience the hallucinatory effects of the plant. However, despite the fact that they sometimes recount their visions to others after the effects have passed, they tend to interpret them cautiously, because, as they say, the plant's soul is not very powerful, and its predictions are not as accurate as those of *jayapa*, which is always correct in predicting the future.

This situation changes when the *seripigari* is the one who administers *kamarampi*, as generally happens in contexts of serious illnesses. *Kamarampi* is particularly used when the illness is believed to result from witchcraft. During the healing process, the *seripigari* drinks *kamarampi* constantly along with the patient until he believes that the person has recovered. Currently, there is no seripigari in Tayakome, and the closest one, Mario, lives upriver, one

⁴¹ Matsigenka employ the term *agaveakempi* (literally "defeat you," or "overpower you") to assert that *jayapa, kamarampi*, or any other substance or medicine is having a significant effect on you, physically and mentally.

day from the community. Tayakome residents visit him after they have tried and failed to cure themselves, or have enlisted the help of the herbalists and experts that live in Tayakome to no avail. Sometimes Mario comes to visit Tayakome, and, when he does, he often prepares *kamarampi* to drink a few times with those who are willing to participate, or whenever someone is sick. Given that Mario a well-known and respected *seripigari*, these *kamarampi* sessions that he conducts are regarded highly by Tayakome residents.

Vuimpuiyo is a 15cm-long, gray bird, known in English as the screaming piha, because of its notorious, loud whistle in the forest understory, partially represented in the musicality of its Matsigenka name. Vuimpuiyo is associated with the forest spirits called sangariite, which are benevolent human-shaped beings that are in close contact with the seripigari. Aurelio, a tall thin man in his late 40s, says that he used to know the sangariite when he was training to become a *seripigari* as a teenager. He and his younger brother, Juan Pablo, ran away from their home in the headwaters of the Manu River and lived with a seripigari who resided alone in another region of these headwaters. This man began to train both Aurelio and Juan Pablo to become seripigari, but after a few years they discontinued their apprenticeship because were convinced by other Matsigenka who visited the area to come to live in Tayakome. After spending a few years in the community, and attending elementary school for some time, Aurelio married his first wife Hermelinda, who was some years older than him. On one occasion, Aurelio recounts, Hermelinda was not paying attention to the manioc that she was cooking and the water in the pot boiled over. As a consequence, he lost his *seripigari* abilities and no longer considers himself to be a *seripigari*.⁴² Nevertheless, Aurelio is regarded in the community as very knowledgeable with regard to the Matsigenka spiritual world, known only to Matsigenka healers, and he is a very

⁴² This is similar to the case of hunters. It is well-known in Tayakome, that whenever the wife of a hunter allows a cooking pot to boil over, her husband loses his aim. In some instances, people say that he can recover it again by following a very restrictive diet. See Chapter 8.

enthusiastic storyteller. His brother, Juan Pablo, is also knowledgeable in these areas, however, because he was younger, his *seripigari* training in the headwaters was not as intense as Aurelio's. Once when visiting his house, Aurelio told me about the *vuimpuiyo* that he used to know:

Far away the *vuimpuiyo* live like Matsigenka, they can transform themselves into Matsigenka. They live in the forest, and their houses look like our houses. A long time ago, I saw them. Now they have left and vanished. I cannot see them anymore. Like now, you cannot see them. [...] They have manioc in their field, and drink *owiroki* [manioc beer]. They look like us, Matsigenka. They also shoot at spider monkeys, and go to the forest. Their wives cook what they have hunted, just like us.

Aurelio, like most people in Tayakome, affirms that he can only see the sangarite, or *vuimpuivo*'s soul, during *kamarampi* or *javapa* drinking sessions. For others, the link between *vuimpuiyo* and *sangariite* is not salient, and they simply refer to *vuimpuiyo*'s human form as its soul. For nearly everyone in Tayakome, *vuimpuivo*'s soul looks like Matsigenka women, men and children, dressed in their magatsi and with the men wearing matsarientsi, just like the souls of *javapa* and *kamarampi*. However, all of these beings' souls are of a different kind than the Matsigenka soul because of their spiritual power. Rather, they are considered to be similar to the *seripigari*. As mentioned by previous researchers (Shepard 1999b), many people in Tayakome affirm that the *vuimpuiyo/sangariite* provide the seripigari with new varieties of crops and medicinal plants, commonly grown by the Matsigenka, such as manioc, pineapple, kamarampi, jayapa, or ivienkeki (see below). Then, the seripigari distributes these new varieties among the Matsigenka. Some people equate the sangariite/vuimpuiyo with the inetsane, the seripigari's auxiliary spirit that helps him cure other Matsigenka. However, experts like Aurelio affirm that they are different spirits. They say that the training of a *seripigari* apprentice consists of continuously drinking *kamarampi* in order to establish contact with his *inetsane*. Likewise, whenever a *seripigari* treats a Matsigenka with a severe infirmity (commonly, children who have lost their soul, or people

who are bewitched), he makes the patient drink *kamarampi* with him, so that the patient can come into contact with the *seripigari*'s *inetsane*, and this can help the *seripigari* to cure the patient.

There are also other accounts of the *sangariite* spirits that do not relate them to the *vuimpuiyo* bird. Some elder experts in their 60s and 70s, explained to me that the *sangariite* are powerful Matsigenka-like beings, who live at the bottom of oxbow lakes. There, they build their houses in the Matsigenka style, and their domesticated animals, chickens, pigs, and dogs, are the wild animals of the forest. They release these animals from time to time, so that they are available for the Matsigenka when they go hunting in the forest. This version of the *sangariite* is similar to that recounted by Baer (1994:77) and Shepard (1999b). However, apart from these elders and some of their adult children and grandchildren, this understanding of the *sangariite* is not very widespread in Tayakome. It is possible that this version of *sangariite* is only held by a few people. Because, in the previous work of the anthropologists mentioned above, it is not unclear who recounted these conceptions (i.e., who were the anthropologists' informants), it not possible to make any assumption about whether these were widely shared notions in their respective field sites or if they were just the beliefs of a few people.

Not all people consider the *sangariite* to be benevolent. A small group of people in the community affirm that ~45-year-old Leonor's husband, Omar, was killed by a *sangariite* around twenty years ago. Omar went into the forest alone, and a few hours later he returned to a neighbor's house, dragging himself, after being mortally wounded by machete strikes to his head and body. The people who treated him before he died of his wounds said that Omar recounted that a *sangariite* spirit, in the form of a man, attacked him for no apparent reason. Saul and his parents told me this story, which was later corroborated by Leonor herself,

though she did not want to give me any further details. After her husband Omar's death, Leonor married Saul's uncle, Nicanor (53), and now, only Saul's family (his parents and siblings), as well as Leonor and Nicanor, consider the *sangariite* to be evil spirits. Other people in the community do not believe that Omar's death was caused by these spirits, and instead blame either kamagarini (demon) spirits, or they claim not to know who is responsible for Omar's murder. This is an extremely rare case in Tayakome, since there is no precedent for murder in the community, and in any other Matsigenka communities of the area. The only other violent murders recounted to me were committed by the Amihuaka (Nahua) or Kogapakori prior to the early 1980s, when these groups were in open conflict with the Matsigenka. It is also nearly impossible for a foreign person to infiltrate the community and perpetrate a crime without being noticed either entering or leaving MNP by the park guards at both park control posts, since the only manner of reaching Tayakome is by navigating the Manu River. Murders in the past have been attributed to witches' curses, for which the accused witches were expelled from the community and banished from MNP. However, in such cases, victims of witchcraft fall ill, and if not cured, they die of the illness. They are not violently attacked, like Omar. It seems strange to me that people would use the figure of the *sangariite* to cover up a murder, since, if anyone wished to assign responsibility for this event to a spirit, the most logical association would be to blame a demon or evil spirit, such as kamagarini, rather than *sangariite*, which is a widely-known benevolent entity. This is actually what other people in the community affirmed, and blamed those evil spirits. However, everyone I talked to was evasive when I asked about details of the event, so I could not really have determined if this version was widely believed. It is also not clear to me the extent to which Leonor believes that a *sangariite* was responsible for her husband's murder, as she was reticent to speak about this event. She did not make the connection with vuimpuiyo, however, and affirmed that this is both a bird and a benevolent forest spirit. Still,

whatever the reason for Omar's death, Saul and his family now seem to believe (at least according to what they say) that *sangariite* are indeed evil.

3) Malevolent Entities

For the Matsigenka of Tayakome, the forest is also inhabited by malevolent beings who are constantly threatening those who visit it. The physical harm inflicted by these malign entities, usually a few predatory animals or evil spirits, can result from attacks, bites, or simply random encounters in the forest. In addition, such harm is also conceptualized in spiritual terms. As such, it can only be satisfactorily counteracted with the help of the benign super-human beings mentioned above, or the *seripigari*. In the context of the formal interview I conducted, a large proportion of participants indicated that malevolent beings, such as the stingless bee *yairi* (95% of all the interviewees) and the *matsonsori* or jaguar (73%), have evil souls that represent their power and constant intention to harm.

Kamagarini are evil spirits that inhabit the forest. For some people, like Magali (see above), snake bites can be caused by malevolent beings who shoot their snake-arrows into Matsigenka in the spiritual world, where Matsigenka still look like humans. During such attacks, the ultimate agent is the evil spirit. The snake is perceived as the object through which damage is perpetrated, without demonstrating a direct will or intention to harm in and of itself⁴³. However, this is not the only manner in which *kamagarini* attack humans. In contrast to predatory forest animals, when *kamagarini* are encountered in the forest, always in a human form, they damage Matsigenka on a spiritual level, which, subsequently, provokes physical symptoms of illness. Fever, chest pain or body pain are common, especially if the person that encountered the spirit tells anyone about her encounter. Everyone

⁴³ The case of the snake is similar to that of *ivienkeki* (herbs for protection and skill enhancement – see Chapter 7), which half of participants consider to have a soul (56%) representing its power, and granting it agency and intentionality, but not necessarily human-like consciousness

I talked to agreed that, in the unfortunate event that one crosses paths with any of these malevolent spirits in the forest, one must keep it secret for some time (from days to years, depending on the informant), in order to avoid illness and eventual death. In some cases, the fear of *kamagarini* is such that people who have experienced an encounter close to their homes, have moved their whole clan to new locations.

Of these different kinds of malign souls, the bee *yairi* was the species that was most consistently believed to possess a dangerous spirit, with 95% of the interviewees affirming that it has an evil soul (see Table 1). *Yairi* is a black stingless bee that is known in Spanish as *cortapelo* (lit. cutting-hair), because, when encountered in the forest, they swarm directly to people's heads (or any hairy part of other animals), and, as they become entangled in the hair, they simultaneously bite the scalp. Virtually everyone that I interviewed agreed that *yairi*'s soul looks physically like a Matsigenka, but is nevertheless an evil spirit that harms real Matsigenka in various ways. The bee is usually encountered close to its hive, which is often hidden near people's houses, or also encountered in the forest, where the simple experience of crossing paths with it is enough to make a person sick. Edgar explained to me how *yairi* operates near the house:

It can be in your house, and it bothers you at night. When you are sleeping, you can dream that it throws a stone and falls and makes a sound, but you cannot see it. When your children sleep, it harms them. [They] feel a pain in their chest and also when you go by yourself to the forest, you can find a person and it appears. [When you see it], you have to wait three days before telling anyone. Otherwise, you can die. Here, my brother-in-law, Aurelio, once he went drinking, when he was young. He said he wanted to pee. He went to the forest, and saw a person. He asked him "what are you doing? Better come here." Then, [the *yairi*] grabbed him, and it was really strong, he almost stabbed [Aurelio with] his knife. If he stabs you, you die, and then he transforms you so that you can go to your house, but you arrive to your house and you are dead. Aurelio said that it was really strong, and that his chest was empty. He managed to hit him in the stomach, and run home, and he almost died. He thought he had hit a Matsigenka, but it was not true, it was *yairi*. And [before coming] Aurelio tried to cut him, and it disappeared. It is dangerous. It has a lot of soul, *yairi* is dangerous.

When I questioned Aurelio about his experience, he said that, rather than *yairi*, his attacker was actually a *jeroroni*, a small owl that is also associated with the *kamagarini*.

Jeroroni is a small owl which is sometimes heard around Matsigenka houses at night, and it is believed to be a bird of ill omen. Despite the fact that neither Aurelio nor Edgar explicitly mentioned it, it is possible that the attack of *yairi* or *jeroroni* on Aurelio was an attempt at rape, as nearly every person that I talked to in Tayakome claimed that rape is a particular type of harm that the soul of this bird inflicts on Matsigenka people. The ethnographic literature about the Matsigenka describes this kind of *kamagarini* as having giant penises or vaginas (Shepard 2002a; Rosengren 2002; Johnson 2003; Baer 1994). However, the people of Tayakome only describe them as being black humans, generally tall, and with superhuman physical strength.

In Tayakome, the human predator par excellence is the jaguar, or *matsonsori*, a term that is also used to generically refer to any type of feline. Along with snakes, the *matsonsori* is viewed as the principal physical threat that the forest poses to the Matsigenka. Some in the community consider jaguars to be more inherently evil agents than snakes, since they see the latter as the passive means by which other malevolent subjects hurt Matsigenka (i.e., snakes are the arrows that tapirs or kamagarini shoot at people, see above, and Johnson 2003). In contrast, jaguars are often perceived as the agents which willingly want to either kill Matsigenka, who are their prey, or spiritually hurt them, often by entering the bodies of weak people, generally elders. As a consequence, they possess an evil soul.

There have been two incidents in which jaguars have attacked the residents of the upriver Matsigenka community of Yomibato, during the time I was conducting field research in Tayakome⁴⁴. Word of both incidents traveled quickly between communities and caused

⁴⁴ One of them took place in 2011, when an old jaguar attacked, during plain daylight, two adult men and a child who were walking back from the center of the community to their house, on a well-used trail. The child died and both men were badly wounded. The jaguar was hunted down and killed days later by the majority of the men of the community. The other case occurred in 2013, when a man went to the forest in the early morning to hunt by himself. Extraordinarily, the jaguar attacked him head-on (they tend to ambush their prey from behind), biting his shoulder. The man was able to defend himself by stabbing the animal with a knife, and the wounded jaguar was never captured.

quite an impression in Tayakome, where jaguar attacks have not taken place for a number of years. Jaguars are occasionally sited prowling around, often looking for easy prey like dogs, chickens, pets, and children. News of the usually-fleeting encounters on the trails of the community, or identification of jaguar prints near a house, are widely and quickly shared by residents, who are primarily concerned for their children. Indeed, parents are constantly advising their offspring, especially pre-teens, not to walk alone on the trails for fear that they will be attacked by a jaguar. When walking between houses, men usually carry their bows and a few arrows for protection and for the extremely rare instances that they find a prey animal on the trail (since these animals are scarce on trails between houses because of the constant transit of people), and women prefer not to walk without company. In fact, during the few weeks that I stayed by myself in Tayakome, without my husband, people constantly expressed concern about me walking on the community trail system by myself. It was common, upon arriving at someone's house, for them to asked me if I had seen a jaguar on the way. In fact, many men suggested that I should learn how to shoot arrows, which was a surprise given that is an activity reserved for men. Most likely, in my case, normal gender norms were eased since I was already a strange woman in their eyes, despite my efforts to perform female activities with our host family and in the community in general.

In spite of the perception that all jaguars pose a threat to the Matsigenka, the majority of people who participated in the formal interview attributed an evil soul to a particular type of jaguar that is characterized as *ivegaga*, or literally, evil. I learned about them when Jaime (22) and his brother-in-law Dario (28) killed an *ivegaga* jaguar near their house, one night in April. The jaguar had been repeatedly approaching their neighbors' houses at night, attempting to catch the clan's dogs, and successfully killing one of them. Both of the men waited up in Dario's house (raised two meters above the ground), and, when the jaguar came, Jaime shot the arrow that hit it in the heart. Many of us saw the jaguar's body the following

morning, near the weeds around Dario and Paula (Jaime's sister)'s house. It was a middlesize male jaguar, probably old because its teeth were worn down, and very skinny. Its spotted body was pocked with more than 30 large skin-burrowing botfly larvae, which, knowing that their host's body was dead, were coming out of their holes and were scattered around the dirt where the jaguar lay. In consultation with Aurelio and German, they decided to burn the jaguar body, which they did until it was reduced to ash, some hours later. According to these two men, this is the proper procedure for disposing of a dead jaguar, because, if they had merely buried it without burning it, a stronger, more powerful *matsonsori* would have arisen from the ground. Many other people also told me that this resurrected jaguar would have two heads, and a turtle shell on his chest that no arrow could penetrate, making it indestructible. They were all fearful that any potential reborn jaguar would kill everyone in the community.

Over the following days, I heard many people talking about the wicked jaguar that Jaime and Dario had killed. Modesto (25) said that "because it comes close, to the house, it is not a *matsonsori*, it is *ivegaga*." Nestor also told me that this kind of jaguar was not normal. Its many *igorone* (botfly larvae) indicated that it was a "*otorongo con daño*," he told me in Spanish, a cursed jaguar with an extremely evil soul. Other people asserted that jaguars like these are the souls of very elderly Matsigenka who wander through the forest in the shape of an *ivegaga* jaguar. At this time, Sara, probably in her mid 70s, was one of the oldest women in Tayakome and was ill. Many believed that she was turning into a jaguar, similar to the one that Jaime and Dario killed. Mercedes (24) narrated to me how jaguars and old people like Sara come to be associated:

The soul of *matsonsori* comes and gets inside her body . . . Any jaguar comes and gets inside [the elder's] body. You give her food and she does not want to eat because she tells you that she has eaten before, "I'm full" [she says]. She has already eaten what the jaguar brought to her. You give her a bit of honey, and that scares [the jaguar] away. [...] It also happened to my father-in-law, but not like to Sara. He did not eat deer meat, [a jaguar] wanted to give it to him, and he did not want to accept it. But with Sara, it did happen, she received what the jaguar brought to her. If you don't give her honey, she transforms completely into a jaguar,

and exterminates all the people. Then she goes to another place, she is the boss [laughs]. We won't see her anymore as Sara, her nails would be long [i.e., like claws].

I asked Mercedes about the jaguar that Jaime killed. She said that "probably in another place an elder has died. His soul transforms, and somewhere else that evil jaguar arises, like that one, skinny, with *igorone*. Some say that the jaguars who attack people do it because they cannot hunt, but no. Those are the ones that elders have turned into." Mercedes' account accords with Ignacio and Gaby's concerns about Salomon becoming a jaguar in the days before his death, and their fears about me talking to Salomon before he passed away (see beginning of this chapter). The fact that elders transform into jaguars is a widespread belief, and was repeated to me by many other people in the community. The soul of the jaguar enters the body of the elder, and it can only be scared away if the elder is tricked into eating honey without knowing it. For Mateo, the conversion of people into jaguars is related to the effect of drinking *jayapa* and with sharing the jaguar's tobacco powder:

Mateo: When you drink *jayapa*, a jaguar comes first and says "let's go to my house." At that moment, it is entering [into your body], the soul of the jaguar bites you. The next day, when [the effect of *jayapa*] passes, you sleep the whole day, the jaguar continues, and you are dreaming. Then, the jaguar's soul is entering into your soul [*ikiawitakempi*]. The next day, you do not want to eat what it's cooked, the jaguar will enter [into you]. Then, if John [my husband] cooks rice, you will not want to eat. You will say to John "I have already eaten." The jaguar brings you a leg of deer, but John does not see it. [The jaguar] comes at night, then he gives you the meat. At night you are eating. Thus, we know that, in order to drink *jayapa* well, the first [spirit] that comes is a jaguar. Once the jaguar leaves, then comes the owner [soul] of *jayapa*. That is the one which takes you faraway [and cures you]. Caissa: And when a jaguar comes, does he looks like a jaguar? Mateo: He looks like Matsigenka, he asks you directly: "I will blow seri into your nose." Then you say "I don't want to," then you are ok.

Seri or tobacco is an essential and widely-known medicine for the Matsigenka. A very common manner of consuming it for the treatment colds or other respiratory illnesses, or to intensify the visions during *kamarampi* ceremonies, is by grinding the leaves into a snuff, which is mixed with other plants (see also Shepard 1998). Then, sitting cross-legged face-to-face, two people take turns blowing the tobacco snuff into the other's nostrils, with a

seritonki, a device made with two curassow bones glued together into a V-shape. In Tayakome, the action of blowing tobacco snuff into another person's nostril, called *sokagantsi*, implies a close relationship, and is only practiced between people who know and trust each other. Therefore, by requesting that the hunter *yasokaki* his *seri*, the jaguar-in-Matsigenka-form wants to establish a closer bond with him, as if by doing so, he will transform the hunter into his jaguar-kind. I discuss this connection more thoroughly below. A number of Tayakome residents agree that elders are the only ones that jaguars can "invade," perhaps because of their bodily weakness. However, a few, including Mercedes, claimed that a close encounter with a jaguar, sometimes when one is in a vulnerable situation, can also have the same effect on younger people as well.

4) Primordial Humanity

Viveiros de Castro affirms that the primordial human condition of certain animals and plants is what homogenizes the ontological world of indigenous American societies, by entailing the attribution of human-like souls to these non-human beings (Viveiros de Castro 1998; 2004a; 2005). In Tayakome, stories about animals that used to be Matsigenka people at the beginning of time are known, and occasionally narrated, usually by elders or middle-aged men, during *owiroki* (manioc beer) gatherings. I was told that these narrations were more common before (mostly) younger men and teenagers began incorporating stereos playing contemporary popular music into these gatherings. Nevertheless, members of this same younger generation, who seem to be more interested in dancing and celebrating parties in the manner that they see in colono towns, still express enthusiasm when a good storyteller begins telling a story. Women are also knowledgeable about these narratives, although they, along with younger men, are usually the audience for older male storytellers. Of course, such parties are not the only times when stories like these are told. As pointed out by young

people, they are familiar with such stories because they have grown up listening to their grandfathers telling them.

In a number of cases, these narratives describe how the Matsigenka-like god Tasorintsi created everything and then converted some of the recently-created Matsigenka into animals (see Chapter 5), while others recount anecdotes about different animals who experience life in a human-like fashion. There is variation among residents of Tavakome regarding their familiarity with, and the content of, these stories. In many cases, people suggested that I talk with some of the experts that I mentioned above, since they know these stories best, people said, and because they are also more familiar with other metaphysical aspects of animals and plants. The fact that they referred me to these experts may be related to the history of anthropological research in this and other communities in the area. Previous researchers were very interested in these stories, and specifically sought older expert storytellers. This was widely known in Tayakome, and thus people assumed that I was interested in this type of information. While I indeed talked to experts about these and other topics, I also asked "non-experts" the same types of questions precisely because my objective is to understand how different conceptions coexist in this community. Ideas, beliefs, and general notions are contingent and constantly being constructed. Therefore, in my opinion, there is no such a thing as a "correct" or "unique" Matsigenka ontology (as Viveiros de Castro seems to suggest exists for Amerindians), and this is the reason why I consider ontologies to be emergent, due to the fluidity that characterizes people's notions of the world.

The results of the formal survey regarding which species were humans in a remote past suggest that this original human condition influences the manner in which some species are treated, entailing different conceptions of their intentionality, agency, and subjectivity, as well as a variety of implications for Matsigenka engagement with them. Of the 23 species determined to form the answer key of the CCM analysis, six are animals and plants that are

spiritually powerful and can either harm or hurt the Matsigenka (most of them mentioned above). As such, they are believed to have been humans in the past and their souls have always been, and still are, human in appearance. Therefore, this condition of "humanity" seems to primarily reflect the physical aspect of their soul, rather than an ontological similarity with Matsigenka people. This is the case for benevolent spirits that are of the same kind as the *seripigari*, who is considered to be an extraordinary human because of his capacity to communicate and interact with non-human beings in the spiritual world. Other human-like spirits include the *kamagarini* or demons mentioned above, whose evil power can cause illness or death in people who interact with them.

Among the remaining items that interviewees regard as having been originally humans, only the moon, the sun, and the jaguar (the latter discussed above) were consistently associated with human-like souls (Table 1). The moon is an essential character in Matsigenka origin stories as he is the man who brought manioc to the Matsigenka people (see Chapter 5). Virtually all interviewees were familiar with this story and a considerable majority agree that the moon still has a soul (86%). Many people pointed out that the sun is interchangeable with the moon, also attributing a soul to it, and only a small minority said that the sun was the moon's son. However, no specific stories associated with the sun were recounted to me. Other researchers mention that, for the Matsigenka, the moon is regarded as a god who eats human souls (Shepard 1999a; 2003; Johnson 2003; Baer 1994). However, in Tayakome no one made allusion to this version, and the moon is not considered to be a threatening entity. Importantly, when I asked Matsigenka interviewees whether the soul of the moon or the sun was their ishaninka (of the same kind as Matsigenka), the overwhelming answer was "no, they are different from us." Some people affirm that the moon's soul looks like a Matsigenka man, and a few experts even suggest that he lives as a Matsigenka man in the sky, in a Matsigenka manner (with his family, his Matsigenka-like house and his manioc field). Others

affirm that it used to be Matsigenka person, but it is not anymore, although it still has a soul. Some also refer to the fact that, whether a Matsigenka or not, the moon looks after the Matsigenka, as a benevolent deity. A few people associate its soul with the power that the moon (and the sun) has to shine. Thus there appear to be several different ways of explaining the condition of the moon as a particular type of subject, reflected in its current possession of a soul.

The current status as humans of the remaining items on the interview list is clearer for some animals than for others. All of these are species with which the Matsigenka commonly interact, because most of them are game animals. For some species, most people agree they are not currently human, while in other cases there is less agreement. For instance, the majority of interviewees affirmed that all monkey species are no longer human, and none have souls, while there are more mixed answers with regard to tapir and white-lipped peccary. I discuss these species in the section pertaining to notions of non-human beings that are not widely shared.

5) Soulless Beings and Elements

According to the frequencies of interview responses, there are fifteen (15) items in the interview list that are considered to be soulless by at least 80% of the interviewees (see Table 1). These items include plants and animals that are commonly used by the Matsigenka, both wild (e.g., the palm tree tsigaro, the larvae pagiri, the trumpeter bird, and the piranha) and domesticated (e.g., the protective annatto seed, cotton, chili-peppers, and chickens). Although it was not included in the list, I informally asked whether manioc, the staple food in Tayakome, was considered to be the bearer of a soul. However, all of the Matsigenka whom I asked (which was nearly all adult residents of the community) affirmed that it does not. Among the elements that are neither animals nor plants, stones, money, gasoline, and bottled water are also considered to be soulless by the majority of interviewees. These items include

a mixture of those referenced with aiñio (money, gasoline) and those referenced with *aitio* (stones).

Varying Notions of Non-Human Beings

The mixed answers regarding the attribution of souls to the remaining interview items (58 plants, animals and environmental elements) demonstrate the variability among people in the conceptions of the souls attributed to them. This may provide a window into Matsigenka ontological dynamics - i.e., constant changes that occur among individuals as a result of intrinsic or external influences. This diversity in responses may also be signal the potential ephemerality of the notions held by people regarding the soul, suggesting that such notions may not be as permanent and enduring *for certain species*, as generally conceived. These two factors, in turn, speak to a continuous transformation and emergence of new ontologies.

Different conceptions of the soul held by Tayakome members for the same entities is clearly observable for species to which a large proportion of interviewees attributed a soul, due to the fact that such species were humans in a remote past and also have exceptional abilities. This is the case for the armadillo (*etini*, 67%) and giant armadillo (*kinteroni*, 67%), which are interchangeable species for the Matsigenka. They are conceived to be both spiritually and physically powerful by the majority of people due to their connection with Tasorintsi, the creator god with whom *etini* interacted as a human in the remote past (see Chapter 5). This relationship is also associated with *etini*'s capacity to dig underground tunnels due to its remarkable physical strength. Of the minority of people who did not consider *etini* to possess a soul, some were men and women (four men and five women, ranging from ages 20 to ~50 years old) who do not seem to be interested in having a thorough knowledge about how the Matsigenka spiritual world works. Interestingly, they are physically or socially close to experts (e.g., their spouses or children), so they may believe that there is always someone knowledgeable close by who can deal with such issues or offer

advice. In other words, they may simply consider themselves to be non-experts and when I asked them about issues such as the soul, they nearly always referred to me to those whom they consider to be more knowledgeable. They themselves tend to appreciate the particulars of the metaphysical knowledge held by experts only when good health is at stake. Therefore, when asked about the species described in the previous section that can have positive or negative effects on health (e.g., those similar to the seripigari, forest demons, or salient species that are harmful for infants), their differences of opinion from the majority of interviewees seem to disappear, and they agree that these entities are spiritually powerful, have souls, and help or harm the Matsigenka. This is also the case for a group of younger interviewees (five women and four men ranging between 18 and 25 years old), who did not attribute souls to armadillos, although they made reference to their extraordinarily strength. According to what these interviewees mentioned, complemented by my experience with them in other contexts, this subgroup of young adults often appears to be uninterested in practicing many aspects of the current Matsigenka way of life (e.g., maintaining a manioc field, living in houses made of palm wood, cooking with firewood) and learning or being acquainted with notions and knowledge of the metaphysical world held by those who are considered to be experts (e.g., spiritual engagements between humans and non-human beings and the practices contingent on these conceptions, or stories related to such interactions). In contrast, these younger interviewees seem to have high regard for the lifestyle practiced in colono towns and cities outside of Manu National Park (i.e., full integration into the market economy, acquisition and consumption of Western goods and food, living in houses with cement walls and corrugated iron roofs, and cooking on gas stoves). Some of them aspire to live in one of those places one day. Most of them have attended boarding elementary and/or high schools in colono towns, thus it is possible that the disregard that they show in some contexts for current conceptions and practices in Tayakome is the result of the influence of Christian missionary

or *colono* ontologies (not disregarding the variations that exist within these non-Matsigenka populations). Still, when asked about powerful species such as *jayapa* or *yairi* (from the previous section), they also agreed with the majority that these species are endowed with Matsigenka-like souls that are either beneficial or detrimental to health.

In the case of harpy eagle (*pakitsa*, with 59% agreement as the bearer of a soul), also an exceptional originally-human entity, the reasons for these divided opinions varied according age and gender. Harpy eagle is generally regarded as being the epitome of a good Matsigenka hunter because of its excellent hunting abilities; it is *kovintsari* (lit. "one that has good aim"). Currently, among men, only those who are considered experts and some of their immediate relatives (mostly their children who are both young and middle-age men, ranging between 18 and ~45) stated that harpy eagle's soul was, and still is, an exceptionally good Matsigenka hunter. Some of them, like Johan, mentioned how it helps men to improve their aim when shooting prey:

[When] harpy eagle helps you, you can go to the forest and shoot many spider monkeys. You need to bring its claws and it helps you. [Harpy eagle] had good aim a long time ago [when it was a human], and now it helps you to hunt well. Now, the *seripigari* can see the harpy eagle like a Matsigenka [i.e., in Matsigenka form]. I've heard that it is like us, but I can't see it, only the *seripigari* can.

Like Johan, other men believed that only the *seripigari* can see its *real* nature, as is also the case for the human-like souls of a few other species. Like the Matsigenka, *pakitsa* also hunts spider monkeys, and is excellent at it because of its outstanding aim. In addition, for this subgroup of male interviewees, harpy eagle is an ally, in that it helps Matsigenka men by bestowing upon them its good aim. Among those men who did not attribute a soul to this animal, most were those composing the two subgroups mentioned above for case of armadillos, in addition to a few others who just affirmed that, because harpy eagle is no longer a human, it no longer has a soul. Among women, a subgroup younger than 25 years old (most of whom also overlap with the subgroup of young adults mentioned above for the case of the armadillos) affirmed that this bird does not have a soul. Women above that age tended to assert that harpy eagle has a soul, but, in contrast to men, instead of making reference to its human nature, they affirmed that its soul, because of its predatory nature, can steal the souls of infants if their parents interact with it. In Chapter 7, I discuss in more detail the case of a subgroup of women (which includes most of this subgroup), who tend to reify the danger that some species can inflict on children as possession of a soul, in contrast to the rest of the interviewees.

Interestingly, the majority of the remaining species that were originally humans in the remote past (Table 1) are no longer considered to be humans in the present by the majority of interviewees, and are consequently soulless. This is the case for most of the game animals in the interview list, including all monkey species, tapirs, white-lipped peccary or *imarapage* (but not the white-collared peccary or *shintori*), some birds like the yellow-rumped cacique and the various macaw species, and the domestic dog. For instance, in the case of spider monkey, a highly desired game species, the few people who affirmed that it has a soul (30% in total) composed the outlier subgroup derived from the CCM mentioned at the beginning of this chapter, who conceive of the soul as the vital force that allows animals and plants to grow. In addition, a few experts and good hunters mentioned that spider monkey's soul is its itinkame or shintarorira, which in Matsigenka means "chief," "leader," or "owner." Some authors taking the perspectivist approach point out that human interaction with master spirits, typical in animist ontologies, is a manner in which humans relate indirectly with animals and plants (e.g., Descola 1994; Descola 2013; Kohn 2013; M. Scott 2014; Willerslev 2007). According to previous studies among the Matsigenka, belief in the master spirits of certain game animals is common, suggesting that, in the case of spider monkey (osheto), the

itinkame, called oshetoniro (the literal translation is "the mother of osheto") is harmful and wicked. Snell (2011) affirms that, for the Matsigenka of Urubamba, oshetoniro was a feared demon that looked like a giant, grey spider monkey, and attacked people on cloudy nights. For the Matsigenka of the Manu area, Shepard (2002a) also describes *oshetoniro* as the mother of *osheto* with evil powers and equipped with a large penis to attack and rape Matsigenka victims. Oshetoniro, as well as adult male spider monkeys, he adds, are examples of malign spirits that cause illness in young children as a form of revenge for having been hunted by the child's parents. In Tayakome, *itinkame* (lit. "owner" of a masculine noun, i.e., an animal) is the spirit that leads a herd or group of animals, or, occasionally, the soul of a species that was human in the past. In the case of plants, the *otinkame* (lit. "owner" of a feminine noun, i.e., a plant) is the soul that lives inside of certain powerful plants, and this soul generally resembles a Matsigenka. However, there is no clear agreement among the members of Tayakome regarding which species have an *itinkame*. A few people assert that all animals have *itinkame*. Nestor, for instance, once told me that even cockroaches have an itinkame, which looks like a larger cockroach crawling with a group of smaller ones. However, most Tayakome members more commonly asserted that only spider monkey and white-lipped peccary have master spirits, which most people associate with these animals' souls. In the case of spider monkey, 30-year-old Ismael, who is regarded as one of the best hunters in the community, affirmed that "[his] soul lives far away, but it is evil." After a bit of hesitation, he added: "His soul is a large spider monkey, it is *ivegaga*. He rapes men that go far away into the forest to hunt." Thirty-five-year-old Edgar, also an experienced hunter, has a similar perception:

Spider monkeys have a soul, because when you go to the forest far away, you walk up in the mountains. It can get dark and a giant spider monkey appears, like a gorilla. It can grab you and kill you, but then, it brings you back to life. You can come here and can curse your own people [because] you have the *diablo* inside, the soul of the spider monkey. That is why, when we go far, we bring garlic, that helps scare it away. With garlic's odor, it cannot carry you away.

These accounts resemble Shepard's description of *oshetoniro*'s evil nature. Furthermore, the existence of a soul in this case is similar to that of any evil spirit (*kamagarini*), such as *yairi* (mentioned above), entailing the intention and capacity to harm. In this case, the soul is not related to the existence of a previous humanity, but rather to these beings' innate capacity and willingness to spiritually and physically harm the Matsigenka.

The case of the tapir is worth mentioning because it is almost the only instance in which a perspectivist notion is conceived by people who attribute a soul to it. Thirty-fouryear-old Miriam describes the soul of tapir (kemari) in this manner: "[Tapir] is like a Matsigenka. When I see it, it looks like a tapir. But he sees his fellow tapirs as Matsigenka, and the snake is his arrow. His house in the forest looks [to him] like a Matsigenka house. Jirina [a species of nettle eaten by tapirs that looks like sugar cane] looks like a swidden field to him." Edgar agrees with Miriam, but adds a variation to typical perspectivism: "[Tapir's] soul is like people, like us. The snake is tapir's arrow. Let's say the snake bites us. Then, it is the tapir who has shoot his arrow at us. When we kill the tapir, it is as if we are the snake [in the tapir's view]." This association between tapir and snake is common among the people who affirm that tapir has a soul, approximately 45% of all interviewees. For them, despite the fact that tapir has a human perspective of the world as a consequence of his human-like soul, he sees human beings in a role-inverted manner: humans are prey for tapir, in the same manner that he is prey for humans. In his world, tapir hunts and eats us, not as a consequence of embodying a continuous "cosmic food web" (Århem 1996, Reichel-Dolmatoff 1976, Viveiros de Castro 1998, 2004), but as a reaction to the constant harassment and aggression directed against him by humans. This sort of "revenge" as a form of reciprocity (Izquierdo et al 2008) is repeated in other contexts of Matsigenka engagement with non-humans, such as those where certain species can take the soul of children away and make them sick when their parents have harmed them in some manner. However, as I argue in Chapter 7, the

intentionality and agency of animal and plant species involved in such "revenge" relationships is not exactly understood as conscious vindictiveness (e.g., wanting to "get even") by the Matsigenka of Tayakome. Interestingly, a majority of women (61%) were among those who affirmed that tapir does not have a soul, and that it was a human in the past, but it is not one anymore. Women experts were included in this group. This contrasts with the majority of male interviewees (58%), who asserted the opposite. These were mostly male experts, and some other men who are also knowledgeable about the Matsigenka metaphysical world, are relatives of experts, but do not consider themselves such. Perhaps the fact that the figure of the vindictive tapir involves an interaction that takes place in the forest, where male Matsigenka spend more time than women, and thus constitutes a more salient idea for men, explains this difference between some women and men. It may also be the case that women are using a different notion of soul to refer to this animal. I discuss this possibility in more detail in the next section.

Most of the remaining items in the interview list were attributed with a soul only by the outlier subgroup of the initial CCM, who affirmed that the soul is what allows every animal and plant to live and grow. This includes most trees, bushes, and herbs; mammalian predators, insects, and other invertebrates; and all the fish and other animals that live in the river and in the oxbow lakes, including predators (such as the giant river otter). A few species (e.g., the flycatcher bird *oeinti*, and the copaiba and kapok trees) are endowed with souls by a relatively high majority of people because these species are considered to be taboos in different contexts. These cases are discussed in more detail in Chapter 7. Other environmental elements such as the lightning, wind, rain, clouds, water, and river were also considered, for the most part, to be soulless. The few people who affirmed that these items possess a soul referred to their capacity for movement (e.g., wind, water, clouds) and/or their capacity to harm the Matsigenka (e.g., lightning can burn people). In the case of the river,

people referred to its soul as Parieni or Parieniro, the mythical woman who created all fish, and who lives in the bottom of the river (see Chapter 5).

In sum, people who attributed souls to species in this section appear to have done so for a variety of reasons that sometimes involve different notions of the soul, and sometimes reflect characteristics, histories, or dispositions of individuals that differ from those of the majority of the population.

On the other hand, it is also important to point out that conceptions and opinions are expressed differently in different contexts, and are potentially in a process of constant change. We often fail to recognize the fact that people hold many ideas that are not always as coherent as we tend to think. I suspect that this instability of ideas may be recorded in responses to the formal tasks that I conducted more often than I may have realized.

In the context of this interview, I believe such was the case for some participants who appeared to have knowledge that they did not wish to explain in the interview, probably out of shyness, or fear of being judged. This was the case for two women (one in her late 40s, and the other in her late 60s) who are regarded as experts in knowledge related to medicinal plants and illnesses originating from non-human beings in the spiritual world. Both were reluctant to discuss the particular nature of the souls of emblematic and common species, apart from the well-known *jayapa* and *kamarampi*, despite the fact that others directed me specifically to them to discuss such issues. This also seems to be the case for some interviewees who formed part of the 27% who affirmed that jaguars do not have souls. Some of these people were the same whom I observed to be very concerned that the *ivegaga* jaguar killed at Dario's house (mentioned above) would rise out of the ground if it were not completely burned. One of these interviewees was Dario himself, who burned the jaguar and was the one who originally told me about this *ivegaga* jaguar's soul. Nevertheless, he affirmed in the context of the interview that jaguars do not have souls. It is possible that,

during the interview, he was referring to jaguars that are not ivegaga, which, in turn, may imply that different conceptions of jaguars are at play (i.e., those that are seen as spiritually dangerous and possessing an evil soul, and those that are simply physically harmful and dangerous because they are predators). However, he was consistent in not attributing souls to anything other than the species mentioned above (e.g. *jayapa, kamarampi, yairi*) whose souls are salient to nearly everyone in the community.

Analyzing Differing Conceptions of Souls

The manner in which the Matsigenka of Tayakome refer to the soul in quotidian contexts suggest that they conceive of it as something possessed by different kinds of subjects. This objectification of the soul is an allusion to the interiority of the Matsigenka and certain non-human beings, and, in the latter case, the soul also instantiates a particular kind of relationship that these beings maintain with the Matsigenka. As such, notions of souls differ depending on the subject to which it is attributed.

When referring to humans, the soul represents the vital force that provides the body with the energy necessary to conduct the activities that define Matsigenka life, such as hunting and preparing a manioc field for men, and spinning cotton and preparing manioc beer for women. In addition, having a human soul is also associated with the capacity to think, specifically, possessing Matsigenka common sense, which entails engaging in gender- and age-appropriate Matsigenka behavior, and the avoidance of aggression. These qualities are, in turn, associated with a good health, since being very sick implies having lost one's soul, entailing physical weakness and the inability to conduct normal Matsigenka activities. In this regard, what I have shown so far partially coincides with Lima's account of the difference between Juruna human and animal souls:

"... the experience of the human soul, unlike that of the animal, does not consist in an awareness of oneself as a subject. On one hand, as a vital principle situated in the heart, the soul is a part of the self and it fails to explain why the self is a (or one) person. On the other

hand, the soul is the subject's double and, as such, it escapes from this very subject. The soul's experience is thus not of subjectivity, except in so far as some of its fragments may become apparent to consciousness." (Lima 1999:121).

While the animal soul may not always coincide with Lima's description in the Matsigenka case (see below), the notion of the human soul may be similar to what this author affirms, in that this kind of soul entails a Matsigenka identity (i.e., acting like a proper Matsigenka), but does not provide a sense of individuality, as a particular subject while she is alive. In this sense, while a soul may look like the person to whom it belongs, it is equivalent in essence to that of any other Matsigenka. This lack of reflexivity implies that the soul is occasionally external to individual consciousness, which is exemplified in the case of illness. When Salomon (see the beginning of the chapter) was seriously ill, everyone affirmed that his soul had already left his body, despite the fact that he was still alive, which is what happens in general with every sick person. In contrast, the soul *is* the person ("the subject's double") when it enters the spiritual world, which occurs, for instance, when she drinks *javapa* or when she is dead. As mentioned above, the Matsigenka's soul *is* the conscious subject that dwells in that world with *jayapa*'s soul during the curing process, and she is thus able to interact with the spirit of the plant, leaving her body behind as an empty envelop that is cared for by the person who prepared the *jayapa* beverage. Similarly, as I have explained in the previous chapter, when discussing the place where dead souls go, the soul is the "embodiment" of the dead person. Thus, when Salomon died, there was a risk that he would take Carmela's baby, his grandson, with him, to accompany him to morekakue, the land of the dead.

Such a notion of soul contrasts with those endowed to non-human beings, as I have shown in the previous sections. In those cases, even though "soul" is referred to as an object (e.g., "aitio isire poriatsiri" or "the sun has a soul"), the term seems to allude to the manner in which a particular entity affects the Matsigenka, which varies according to the entity and to

the person that ascribes a soul to it. In section 1 (above) I illustrated conceptions of beings that seem to be nearly universal in all the members of Tayakome. In those cases, there is high agreement regarding the meaning of soul (i.e., as a relationship) attributed to a few species. In the case of *jayapa*, *kamarampi*, and *vuimpuiyo*, interactions with the Matsigenka are instantiated in a soul that has the form of a Matsigenka-like person or people, perceived as benevolent beings who cure Matsigenka illnesses, or who assist the seripigari in helping the Matsigenka (either by assisting him in curing illnesses and being his mentors, or by providing new crops that the seripigari will distribute to lay Matsigenka). The fact that the spirits of these three entities (kamarampi, jayapa and vuimpuiyo) interact among themselves speaks of their internal similarity as interlocutors or peers of the *seripigari*. As Segundo (\sim 65) affirms: "Vuimpuivo and javapa are friends, they both live in the forest. Sometimes they take care of us. Vuimpuiyo is of the same kind as *jayapa*, they are companions. When a Matsigenka drinks *jayapa*, sometimes *vuimpuiyo* comes." Others mentioned to me a similar relationship with kamarampi, affirming that sometimes they see vuimpuivo either as a person or as a bird perched on the shoulder of the man who prepares the drink, speaking and singing like a Matsigenka and joining everyone else in the ceremony. While kamarampi is less trusted than *jayapa* when used by lay Matsigenka, it is still considered powerful because it is the principal means that the *seripigari* uses to cure severe cases of harm, such as that caused by witchcraft. They (*jayapa* and *kamarampi*) are the doctors, people say, and such curative power is instantiated in a Matsigenka-like person, or rather in a seripigari-like person. Because lay people are able to directly engage with the souls of these two plants in the spiritual world (i.e., the fact that they see and talk to them when consuming these species' beverages), and because they witness the consequences of these interactions (i.e., being cured), the existence of these plants' souls is constantly reaffirmed. Despite the fact that fewer people drink *jayapa*, as its effects are known to be strong (and even dangerous) and thus it is only

consumed in case of a serious illness, they still regard it highly (see Chapter 8) since they have personally witnessed the extent of its power to cure other people in the community. Interaction here, though second-hand, is salient because everyone has witnessed the recovery of seriously ill people. This seems to differ from the type of relationship that lay Matsigenka have with the bird vuimpuiyo, whose soul is considered as powerful as those of jayapa and *kamarampi*, because it is the mentor or peer of the *seripigari*. However, most people rarely interact with this spirit. This fact may affect the valuation of vuimpuiyo by Tayakome residents, as I show in Chapter 8. Still, vuimpuiyo and the two plants' souls are perceived as similar in kind, and, in their human form, they conform to the social norms and moral principles that structure the life of ordinary Matsigenka. The souls of these beings live with their own families, and, pointed out by some, they conduct their lives as the Matsigenka do (e.g., hunting, building their houses, preparing manioc fields, making and drinking manioc beer). Human-like consciousness is also attributed to them, in the sense that their cognitive capacities are equivalent, or even superior to, those of Matsigenka. In this regard, the animistic conception of these three species seems to surpass a simple equivalence of interiority with humans, as suggested by Descola (1996; 2013) or VDC (1998; 2004). Because the kind of subjectivity or personhood attributed to them transcends the limits of common humanity (i.e., their extraordinary capacities to cure, and superior knowledge about the forest and the spiritual world), they are perceived as different from the common Matsigenka. As Tayakome members themselves assert: "tera noshaninka, ishaninka seripigari," or "it is not of my kind, it is of the same kind as the seripigari." This similarity with the *seripigari* is reified in the fact that, as some experts affirm, the *seripigari* can even have a parallel family among *vuimpuiyo* or *sangariite* in the spiritual world.

These conceptions of *kamarampi* and *jayapa* as "super-humans" – i.e., beings endowed with a kind of subjectivity that exceeds human capacities – differ from notions that

people in Tayakome have of other medicinal plants. For instance, the Matsigenka use a diverse array of species of *ivienkeki* or sedges (Cyprus sp.) for a wide variety of purposes, such as protecting infants from the dangers posed by evil spirits (e.g., kamatsirivienki against *kamatsirini*⁴⁵). In the format of the formal interview, where these varieties are considered generically as "*ivienkeki*"⁴⁶, there were two competing (emergent) ontologies: half of the interviewees (48%) conceived of *ivienkeki*'s soul as its curing ability, associating it more with agency (the capacity to act) than volition (the intention of performing that act) or any type of human-like subjectivity. The other half of participants attributed *ivienkeki*'s capacity to cure to the *seripigari* or *vuimpuiyo* (who originally gave these plants to the *seripigari*), who are the ultimate sources of these positive effects. This latter subgroup comprised those who are considered experts, as well as some of their relatives who are middle-aged men and women with knowledge similar (though not as extensive, they affirm) to that of the experts regarding Matsigenka metaphysics. For this subgroup of participants, then, rather than being plants endowed with subjectivity and agency, like *jayapa* and *kamarampi*, *ivienkeki* are rather considered to be a vehicle or passive transmitter of *vuimpuiyo*'s healing powers. The case of seri or tobacco is comparable, in the sense that it is considered agentless despite its medicinal power, since only 37% of the respondents attributed a soul to it, many of them belonging to the outlier subgroup mentioned above (the ones who said that every animal and plant has a soul). Likewise, *potsoti* or annatto, used to paint one's face in order to repel evil spirits, is

⁴⁵ Some of the various types of *ivienkeki* are used to guarantee that manioc (*sekatsi*) in the field grow large (*sekatsivienki*); to make it easier to cut a tree (*inchato*) (*inchatovienki*); to improve the fisherman/fisherwoman's "luck" or the hunter's aim when shooting particular game species (e.g., *oshetovienki* for *osheto* or spider monkeys); to decrease pain during childbirth (*ananiekivienki*, where *ananieki* means child); to repel evil spirits (e.g. *yairivienki* against *yairi*); or from animals or plants which can steal the child's soul if her parents eat or interact with them (e.g., *omanivienki* against *omani* or the large catfish *zúngaro*). Depending on the variety, *ivienkeki* bulbs are chewed, boiled, or squeezed to extract the juice.

⁴⁶ I asked people about the generic term *ivienkeki*. However, virtually all of the participants seemed to associate it with the varieties of *ivienkeki* that can protect infants from the harm of species capable of stealing their soul. This demonstrates, in particular, the saliency of the practice of dietary and behavioral restrictions during the couvade (explained in detail in the next chapter), and in general, the ever-present fear that people have regarding the good health of their children.

perceived to be soulless by virtually everyone (only 16% of the participants indicated that it has a soul, most of these belonging to the outlier subgroup). There are also a variety of wild herbs, generically called *inchashi* (but with specific names depending on the species), that are used for purposes similar to those of *ivienkeki*. Despite the fact that I did not include these in the interview list, based on informal discussion, these herbs are generally believed to be soulless and agentless.

In the case of malevolent species, as physically different as the bee *yairi* and the jaguar, Matsigenka also tend to reify their super-human capacities, that is, the spiritual harm that they can inflict, in the form of a Matsigenka person. This form seems to grant them human-like agency and intentionality, but not necessarily consciousness, at least not in the sense that Matsigenka conceive of human consciousness. In contrast to the entities that are similar to the *seripigari (described above)*, and, in particular, in the case of malign spirits like *yairi* (and other types of *kamagarini*, such as *jeroroni*, a small owl that is also considered to possess a malevolent soul), these evil beings possess neither human-like consciousness nor the ability to think, because they do not comport themselves according to the morals and ethical principles that regulate Matsigenka life. People commonly affirmed that *yairi* do not have the capacity to think because they are *ivegaga*, or evil, a position that is similar to the case of neighboring ethnic groups (discussed above), who are considered by some Tayakome members to be incapable of thinking because of their perceived bellicose nature.

These considerations seem to contrast with constructions of the jaguar's subjectivity (or subjectivities), and its manner of inflicting spiritual damage. In this case, more humanlike affects that involve interpersonal engagements and integration seem to be at play, at least in the particular context of interacting with elders and enabling their transformation into jaguars. In this regard, socialization is apparently the means for producing the emergence of *sameness* (of both internal humanity and external animality) by acquiring the perspective of

the other (Lima 1999), as suggested in other Amazonian societies (e.g., McCallum 1996; Vilaça 2002; Rival 2005). For the Matsigenka of Urubamba, Rosengren asserts that the Matsigenka body is constructed through socialization (Rosengren 2006a). Drawing from his analysis of Matsigenka myths, he suggests that humans are transformed into the animals with whom they conduct a shared activity, notably commensality (see next chapter), and their bodies transform into these animals' bodies as a result of this shared behavior. This contradicts Viveiros de Castro's conjectures that difference is established by nature (the body), and that the formation of bodies occurs *a priori* or independently of any interactions with other subjects. His focus is on the formation of subjects as participants in a social realm based solely on their shared interiority. While this author contemplates the possibility of metamorphosis, this seems to be only a characteristic of shamans, and, even in that case, bodily difference is permanent, and sameness is only realized in the spiritual world.

The conversion of people into jaguars seems to be different for the Matsigenka, as is evident from the accounts provided by Johan (Chapter 5) and Mateo (see above). According to my experience in Tayakome, people only share tobacco powder with those who they consider to be close family members or friends. Following Rosengarten's interpretation, it is possible that the very act of sharing the jaguar's tobacco and engaging with its soul at such an intimate level, transforms the elder Matsigenka into the jaguar's kind. As a consequence, the jaguar will not attack the person, because he has become its *ishaninka* (kinsman).

However, this are male accounts of how a jaguar conversion takes place, because hunting and going off alone into the forest are activities generally only conducted by men, as is the snorting of tobacco snuff. However, as seen in Sara's case (see above), both women and men can turn into jaguars. In addition, Johan and Mateo's accounts are based on what spiritual experts (Johan's grandfather who was a *seripigari*, and Mateo's father-in-law, and expert herbalist) narrated to them. As I mention above, Mercedes' version coincides more

closely with how most Tayakome residents explain the transformation of elders (and other people) into jaguars. The majority of residents, like Mercedes, do not mention sharing seri as a fundamental step in a person's transformation into a jaguar, but they do believe that this transformation occurs when the jaguar's soul enters the Matsigenka body, expressed with the verb ikiawitakeri (literally "it enters inside him"), reserved almost exclusively for the context of elderly people and jaguars. Thus, I argue that jaguar transformation is not a case of metamorphosis, at least not in the way suggested by Lima, Viveiros de Castro, and other perspectivists, since it is the jaguar's soul that invades and eventually replaces the elder's soul in her body. This is exemplified in the case of Salomon (see above), when people took precautions that they believe were pertinent to prevent the potential jaguar from rising out of the place where Salomon's body was buried (e.g., placing Salomon's body in a wooden box, instead of burying him directly in the ground). After his death, and during the last few days and weeks that Salomon was alive, his human soul was already in the sky, and his body was possessed by the jaguar's soul, as Ignacio and Gaby explained to me. Thus, while, for the Matsigenka, there is a certain fluidity between human and animal bodies and souls, there is no universal essence (i.e., the human soul) that facilitates this fluidity, as perspectivism suggests. The actor in this transformation is the jaguar, due to its spiritually-superior power that allows it to enter the bodies of humans, especially those of the old and weak, so that they become of the same kind as he. The mode of this transformation is more closely related to integration, also proposed by Rosengren in his analysis of Matsigenka myths (Rosengren 2006a), rather than predation, which may better characterize the type of interactions between people and *kamagarini* or demons. It is true that the elder-turned-jaguar is expected to subsequently attack and kill Matsigenka people. However, the form of the jaguar-elder interaction is not predatory, because it poses no harm to the elder human, as Johan (Chapter 5) mentions: it is not the intention of the jaguar to harm this person with whom he shared his

seri, but rather to subconsciously persuade him to become a jaguar. Because predation is not involved, the subjects in this interaction do not have different views of the same event, as perspectivism proposes (Viveiros de Castro 1998). Rather, the jaguar and the elder share a single perspective: The elder gains the jaguar's point of view. The latter sees itself as a human, but this does not make the elder, from the jaguar's perspective, look like the jaguar's prey. He or she is still a Matsigenka human elder, and is transformed into the new companion of the jaguar.

However, the jaguar's soul is only conceived in a human form when it interacts with elders whom it wants to convert into its peers. This intention is generally attributed to jaguars that are *ivegaga* or evil (see above). Other jaguars are still malign, but people in Tayakome tend not to think about their souls in human form. This may be the reason why nearly 30% of interviewees affirmed that jaguars do not have souls, despite the fact that almost everyone believes, according to my conversations with them, that elders transform into jaguars if they interact with them.

The case of the moon (and consequently, the sun) is different. Many people associated its soul with its human origin, but this origin differs from that of animals, which were transformed from humans to animals by the creator god Tasorintsi (see Chapter 5). The moon, in contrast, was a human in his own right, and a very powerful one. In this regard, the category that the moon occupies seems to be that of a deity, similar to Tasorintsi, because it is the creator of manioc, which is the most important staple of the Matsigenka diet (see Chapter 5). The fact that the moon is still the bearer of a soul, and consequently, a subject, is related to this godlike condition, despite the fact that most people do not believe that it conserved its human form. While only a few people asserted that the moon takes care of the Matsigenka, most people seem to regard it highly, and many refer to it as a powerful entity, which may be related to the essential role it occupies as a provider of light, like the sun, its daytime-

counterpart. The case of the moon coincides with accounts mentioned above in the sense that it illustrates the tendency of the Matsigenka to attribute a human form to beings that are considered powerful. It is a more direct way of conceiving of human-like volition and consciousness and projecting this onto other beings. However, these various human-like souls in the metaphysical world are not homogenous, and interactions with these human-like beings do not take place on a level playing field. In this manner, the Matsigenka, as human beings are subjected to the will or intentions of other "superior" entities, who may be benevolent or evil.

Interestingly, among those species that most people agreed were soulless (section 5, above) and, probably, subjectless, were those that are widely-used plants, such as bamboo (used to make arrow points) and the palm tree *tsigaro*. The case of tsigaro is remarkable because the fruits and heart of this palm tree are fundamental to the Matsigenka diet, and are conceived as the safest food that one can consume. Tsigaro is given to girls at menarche to ensure the proper formation of their bodies and their character (see Chapter 7). It is also given to sick people, or those who are recovering from a death of a family member. As such, tsigaro seems to have be conceptually stripped of any kind of subjectivity, making it agentless in the Matsigenka sense. That is, it cannot negatively affect people in any way. Domesticated plants were also considered soulless by nearly all Matsigenka, which may speak to the dependence of these crops on the Matsigenka's help for survival and reproduction, and, thus, their incapacity to affect the Matsigenka. This contrasts with the conceptualization of *jayapa* and *kamarampi*, which, despite the fact that they are also planted next to the houses of the people who know how to prepare them, they are perceived as subjects in their own right. These two plants also grow in the forest by themselves. However, people avoid these wild varieties because they are perceived to be dangerous (see Chapter 5).

Results of the formal interview, explained in the previous section, demonstrate that there is considerable disagreement among people, and the potential existence of simultaneous and conflicting ontologies, regarding many entities that populate the Matsigenka world. Some people in the community seem, to a greater extent than others, to conceive of certain animals and a few plants as subjects, with varying kinds of agency, intentionality and consciousness. Tree species to which souls are attributed are usually associated with food taboos, and will be discussed in more detail in the next chapter. The case of animals is more variable. For instance, for some people (mostly men older than 25 years) emphasized the resemblance of harpy eagle (pakitsa) to a Matsigenka. This seems to be an idealization of the species: the anthropomorphized bird is the epitome of the ideal Matsigenka hunter, based on the harpy eagle's excellent monkey-hunting skills, which, in turn, endows it with a humanity that is not in direct or spiritual contact with that of the common Matsigenka. The harpy eagle is admired, but there is no inversion of predator-prey perspective -harpy eagles, like humans, see spider monkeys as spider monkeys –, or even predator-predator perspective – harpy eagles do not see humans as their equals –, because there is no interaction. The contraposition of humans and *pakitsa* represents a partial analogy: they are equivalent because they hunt, and they hunt the same prey: spider monkeys. In this case, the subject (pakitsa) is not created through a direct interaction with it, but rather, through the projection of humanity and exceptional hunting qualities onto it. For most women, primarily those older than 25 years, such conceptions are maintained, although *pakitsa* is not necessarily conceived in the form of a Matsigenka man. What is rather more salient for women about this species is its potential capacity to harm children by carrying their souls away. This agency is reified through the attribution of a soul, but it is not necessarily associated with intentionality or human-like consciousness, which I discuss in more detail in the next Chapter. Such a latent power to harm children is possible because of this animal's extraordinary ability as a predator, and the

danger posed by *pakitsa* to children is a belief shared by most men as well. Therefore, it is evident that the varying dimensions of *pakitsa*'s "thingness" with which everyone would agree – i.e., having excellent hunting skills – elicits differentially salient notions of its capacity to affect the Matsigenka according to the particular, more immediate concerns that individuals may have. Thus, *pakitsa* elicits admiration in men as a model hunter to be emulated, and fear in women for its capacity to harm children.

This contrasts with the case of the tapir (kemari), which coincides, to a certain extent, with VDC's perspectivism. For the Matsigenka, not only does the tapir see its food as humanlike food (as recounted by Miriam, above), but it also sees the Matsigenka people themselves as its prey. Thus, the predator-prey roles are reversed, and the human-tapir sees the Matsigenka, its predators, as they see it, its prey in the form of tapirs. This conception of perspectivism (only applied by the Matsigenka to the case of tapir) may correspond to the concept of revenge that Izquierdo and colleagues (2008) advance, such that revenge is a major force governing Matsigenka interactions with non-human beings: "The notion that plant and animal spirit attacks are mostly motivated by revenge appears to imply a system of ecological checks and balances in which the role of predator and prey may become reversed as Nature settles its scores" (Izquierdo et al 2008:12). However, as I will suggest in the next chapter, with the exception of tapirs, Matsigenka conceptualize most relationships with potentially-harmful non-human beings more in terms of a notion of pervasive evenness, rather than a Western notion of vindictiveness involving conscious intentionality to reciprocate inflicted harm. In this case, fewer women than men asserted that tapirs have souls, despite the fact that many women explained to me, in contexts outside of the interview, that tapirs, as well as evil spirits (kamagarini), are responsible for people's snake bites, such that their arrows in the spiritual world take the form of snakes that bite people. It is possible that the women stated, during the interview, that tapirs do not have souls were using an

alternative notion of soul, different from that used by men and women who asserted that tapirs do have souls. Similar to the case of harpy eagle, I believe that these women may have equated the soul with the potential to harm children, and, because tapirs are considered to be harmless (see Chapter 7), they were also regarded as soulless.

This notion of soul seems to have been pervasively employed by women for other items on the interview list, such as for animals with a human origin (mostly game species, which are, for the most part, considered to be harmless for children). The saliency of species' potentially harmful effects on children coincides with one of the most pressing concerns of women living in a society with such strongly-defined gender roles. This supposition does not imply that men do not also worry about the wellbeing of their children. I simply suggest that, for them, as a result of their strongly gendered roles, other dimensions and characteristics of non-human beings are more salient, e.g., aspects of non-human subjects that may affect men's hunting abilities.

In contrast to the cases of harpy eagle and tapir, the majority of interviewees considered many species, especially game animals, to be soulless, which may be the result of Christian influence. This is telling in its divergence from perspectivism and other ethnographic accounts that emphasize the rituals practiced in some Amazonian societies to "desubjectify" their prey before consumption (e.g. Århem 1996, Reichel-Dolmatoff 1976). An important majority of Tayakome residents consider game animals to be soulless beings, because, despite having been humans in the past, they are not anymore. The ex-human status of these species and the underlying primordial similarity between them and humans speaks of a radically different conception in comparison to the natural hierarchy of Christian ontologies, where humans are created superior to other beings. Still, Matsigenka treatment of

these species (with the exceptions mentioned, e.g. tapir) aligns with Turner's critiques of VDC, in that these animals are seen as fundamentally different from humans.

Differences in people's answers may also reflect variation in individual backgrounds, personal interests, and aspirations. One the one hand, as mentioned in the previous section, a small subgroup of adults (four men and five women, ranging from ages 20 to ~50 years old) seem generally uninterested in the ontological condition of non-salient non-human beings, that is, those with whom they do not interact frequently. Some of the men in this group have spent many years of their youth traveling throughout different parts of the lowland region, visiting the closest cities, as well as the Urubamba region. As adults, they settled in Tayakome and raised their families. It is possible then, that such a difference in background compared to the majority of Tayakome residents contributed to the divergent answers that they provided during the interview, and also demonstrates less interest in this type of knowledge (i.e., whether animals and plants have souls or not). Others in this subgroup seemed to be simply uninterested in the topic, and while they cooperated with me and allowed me to interview them, they often suggested that I ask experts about certain animals and plants. These interviewees tend to hold beliefs about salient species (e.g., *jayapa*, *yairi*) that are generally similar to those of the rest of the community. However, they do not attribute much agency or subjectivity to non-salient entities (i.e., items with no widespread agreement) when I asked about them hypothetically. As such, their opinions regarding these species may be more variable than, say, those of people who are considered to be experts, and who seem to hold a more stable set of notions and knowledge due to the fact that they employ this knowledge more often in practice, and therefore think about it more frequently. This does not imply that experts' notions are static. Conceptions (and consequently ontologies) are constantly changing, and what I have registered here through this formal interview and qualitative ethnographic research may be only a specific, contingent, and transient instance of

peoples conceptualizations of their world. However, the fact that certain conceptions are more widely shared than others may be speak to their greater stability (slower rate of change) compared to more ephemeral conceptualizations held individually by some people.

One the other hand, as I mentioned in the previous section, another subgroup of younger adults (five women and four men ranging between 18 and 25 years old) seem to have responded differently than the majority as a result of a greater influence of foreign conceptions. Most members of this subgroup received formal education outside of Tayakome, attending high school (and some even elementary school) in colono towns, and may thus have received greater exposure to the ontologies of colonos and Dominican missionaries. As a result, members of this subgroup seem to value the customs and lifestyle that they observe outside of Tayakome more than the Matsigenka customs and lifestyle. Some of these younger interviewees are married in the community, but they have not yet built their own houses, nor have they made a manioc field. Many attempt to work seasonally in tourism around the Manu National Park buffer zone, and aspire to live in one of the colono towns located in this area. People that belong to this subgroup tended to conceive of most interview items as soulless, with the exception of those salient species that are similar to the seripigari and those that are evil, most likely because these interviewees believe that that such beings can directly affect their well-being, and they have witnessed or heard about the power of such species. Perhaps members of this subgroup also wanted to appear to me as different from the rest of the community, and therefore attempted to answer the questions as they thought a *colono* person would. However, it may be also the case that these younger interviewees are consciously doubt notions regarding the subjectivity of non-human beings, that are in such a sharp contrast with colono conceptions (e.g. similar to the opinions of the Manu National Park staffers accounted in Chapter 1), and they may, in fact, hold different beliefs now. This may be especially true of those who attended boarding schools run by the

Dominican mission, as these missionaries, according to my conversations with them, seem to hold negative stereotypes of the Matsigenka lifestyle (asserting, for instance, that Matsigenka people are lazy or "uncivilized" for not believing in the Catholic god, or simply holding a negative opinion of the subsistence activities that the Matsigenka practice). Not all young people in the community who also have been exposed to this kind of external influence hold these same conceptions and aspirations. Still, the changing notions of young people with regard to the environment and non-human beings remain to be more thoroughly explored in follow-up research.

In sum, I contend that conceptions regarding the nature of certain non-human entities are more widespread and stable than those held with regard to other beings or elements. This implies that people are alluding to the same type of interaction that they have with these beings, which is reified in a particular form of soul or a lack of soul. In contrast, other entities have more dimensions of interaction with the Matsigenka, and consequently, their ontological status reflects this variety of notions. Finally, idiosyncratic and external influences may further explain differences in conceptions of certain non-salient species or elements, providing evidence for the dynamic nature of alternative ontological configurations.

Conclusions

As shown above, *isire* or *osire* (the soul) signify different things for the Matsigenka of Tayakome, depending on the species to which they are attributed, as well as on both the intrinsic qualities and substantiated relationships between these beings and Matsigenka. For instance, the human-Matsigenka soul, as the place of thought that results in moral behavior characteristic of a proper Matsigenka, is associated with Matsigenka identity. In contrast, the souls of *seripigari*-like beings and malevolent *yairi* belong to categories of beings whose human-like souls are the substantiation of the spiritual power that allows them to interact

with the Matsigenka in different manners. Likewise, the notion of harpy eagle's soul as the epitome of a good Matsigenka hunter and an aid for human hunters, contrasts with the dimension of its soul conceived as its capacity to harm children, which is more salient among women. Direct spiritual engagement may be the key for more stable and widespread conceptions, as in the case of *kamarampi* and *yairi*. When the interaction with a non-human being directly involves its soul, and the interaction entail benefit (being cured) or risk (being harmed) then there is more agreement about the nature of its soul. When interaction is less frequent with a certain animal or plant (such as women's infrequent interaction with tapirs), and less is at stake in terms of good health and well-being, I detected less consensus.

In sum, the classification of non-human beings presented in this chapter, while not a stable Matsigenka taxonomy of entities, as it is the result of my inquiries regarding the particular context of the meanings of souls, does provide a general overview of the relationships among a variety of non-human subjects (similar to Bird-David [1999] and Gell [1998]'s remarks). Discussion of the full range and variety of the types of agency attributed to these entities is not yet possible, as those beings that are assigned souls because of their capacity to harm infants are discussed in the next chapter. Nevertheless, the evidence presented here suggests that the varying notions of souls, and their absence, reflect different types of consciousness and agency ascribed to subjects. For now, the attribution of a soul seems to be related to a subjectivity similar to personhood. However, as I discuss in the next chapter, personhood is not necessarily amenable to other types of subjectivities that do not possess human-like consciousness or anthropomorphic souls. In addition to variation among beings, in terms of ontological status, results of this formal interview also reveal considerable variation among the conceptions of community members, that occasionally appear to correspond with particular life histories and aspirations of specific subgroups of the Tayakome population.

At the same time, variation with regard to notions about non-human beings demonstrates, in a manner similar to the case of the Huaorani (Rival 2012), that perspectivism, as a theory, is not comprehensive enough to account for the variety of ways that the Matsigenka engage with animals, plants, and their environment. While there are a few cases of animals that are perceived by some Matsigenka in a manner consistent with this theory, perspectivism is not pervasive in people's relational conception of the world, and does not completely explain their conceptualization of non-human beings. Although some of these beings may have souls, and may be considered subjects (rather than objects or resources), they are not ontologically equivalent to humans. Furthermore, in contrast to both Lima's interpretation (Lima 1999), and to VDC's perspectivism in general, not all non-human beings that have souls are necessarily aware of their own subjectivity, as I will show in the next chapter for the case of species that can harm infants. Rather, possessing a soul entails the capacity for a particular type of agency, and occasionally, intentionality and consciousness. In addition, apart from predation, there are other forces, like socialization and integration (Rosengren 2006a), that permeate the engagements of the Matsigenka with other beings in their world.

I close this chapter by highlighting a point that I discuss in more detail in Chapter 7. One of the criticisms of VDC's perspectivism, pointed out above, is the epistemological representations of Western and Amerindian ways of knowing, which seem to confine each to artificial, diametrically-opposed extremes that nicely fit a structuralist model. For VDC, knowledge practiced in shamanism is the epitome of Amerindian epistemology, ignoring not only the fact that such knowledge differs from that held by non-experts (i.e., most people), but also variation in conceptions among different members of the community with regard to non-human beings and their engagements with them. I have shown in this chapter that the Matsigenka of Tayakome have different conceptualizations that may correspond with their

individual or group experiences, influences, and personal history. Consequently, such conceptualizations may not be as stable as VDC and other researchers assume they are. Therefore, distinct notions about non-human beings' subjectivities may be the result of the transmission of one's parents' beliefs, or the influence of experience with non-Matsigenka people (e.g. *colonos*, missionaries). In this regard, Hallowell's "personalistic theory of causation" is interesting in that it sheds light on explanations for the origin of the attribution of subject-like features to non-humans (Hallowell 1960). I discuss this theory in more detail in the next chapter, in order to explain how various *factishes* of non-human beings, in the context of food and behavioral restrictions, may arise and spread throughout the population of Tayakome.

CHAPTER 7: THE CONSTRUCTION OF SUBJECTS THROUGH FOOD AND BEHAVIORAL TABOOS

Despite the fact that meter-long giant armadillos, called *kinteroni* in Matsigenka⁴⁷, are sometimes heard wandering around Matsigenka houses at night, they are rarely seen and even less frequently caught in Tayakome. Thus, the hunt of a *kinteroni* by Saul (22) was an exceptional event in the community, and granted me the opportunity to witness how such a singular, complexly-perceived species is treated differently from other game species by the Matsigenka. For the Matsigenka of Tayakome, kinteroni and the smaller 40 cm-long etini, or nine-banded armadillo, are interchangeable in Matsigenka stories that give an account of their human origin and current condition. These stories assert that kinteroni was the brother-in-law and close friend of Tasorintsi, the Matsigenka man-like god who created the world at the beginning of time (see Chapter 5). In the present, Tasorintsi lives in otsitiakue inkite, the horizon (literally "where the sky begins"), or as explained to me in Tayakome, at the remote place on the where the sky meets the earth and the sun sets every day. His only companion is kinteroni, whom he long-ago converted into a giant armadillo, which, thanks to his powerful 10 cm claws, can swiftly travel via underground tunnels from *inkite* to where the Matsigenka live. Indeed, people often talk about having heard a kinteroni or an etini walking around their houses at night, which, they say, he does in order to care for the Matsigenka. Then, he returns to inkite to inform Tasorintsi about their well-being.

In addition, members of Tayakome also attribute this caring behavior to *kinteroni*'s own interests, since, as they say, he considers the Matsigenka *nosariegi*, roughly translated as "my grandchildren," and the Matsigenka reciprocally call him by this same kin-like term, *nosari*, to signify "my grandfather"⁴⁸. Snell asserts that, for the Matsigenka of Urubamba,

 ⁴⁷ See Appendix A for Spanish, English and scientific names of the species mentioned in the dissertation.
 ⁴⁸ The suffix *-egi* transforms the word *nosari* to its plural form.

nosari is used to refer to a distant relative of a previous generation, again, using the term in a reciprocal manner to mean "my grandfather" and "my grandchild" (Snell 2011:383). In my experience in Tayakome, people use different terms to refer to their human grandparents - *japai* for "my grandfather," and *mamani* for "my grandmother" - and grandchildren - also *japai* for "my grandson," and *nosharo* for "my granddaughter." Thus, despite the fact that the majority of people's first reaction regarding *etini* or *kinteroni* is to call it *nosaro*, these animals are not conceived as being equivalent to human-kin, nor does even such a figurative kin-like relationship prevent people from trying to hunt these species whenever they encounter them in the forest or near to their houses (see more in Chapter 8).

I learned of the killing of the kinteroni one afternoon when I visited Nestor and Magali, Saul's parents. Upon arriving at their house, I saw Saul, who had returned from the hunting trip in the morning, butchering the giant armadillo on top of a table generally used to store pots and other utensils for cooking. Saul had removed the kinteroni's nearly meter-long shell and organs, and was now using a knife to try to extract one of the 10cm-long claws from one of its feet. He greeted me as I approached. His hands were covered in blood and, in typical Matsigenka fashion, he was smiling and occasionally laughing at the difficulty of his task. Having never seen a giant armadillo in person before, I was astounded at the size and apparent strength of the animal, which I mentioned to Saul's mother, Magali (48), after seeing and greeting her in the kitchen. She was crouching under the roof of the wall-less room, behind Saul, frying the *kinteroni*'s ribs that Saul had already removed from the body. Magali is an expert cook, not only in Matsigenka cuisine, but also in highland dishes that are frequently prepared in Matsigenka settlements in the Urubamba region of the Department of Cusco, where she grew up. As such, she was preparing the ribs in the style that pork is fried in the highlands and other parts of Peru to make *chicharron*, that is, deep-frying the meat in the animal's own fat. Magali laughed at my astonishment at the impressive size of the animal,

and then told me that once Saul was finished cutting up the armadillo, they would smoke the rest of the body, mostly limbs and the head, over the fire, a common Matsigenka cooking technique to preserve meat for several days.

While I was chatting with Saul and Magali, Saul's father, Nestor (55), came up from the river port, a ten-minute walk from the house. He recounted to me how he had carried the armadillo from the boat at the river all the way up to the house earlier in the day when his son arrived. "None of those young men could do it," he stated proudly, referring to the men who went on the fishing/hunting trip, and emphasizing the heaviness of such a large animal (approximately 40 kg). "I was like this all the time" said Nestor while imitating his posture when carrying the dead armadillo on his back, tightly pursing his lips, emphasizing the fact that he conducted the task in silence during the 10-minute walk from the river to the house. "You cannot talk" he explained to me, and then he said he placed the kinteroni carefully on the table. I asked him why he had to act like that with the kinteroni, and he responded that one must be cautious with it, because it is a very strong animal and, even when dead, has the power to *iripuigatake*, or *cutipar* children. *Cutipar* is the Spanish version of the Quechua term *kutipay*, which means "to respond" (Academia Mayor de la Lengua Quechua 2005). Cutipar is commonly used in the Peruvian highlands and lowlands to refer to the harm that a spirit or animal inflicts on small children after coming into any type of contact with it. The Matsigenka word for this verb is *puigatagantsi*, which also means "to pay back" or "to return something in the same manner" (see below for a discussion about non-human revenge and harming children). Indeed, as also explained in the previous chapter, interacting with kinteroni (giant armadillo) or with etini (armadillo), is a source of concern for the Matsigenka of Tayakome, especially if the people handling these animals have infant children at home.

This fear of harm to children became more apparent to me when I shared the *kinteroni chicharron* that Magali had given me with other families in Tayakome. Like many people in

Tayakome, Magali shares any food that she has whenever someone comes visiting. I was certainly grateful to her when she gave me some pieces of fried kinteroni to bring home, as I had never eaten it before. On my way home, I met my neighbors, Aurelio (~48) and his wife Nidia (39), followed by their 18-year-old daughter Eva, who was carrying her 7-month-old baby girl. I told them about the armadillo at Magali's house and gave them some of the chicharron to take home. Later that night, I ate the rest with Jacinta (~45) and her family: her husband Ignacio (~45), her two younger boys, and one of their grown daughters who lives with them, Gaby (22), and her five-year-old son. To accompany the fried armadillo meat, Jacinta and Gaby brought boiled manioc to the table, an essential component of Matsigenka meals. All of us were standing by the table (men at one extreme and women at the other), chatting and enjoying the dark meat, which had a strong but pleasant flavor. While we were eating, Jacinta's oldest daughter, Micaela (25), and her husband, Rufino (33), who also live in Jacinta's clan, came back from fishing. We invited them to join us, but Micaela excused herself and her husband, saying that they were afraid that their three-year-old daughter, Yadira, would be harmed if they (Yadira's parents) ate the armadillo. They had not caught any fish, so they probably ate only manioc that night. I was struck by the diligence with which Micaela and Rufino, undoubtedly hungry, complied with this dietary restriction, one of the numerous Matsigenka food taboos, in order to protect their daughter. I asked Jacinta and Gaby if it was really necessary for Micaela and Rufino to forego the armadillo meat. Both women kept eating, and then Gaby suggested that they just wanted to be careful. She added that our neighbor Eva's infant daughter (whom I had passed earlier in the day on the way back from Magali's house) was skinny and pale now because Eva's husband, Juvenal, had eaten *etini*, the more common, smaller species of armadillo, a while ago (before my visit to Tayakome). "You see that Eva's baby is still weak and small, even though Juvenal ate etini

many months ago. It is bad to eat *kinteroni*⁴⁹ if you have a baby, it can kill her," Gaby stated. Previously, I had noticed that Eva's baby was, in fact, smaller, paler, and less energetic than other infants of her age in Tayakome. After hearing this, I wondered if Eva had actually eaten the *kinteroni* that I gave her and her parents, Aurelio and Nidia, on the trail that afternoon. My question was answered a few days later, when I learned that, given that both Eva and Nidia have infants, the only person in that household who actually ate the *kinteroni* that I shared with them was Eva's teenage sister, Valentina.

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Varying modes of subjectivity attributed to non-human beings are evident in the context of food and behavioral taboos practiced by the Matsigenka, that, in turn, establish particular types of social relations between the Matsigenka people of Tayakome and the animals and plants of the forest. Because consumption is a context for human interaction with these beings, their perceived agency is partially constructed according to their capacity to affect humans, often negatively. The practice of consciously refraining from eating or interacting with these species, known in Matsigenka as *titagantsi*, serves as a mechanism to avoid harm to humans. In this chapter, I analyze dietary and behavioral restrictions among the members of Tayakome, in order to further elucidate Matsigenka conceptualizations of these species, and the world that surrounds them. Below, I first present and discuss relevant theories from the literature that attempt to explain the existence of food taboos. Next, I provide a detailed discussion of general and specific dietary restrictions in Tayakome, that is, general, permanent taboos practiced by the entire population, and specific taboos observed by a subgroup of people during a particular period of time or life stage. For specific taboos, I focus primarily on the couvade, which entails behavioral and dietary restrictions that must be

⁴⁹ As mentioned before, in Tayakome people use the terms *etini* or *kinteroni* interchangeably. Only when asked specifically what is the difference between the terms, or when referring in Spanish to their different names, do Matsigenka make a distinction between the terms (*etini* for the smaller species of armadillo, and *kinteroni* for giant armadillo).

carried out by the parents of a newborn child, because this is a context where people's beliefs and concerns are especially salient regarding the agency of particular animals and plants. I complement the discussion of couvade taboos with the results of a formal interview that I conducted with 53 adults, in which I inquired about the apparent relationship between being a taboo and possessing a soul in 47 species of animals and plants. Based on these results, and on ethnographic accounts of other specific and general dietary restrictions, the fundamental premise that I wish to highlight is that, for the Matsigenka, the cosmos is populated by a variety of beings with different types of agency, subjectivity, and capacity to harm, thereby confounding any simple general rule linking dietary and behavioral restrictions to Matsigenka conceptions of the environment. As I will illustrate and clarify below, some of these particular conceptions of animals and plants do not necessarily correspond to Matsigenka mythical representations, or to ideas that have been transmitted between individuals. In the case of certain species, ideas regarding their nature appear to have been developed inductively, through an individual's experience interacting with them. Such ideas then appear to have been adopted by others, after first being legitimized by the influential figure of the seripigari or Matsigenka healer.

Materialist and Evolutionary Approaches to Behavioral Taboos

An extensive variety of epistemological approaches have been used to explore the reasons behind the existence of dietary and behavioral restrictions in human societies. Materialists, including human behavioral ecologists, generally interpret such restrictions as behavioral adaptations resulting in fitness advantages. Marvin Harris focused on the apparently adaptive function of cultural practices stemming from the religious belief among Hindus peasants that cows are sacred and must not be eaten (Harris 1974). He claims that the Hindu taboo against eating beef is adaptive in that the long-term utility of the cow as a source

of resources – e.g., milk, fuel – and services – e.g., plowing - outweighs their utility as a source of meat in rural Indian society. Similarly, Eric Ross (1978) takes an adaptationist approach by using ecological factors to explain general food taboos, that is, those that are relatively stable and practiced by the entire population, which contrasts with specific dietary restrictions, that are only practiced during a period of time by a particular segment of the population (see more in Basso 1973; and Rea 1981). Ross critiqued symbolist and structuralist explanations, what he called "mentalist" approaches, for the existence of such taboos because, in his opinion, their focus on people's beliefs and worldviews is not sufficient to explain how environmental constraints guide specific conduct, such as dietary restrictions. Claiming instead that "patterns of behavior... lie among non-cultural factors" (1978:1), he affirmed that food restrictions are based on resource production and the evaluation of costs and benefits from their exploitation. Based on the premise that protein is a valuable and scarce resource in the Amazon region, Ross postulates that, in riverine societies where fishing is more efficient than hunting as a protein acquisition technique, game animals are a less important component of the diet. Focusing on general taboos, he concludes that animals are more prone to be considered food taboos, as their exclusion from the diet does not greatly affect people's caloric or protein intake. Conversely, Ross predicts that mobile (e.g., nomadic) Amazonian societies, who rely more heavily on hunting than fishing, will manifest more fish-related than game animal-related food taboos, as fish are a less important component of the diet (Ross 1978). However, the direction of causation between food taboos and diet is problematic in Ross's argument. For instance, Amazonian groups may choose to be nomadic rather than riverine precisely because they must rely on game animals for food, given that most fish are taboo for them.

A similar ecological approach to explain food taboos is taken by Begossi et al. (2004) in their research on dietary restrictions for fish among riverine Caboclo communities in the

Brazilian Amazon and Caiçaras communities in the Atlantic coastal forest. The researchers claim to approach the study of taboos from an *etic* perspective (i.e., that of an "objective" researcher) rather than an *emic* perspective (i.e., that of the people under study), which exemplifies ontologists' qualms about academic approaches to the study human-environment relations, where people's perceptions must be (and are capable of being) translated into objective, scientific terms in order to explain the "real" mechanisms by which the world functions. In this manner, Begossi and colleagues affirm that their results indicate that species in the highest trophic levels (i.e., top predators) are viewed as species which ill people must refrain from eating. They interpret this taboo as a behavioral adaptation which prevents ill people from ingesting toxic substances which typically accumulate in the bodies of predatory species. An analogous example from our own society would be proscriptions on eating excessive amounts of tuna in order to avoid mercury which tends to accumulate in the meat of this oceanic predator (Storelli et al. 2010; Okyere, Voegborlo, and Agorku 2015).

In a similar vein, the research of Henrich and Henrich (2010) on traditional Fijian fish taboos was aimed at demonstrating that a cultural evolutionary approach can explain both adaptive and maladaptive customs. They discovered that pregnant and lactating women in some Fijian villages were prohibited from eating toxic fish species (which are commonly eaten in small amounts by most people), and that this is likely to considerably decrease the probability of fish poisoning among the fetuses and lactating children of these women. Henrich and Henrich determined that knowledge of these taboos was transmitted to women through the advice of prestigious figures, such as their mothers and older, wise women. In addition, the authors determined that the Fijian categorization of octopus explains dietary restrictions towards it. Since their Fijian interviewees could not consistently associate and classify octopus with other animals common in their environment, this species is considered "aberrant," and consequently, taboo. As a result, despite the fact that octopus is harmless as a

food, this Fijian conception leads to an apparently maladaptive behavior (i.e., forgoing a perfectly good food resource). It not clear, however, if Fijians actually make this direct link between being a "weird" species and considering it inedible, since researchers did not ask Fijians for the reasons they do not consume octopus, overlooking the role of people's conceptions of animals in this presumably maladaptive practice.

Symbolic Interpretations and a Multi-Response to Ross's Thesis

In contrast to these behavioralist and ecological approaches, another prolific and diverse body of research has addressed the existence of food and behavioral restrictions by considering them to be the result of cultural dispositions, using what Ross would call a "mentalist approach" (Ross 1978). For instance, following Durkheim's notion of religion as an encompassing force for social cohesion, Mary Douglas' work on the Book of Leviticus (Douglas 1966) suggests that religious beliefs are formulated as a code of restrictions or rules that provide a structure for the patterns of thought of a society. Therefore, argues Douglas, dietary prohibitions and ideas of uncleanness as expressed in the Hebrew Bible are directly related to norms in the Hebrew worldview. If Leviticus establishes taboos against eating pigs and scale-less fish (e.g., catfish), it is because these animals are considered abominations or anomalies since they do not fit into categories of animals considered to be virtuous.

Taking a similar symbolic approach to the understanding of food taboos, and addressing a variety of both general and specific food restrictions, Kensinger and Kracke's edited volume (originally an American Anthropological Association conference panel) was a reaction to Ross's proposal (Ross 1978), described above. This volume addresses the "cultural" aspect of food taboos, with a focus on lowland South American societies, and includes a diverse set of responses to Ross' "materialist" approach (Kensinger and Kracke 1981). While not completely dismissing Ross' position, a number of these chapters affirm

that certain aspects of dietary restrictions can only be satisfactorily addressed using a symbolic approach, this is the case of Dumont and Hurlish (1981), who propose a continuum of taboos between those that exist purely "for ecological reasons," and those that exist purely "for symbolical reasons." Urban (1981), for his part, holds that taboos organize social life because they serve as indices for the categorical status (e.g. ethnicity, gender, age-class, or moiety) of individuals in a society, as well as for liminal transitions between some of these statuses. Like him, other authors propose different ethno-taxonomies for animals, and, occasionally, for plants, based on the different symbolic conceptions of such species held by the particular Amazonian group of study. For example, Kensinger (1981), working among the Cashinahua of Peru, proposes that taboos exist as rules that emerge from the interactions between animals and humans belonging to particular categories, during a specific stage of the Cashinahua person's life cycle. This author states that the restrictions imposed during the couvade, that is, upon the fathers of infants, are the most numerous in the life cycle of a Cashinahua person. This is because a man, having to spend a large proportion of his time in the forest, is more likely to encounter, interact with, and offend spirits that can potentially harm his child, who is still in a vulnerable stage of life. Thus, for the Cashinahua, taboos serve to maintain good relations with spirits, and thereby contribute to the well-being of this group of Amazonians.

Other authors of this volume criticize Ross for arguing that symbolist and structuralist approaches are incompatible with, or opposed to, his own, when, in fact, they may be rather complementary (Menget 1981; K. I. Taylor 1981). In particular, Taylor proposes a "unified theory" for understanding dietary restrictions, using the case of the Sanumá from the border of Brazil and Venezuela. This author addresses the same ethnographic material from different analytical perspectives, explaining that food taboos: 1) serve the purpose of guaranteeing the availability of protein for the youngest and oldest segments of the Sanumá population; 2)

constitute a "symbolic classification" of the members of the Sanumá society; and 3) coincide with *emic* conceptualizations of certain illnesses, in that people make a metaphorical comparison between the taboo animal and the illness in question.

More recently, Viveiros de Castro (1998, 2005) has interpreted dietary restrictions in Amazonian indigenous societies under his proposed framework of perspectivism, using descriptions from an array of Amerindian ethnographies. He suggests that, among Amerindian societies, humans and certain non-human beings (mostly animals and forest spirits) are perceived as ontologically similar because they possess a human soul. In the case of animals, this author asserts, having a soul is a remnant of their primordial human state, which has subsequently been lost. Therefore, dietary restrictions are instituted in order to prevent cannibalism (i.e., beings with a human essence eating each other). If such prohibitions are broken, the vengeful soul of the animal inflicts illness, and even death, upon the offender (Viveiros de Castro 2004). Consequently, according to this interpretation, some societies, such as the Tucano of the Colombian Amazon (Århem 1996), have developed ritual strategies to "desubjectify" prey animals so that humans can eat them without fear of spiritual retaliation.

The Soul, the Body, and the Couvade

The analysis of food taboos and other restrictions followed by both parents of a newborn child, known as couvade⁵⁰, has been widely studied in Amazonia. Using ethnographic accounts of this region, Rivière (1974) questions the treatment that classical anthropologists gave to the couvade as a specific social institution and rite of passage,

⁵⁰ This term was originally coined by Tylor (1865), and referred solely to the restrictions followed by fathers of newborn children. In more recent treatments of this phenomena, other scholars affirm that, in their experience, such restrictions are also applied to mothers as well (Rivière 1974, Rival 2005).

suggesting that it is rather part of a larger phenomenon. In the case of the Waiwai Caribspeakers of Brazil, Rivière explains the purpose of couvade taboos in this manner:

The soul of the newborn child is weak and not properly fixed in the child. The soul is free to leave the child and wander about with the child's parents; in these wanderings the child's soul is very vulnerable to spiritual danger. Furthermore, because of the close spiritual tie between the child and the parents, a spiritual danger acting on the latter will affect the former; thus the limitations on the diet and activities of the parents. (Rivière 1974:429).

He further asserts, "[t]he problem of the duality of man may well be a universal one, and it is certainly one that is approached in very many different ways... Then it is possible to have great variation in the ideas about when exactly the soul and the body are thought of as coming together, or beginning to come together. Thus the pre-natal couvade suggests the idea that the process of combining body and soul starts before birth, in the fetus" (Rivière 1974:431). His interpretation of the couvade addresses the broader issue of the duality of the human body and soul, by emphasizing the hazards entailed in the development of both the spiritual and the physical parts of the child. The couvade, then, according to Rivière, is a means through which people come to terms with the origin of a child's soul, and its incorporation into the body.

Later research focused on the transformability of the body (see Seeger, Da Matta, and Viveiros de Castro 1979; E. Viveiros de Castro 1979; 1998), provoked a renewed interest in food restrictions as a factor that influences this potential somatic conversion (Rival 2005). This is evident in Vilaça's (2002) discussion of dietary taboos during the couvade in the context of the limits of kinship. Following Viveiros de Castro's multinaturalism, Vilaça claims that kinship is established on top of a prevailing default alterity, "an undifferentiated universe of subjectivities" (Vilaça 2002:361), which include not only other humans, but also animals. The production of kinship goes beyond sociality, and, rather, is intrinsically related to the social construction of the body. This includes not only the fabrication of humanity, for instance, through commensality, but also the practice of food restrictions. Vilaça affirms that,

since newborns' bodies (and therefore, their identities) are still in the process of "fabrication," the couvade is performed for the purpose of differentiating them from nonhuman beings, i.e., through construction of their human bodies. Other authors agree with this statement, but they also emphasize the danger posed to children by spiritual attacks from animals that the parents come into contact with, in accord with Rivière's thesis (e.g., Goldman 2004; McCallum 1996; 2001). According to McCallum (1996; 2001), the Cashinahua believe that once a woman is pregnant, the baby can be attacked by the spirits of certain animals that the father hunts and that she consumes. If this occurs, the baby will come to resemble the animal whose spirit attacked it. This corruption during the formation of the child's body, resulting from her susceptibility to the effects of food consumed by parents, continues after birth. However, then, it is controlled by bathing the child with medicinal plants.

A similar thesis is proposed by Rival for the Huaorani. She affirms that the couvade, "far from being a father's rite, should be understood as a rite of co-parenthood through which both parents actively involve themselves in the protection of their newborn, so as to ensure its fast and vigorous growth" (Rival 2005:292). Rival further asserts that the couvade is practiced in order to ensure the inclusion of the parents into the longhouse they inhabit, most importantly that of the father, since the Huaorani are uxorilocal. She argues that "the danger is that the infant's soul, like all soul matter, comes from, and belongs to, the cosmic world. Consequently, it is not sufficiently contained inside the nascent and unfinished human body" (Rival 2005:303). Like Rivière, Rival asserts that the couvade is associated with the creation of body and soul, and particularly, the fragile bond that exists between the body and the soul of infants. This bond develops differently according to gender, such that males are more prone than females to detachment of the soul from the body as they grow. Rival doubts that Vilaça's claim, i.e., that human children can potentially develop animal features if the

couvade is not practiced, can be generalized to other Amazonian societies. Rather, she prefers to emphasize the importance of the couvade as "centrally concerned with the spiritual bond between parents and child, and, more generally, the nature and fate of spiritual matter" (Rival 2005:294). She further affirms that this interpretation coincides with Amazonian conceptualizations of "spirits and bodies as independent modes of being, which occupy different ontological planes" (Rival 2005:302).

Accounting for Changing Perceptions of Non-Human Beings

Analysis of dietary restrictions from the "materialist," ecological or evolutionary approaches is compelling and valuable as a starting point for testing specific hypotheses regarding food taboos as adaptive behavior. Nevertheless, such work often overlooks the fact that, in many cases, taboos may develop as "maladaptive" practices – as proposed by Henrich and Henrich (2010) for Fijian octopus -, neglecting the decision-making processes of the people in the societies under study. Similar to the economic theories regarding the use of common pool resources mentioned in Chapter 2, much of this body of research on food taboos assumes that the Western conceptualization of animals and plants as objects, stripped of any agency, is universal. As the studies that take a "mentalist" or symbolic perspective illustrate, the consumption of food is not necessarily related in a straightforward way to the maximization of calories or minimization of toxins, and edible animals and plants are not necessarily objectified of as "resources." Rather, the animals and plants that give rise to these restrictions are often perceived as agents or spirit-possessing entities that are capable of affecting both the souls and the bodies of humans, and the social interactions that people maintain with these beings exert a fundamental influence over conceptions of what constitutes food and when it may be safely consumed. Therefore, it is essential to consider the particular conceptions that people have of these beings, as well as a more general notion

of how such beings fit into a broader universe, in order to explain a society's dietary restrictions in particular, and people's environmental behavior in general.

It is important to mention that, in most of the theoretical orientations described above, i.e., materialist/evolutionist as well as symbolic/ontological, anthropologists assume that all members of the group under study possesses a single, coherent, and unchanging conception of their world, in which food restrictions represent an instantiation of the institutions that maintain the organization of such a world. There is almost never a concerted attempt to understand how these practices and beliefs came to be held initially by individuals, and how they eventually spread throughout the society. Some of the authors mentioned above, admittedly, did not have this objective (e.g. Urban 1981). Still, it may be the case that idiosyncratic beliefs and practical concerns, rather than widely-held spiritual or religious ideals (a proposition advanced by White 1967), could be guiding people environmental behavior in some cases (Tuan 1970; Vayda and Walters 1999; Vayda 2009), which includes dietary practices, and contributing to the origin and spread of such cultural practices. Therefore, understanding the dynamics of knowledge, and, relatedly, exploring the distribution of beliefs within a social group, is essential to elucidate the relationships between such beliefs, processes of environmental decision-making, and resulting behavior.

In this chapter, I argue that the reasons underlying the practice of food and behavioral restrictions in Tayakome are varied, as are the degrees of agency of the non-human beings to which such restrictions apply. In some instances, taboos correspond to the ontological status of the non-human being with which people interact, and the power of these species to harm the Matsigenka. In other cases, however, the species involved have a passive role, and it is the acquisition of their characteristics (physical or behavioral) that the taboos seek to prevent. This is especially the case when taboos are practiced in liminal contexts (e.g., by girls at menarche), which are vulnerable life stages when the construction of a "proper" humanity is

at stake. Therefore, Matsigenka conceptions of particular animals and plants (e.g., their degree of agency), and decisions regarding how to interact with them, are context-dependent.

In addition, while it is difficult to evaluate hypotheses regarding the origins of currently-practiced food taboos, I show that the adoption of some taboos seems to be related to individuals' direct experience, and the explanatory reasoning and (self)conceptualization of the event, after it took place. Thus, the origin and spread of certain taboos may result from such *a posteriori* justification, which may then be legitimized by the authority of an expert, such as a Matsigenka healer or *seripigari*. Below, I describe several examples of food and other behavioral restrictions practiced in Tayakome, followed by a more detailed elaboration of this thesis.

"Not Tasty" Animals: Predators, Evil Beings and Other General Taboos

General food taboos, the restrictions practiced permanently by the majority of Tayakome residents, involve predators and other animals known (or thought) to be unappetizing and/or to possess evil souls. Some in the community also affirm that benevolent spirits, if consumed or hurt, may also unintentionally pay back the damage to the person that inflicted it in the first place. However, as I will show below, this there is no consensus regarding this belief.

Among those predators and animals perceived as unappetizing, restrictions are applied to jaguars, snakes, anteaters, giant river otters, tayras, harpy eagles, and sloths. Similar taboos have previously been described for the Matsigenka in this and other regions (Baer 2004; Izquierdo, Johnson, and Shepard 2008; Shepard 1999a), generally concluding that the strong odors of these species is the reason that they are considered taboos (Baer 1994, Izquierdo et al. 2008, Shepard 2002a). In Tayakome, the most common reason that people gave me for not eating these species was that they are "*tera poshini*" or not tasty. Kensinger

(1981:161), after receiving similar responses from his Cashinahua informants, questioned their explanations regarding the bad taste of certain animals. He suggests that this could not be the real reason that they are considered inedible, "since few, if any, informants have ever tasted these items," and he, instead, grants more importance to "cosmological explanations," defined as the set of rules that govern relationships in the structure of the Cashinahua world. In the Matsigenka case, both personal experience and socially-held ideas contribute to such taboos. A few people mentioned to me that they have actually tasted some of these taboo animals, such as sloths or caimans, or that they know of somebody else who had eaten them and affirmed that they were unappetizing. However, on some occasions that Matsigenka interviewees asserted that an animal was not tasty, they laughed at the ridiculousness of the proposition of eating it, or were genuinely disgusted at the thought. The very idea of consuming these species goes beyond the fact that they may or may not taste bad, since these species are not traditionally eaten. These explanations resemble the repulsion that some Westerners feel for consuming dogs, horses, or insects, precisely because it is not common to do so due to the ontological status that these species have in Western societies. Thus, animals that are pets are at times treated as family, and consequently perceived as inedible, or certain species of animals (e.g., insects) are simply traditionally not conceived of as food. Similarly, a number of Tayakome members said that some species are not tasty, partially due to the fact that they are not commonly eaten, which is the case for mustelids, such as the giant-river otter and the tayra.

Others species are not conceived of as food because they are evil. This is the case for jaguars, pumas, and vipers, that are considered to be the principal animal threats to humans in Tayakome. As mentioned in the previous chapter, despite their former humanity, jaguars are considered to be evil spirits, and people is constantly afraid of meeting them in the forest or that they approach the community. The generalized fear that the Matsigenka have for jaguars

also influences their repulsion to its meat. In contrast to the harpy eagle, the hunting skills of the jaguar are attributed to its wicked nature. Therefore, dead jaguars are always burned and their meat is never eaten (see Chapter 6).

The deer (maniro) (according to some, the red-brocket deer, and to others, the black/gray deer) is another example of an animal that is usually not consumed because it is believed to harm people due to its evil spirit. Deer tricks people who are alone in the forest into having sexual intercourse, by presenting itself to them in the form of their spouse. Some days after the sexual encounter takes place, when the person come to realize that they were tricked, he or she dies. On many occasions, people mentioned to me that skinny deer, rather than plump deer, are the demons because their thinner bodies resemble a human being. Thus, skinny deer are not hunted or eaten by most people in Tayakome. On the contrary, deer that are more robust and fatter are generally thought of as harmless and are consumed. I did in fact see leather taken from the hide of a deer that was shot and eaten by the members of a household in Tayakome. This had been, apparently, a fat deer. Thus, whether a particular deer is viewed as taboo or not appears to be contingent on its health, and consequent likelihood of being a demon. Jeroroni, a small owl that occasionally visits Matsigenka homes at night, is another species that, like deer, is considered to be an evil spirit, and is therefore not consumed. While not all the species of owls that inhabit the forests of Manu are as saliently evil as *jeroroni*, none of them are eaten.

While there is overall consensus about the status of evil species as general taboos, this is not the case for powerful benign beings with human-like souls, like the *vuimpuiyo* (screaming piha) or *tsonkiri* (hummingbird) (see Chapter 6). Some experts (as defined in the previous chapter) and non-experts insist that *tsonkiri*, which are metamorphosed shamans or *seripigari*, should not be eaten, claiming that "if you eat him, he will bewitch you (*ichonteatakempi*), and you will get sick." However, other people, mostly non-experts, assert

that these birds are good to eat. As Mercedes affirms: "You can eat hummingbirds, they are tasty, and children kill them." Others hold an intermediate position, affirming that there are *tsonkiri* that are *seripigari* and others that are not, and only the latter can be eaten without any repercussions. Similar variation of conceptions exists regarding *vuimpuiyo*, who are manifestations of forest spirits that protect the Matsigenka.

As mentioned in the previous chapter, the Matsigenka classify these evil and benevolent beings in a super-human ontological category, that is, being human-like subjects that are not properly humans – i.e. they are similar (*cañotaka matsigenka*), but not of the same kind (*tera ishaninka*). Most Tayakome residents reify this powerful condition associating such species with possession of a soul, which, consequently, enables them to harm people that consume them. If they are evil, they have malign intentions, and the harm they inflict on people is intentional; if they are benevolent, according to some people, the harm that they inflict is involuntary.

Cannibalism and General Taboos

Based on his work among Matsigenka communities of the Urubamba region in the 1960s and 1970s, Baer affirms that the Matsigenka think of themselves as hunters (Baer 2004). Therefore, in accord with Viveiros de Castro's theory that food taboos are instituted in order to avoid cannibalism among entities with similar essence or soul (Viveiros de Castro 1998, 2004), Baer argues that the Matsigenka avoid eating animals that they also consider to be hunters. This includes the harpy eagle and jaguar, two of the largest and most impressive predators in the Matsigenka environment. However, it is not clear from Baer's account whether the Matsigenka actually affirm that this taboo is based on a perceived intrinsic similarity between humans and animal hunters, or whether this Baer's interpretation of the existence of this general taboos.

In Tayakome, I did not find support for the cannibalism-avoidance explanation for general taboos. The case of the harpy eagle, which could fit the analogy proposed by Baer, is telling. Many people in the community believe that the harpy eagle (a specialized predator of large monkeys) was a Matsigenka hunter in a remote past, and people invoke its excellent hunting abilities by consuming special herbs, one of them a sage named for this eagle, pakitsavienki and rubbing parts of its body (in particular its talons) against their hands and bows to improve their aim. The majority of people in Tayakome indeed mentioned that they consider the meat of the harpy eagle to be unappetizing. However, some men (mostly those older than 60) told me that the harpy eagle can be eaten. Some of them have tried it before and liked its taste. One of these men, Facundo, who was regarded in the community as a knowledgeable herbalist and healer, and an expert storyteller of animal origin stories (he passed away in 2015), explained to me that the person who eats the harpy eagle acquires its hunting abilities and its desire to hunt. For this reason, Facundo affirmed, women are not allowed to eat it, lest they acquire a desire to go to the forest to hunt, which is perceived as a man's task. However, there is no cannibalistic association with eating this bird, or any other animal that is considered a predator, for that matter. The general taboos that exist against other predators, such as jaguars, vipers and mustelids, are related to their spiritual power, their repulsion towards these animals due to their bad taste, or the generalized custom of not consuming certain species, as explained above.

These results not only contradict the thesis of Baer and VDC for the existence of food restrictions to avoid metaphysical cannibalism, but serves as evidence demonstrating how the latter contradicts his own premise that it is a mistake to employ Western concepts (ontology) when interpreting the beliefs of non-Western societies (a contradiction also evident in the work of other ontologists, such as Henare et al [2007], see Chapter 2). In this manner, VDC assumes that all Amerindians must consider cannibalism to include the consumption of

animals that are formerly-humans, without questioning how the notion of cannibalism is understood among these societies (i.e., is it always considered to be bad?), or even if it exists at all. The case of the Guaja, as recounted by Cormier (2003b), is telling in that it shows how the existence of kin relations between these people and their pet monkeys does not prevent the former from consuming the latter. The author asserts: "an important feature of their symbolic cannibalism involves preferential consumption of forms of life that are considered to be partial consanguines." (Cormier 2003b:88). The Guaja may just be an exception to the "rule" proposed by VDC, but this is, in any case, still an empirical question.

The Matsigenka Couvade as Specific Taboos

My initial interest in understanding the nature of dietary restrictions in Tayakome grew out of my attempts to elucidate the meaning of the soul for the Matsigenka. It was a common occurrence that whenever I asked someone in the community if certain animals or plants had a soul - during the formal structured interview described in the previous chapter, as well as during informal conversations - the answer was "yes, because it can harm children (*iripuigatake*) and take their souls away (*iramanakeri isire ananieki*)." Thus, despite the fact that a variety of dietary and behavioral restrictions involving certain animals and plants are widely practiced in different contexts by different people in the community, specific restrictions during the period of the couvade – the restrictions followed by the parents of newborn babies in order to protect them (see above) – are the most salient specific-taboos in Tayakome. Virtually all members of the community believe that when the parents of an infant eat certain species of animals, or the fruits of certain large trees, or injure such beings in any manner, these species, or their souls, carry away the soul of the child. This, in turn, makes the child cry constantly, and become weak and ill, causing, in extreme cases, death. Taboos for such dangerous species are observed only after a child is born, rather than during

pregnancy, because, according to interviewees, during the postpartum period, the baby is more susceptible to spiritual harm due to its physical weakness⁵¹. Only when children are strong enough, typically around age two, when they can walk, is it safe for parents to kill and/or eat these species. In addition to following such restrictions, new mothers use a variety of herbs, or *inchashi* (the generic name for herbaceous plants) to bathe their babies in order to protect them from these harmful beings. There are specific *inchashi* to counteract the threats posed by specific animals. Some such herbs are the aforementioned *ivienkeki* (see previous chapter), which include different species of sage (Cyperaceae family) that are specific to each taboo animal: e.g. *omanivienki* prevents harm posed by the large catfish *omani* (*zungaro* in Spanish), and *shakiririvienki* does the same for the turtle *shakiriri* (*motelo* in Spanish).

Do Species Posing a Danger to Infants Have Souls?

As mentioned above, in my conversations and experiences with Tayakome residents, people seem to suggest that there is a relationship between being a species that poses a danger to infants, and having a soul. Indeed, in the context of the couvade, previous studies suggest that, in Amazonian societies, taboos are often instituted to avoid contact with the spirits of particularly harmful animals (see Rivière 1974, Taylor 1981, Rival 2005). In an attempt to understand the relationship between these attributes in non-humans (i.e., being a taboo and possessing a soul), and to explore the diversity of beliefs among different people, I conducted a structured interview pertaining to these and other attributes of particular animals and plants that might contribute to their capacity to harm children. I created a list of 47 animals and plants, including those most salient during my ethnographic research and previous free-listing interviews – e.g. species that are preferred food, or species that are

⁵¹ Rosengren affirms that "Matsigenka people consider small children's souls to be particularly volatile because souls are assumed to be only loosely attached to the physical body during the first years." (Rosengren 2006a:84-5). In Tayakome, people instead put more emphasis on the physical weakness of infants, since it is a general conception that, when one is sick, even among adults, the soul is taken away or detached from the body (see Chapter 6).

frequently referenced in conversations and daily activities –, as well as others that were less salient to interviewees but chosen by me, in order to know what and how people think of them. I interviewed 53 adults, analyzed responses with the Cultural Consensus Model (CCM), and compared these results with results from the formal interview related to notions of the soul, described in the previous chapter.

Results of CCM Related to Taboos

According to the results of the CCM, there is consensus among the interviewees (1st factor eigenvalue= 23.24, 2^{nd} factor eigenvalue= 6.09, proportion of $1^{st}/2^{nd}$ eigenvalues= 3.81; proportion of variance explained by 1st factor=77.27%; positive interviewees' competency scores), and the majority of them (more than 50%) indicated that 31 of the 47 animals and plants in the interview list are harmful for infants if either parent kills or eats them (see Table 2). Analysis of the residual agreement (the agreement not explained by the model determined in the CCM) revealed the existence of a submodel shared only by the men. The differences associated with this submodel are related to the fact that more men consider the large catfish omani (zungaro) and kuitapoari (dorado) to be taboos (78% and 57%, respectively), compared to the general average (56% and 46%, respectively, see Table 2), and considerably more than women (38% for each species). As I will explain in more detail below, omani is a fish that virtually all of the Matsigenka consider to be harmful only when it is a large individual. Smaller omani individuals are completely harmless and apt for consumption. Some women referred to this size-conditional danger when justifying their answers regarding omani. However, many others affirmed that parents of infants can consume both omani and kuitapoari because one can use inchashi (herbs) to counteract the danger posed by these fish. Inchashi, as mentioned above, is a generic term used to refer to herbaceous plants, but also includes different species of herbs, some of them sages called *ivienkeki*, that are used to bath infants in order to protect them from harmful species and

spirits. A very well-known and widely used type of *ivienkeki* is *omanivienki* that, as its name indicates, shields children from the harm caused by consumption of large *omani*. The few women that cultivate *omanivienki*, in addition to using its bulbs themselves, along with other herbs, to prepare a warm infusion to bathe their children, also lend it to (usually younger) women, so that they can do the same and prevent their infants from being harmed (see more about *ivienkeki* in Chapter 8).

Table 2: Taboos and Souls. The proportions shown correspond to interviewees (N=53) who affirm that a particular species has a soul or is a taboo. The minority subgroup is composed of fourteen (14) participants who were more prone to associate a species' possession of a soul with its capacity to harm. This minority subgroup is composed of different interviewees than the minority subgroup mentioned in Chapter 6. The groupings are based on the attribution of souls by the majority subgroup.

| Species | Taboo | Soul All* | Soul Minority Subgroup | Soul Majority Subgroup | Group** |
|------------|-------|--------------|---------------------------|---------------------------|---------|
| Chambira | 0.98 | 0.38 | 0.64 | 0.28 | 2 |
| Etini | 0.96 | 0.72 | 1.00 | 0.62 | 1 |
| Oeinti | 0.96 | 0.75 | 1.00 | 0.66 | 1 |
| Kinteroni | 0.94 | 0.75 | 0.93 | 0.69 | 1 |
| Shiani | 0.93 | 0.56 | 0.79 | 0.44 | 2 |
| Chogotaro | 0.92 | 0.44 | 0.77 | 0.33 | 2 |
| Matsonsori | 0.90 | 0.83 | 0.93 | 0.82 | 1 |
| Kovieni | 0.89 | 0.79 | 1.00 | 0.72 | 1 |
| Mavoro | 0.89 | 0.43 | 0.86 | 0.28 | 2 |
| Soroni | 0.87 | 0.37 | 0.50 | 0.33 | 2 |
| Toroshoke | 0.85 | 0.51 | 0.93 | 0.36 | 2 |
| Maranke | 0.83 | 0.57 | 1.00 | 0.49 | 1 |
| Kapiro | 0.80 | 0.15 | 0.08 | 0.24 | 2 |
| Jeroroni | 0.77 | 0.65 | 0.77 | 0.64 | 1 |
| Kimaro | 0.72 | 0.49 | 0.79 | 0.38 | 2 |
| Oati | 0.71 | 0.45 | 0.43 | 0.44 | 2 |
| Shakiriri | 0.70 | 0.62 | 0.93 | 0.51 | 1 |
| Kapieshi | 0.69 | 0.44 | 0.54 | 0.41 | 2 |
| Pakitsa | 0.69 | 0.63 | 0.93 | 0.54 | 1 |
| Potogo | 0.68 | 0.52 | 0.50 | 0.49 | 1 |
| Saniri | 0.68 | 0.53 | 0.71 | 0.46 | 2 |
| Mao | 0.67 | 0.40 | 0.46 | 0.38 | 2 |
| Iveto | 0.65 | 0.35 | 0.31 | 0.36 | 2 |
| Parari | 0.64 | 0.33 | 0.21 | 0.41 | 2 |

| Manke | 0.62 | 0.29 | 0.15 | 0.33 | 2 |
|-------------|------|------|------|------|---|
| Pigiro | 0.58 | 0.34 | 0.57 | 0.26 | 2 |
| Katsari | 0.57 | 0.49 | 0.46 | 0.50 | 2 |
| Omani | 0.56 | 0.35 | 0.46 | 0.31 | 2 |
| Maniro | 0.56 | 0.52 | 0.38 | 0.56 | 1 |
| Vuimpuiyo | 0.54 | 0.89 | 0.91 | 0.86 | 1 |
| Komaguinaro | 0.52 | 0.42 | 0.46 | 0.41 | 2 |
| Tsiaro | 0.48 | 0.46 | 0.62 | 0.41 | 4 |
| Tsiticana | 0.48 | 0.19 | 0.08 | 0.23 | 4 |
| Kuitapoari | 0.46 | 0.35 | 0.31 | 0.36 | 4 |
| Joma | 0.42 | 0.21 | 0.07 | 0.26 | 4 |
| Komagiri | 0.29 | 0.31 | 0.15 | 0.37 | 4 |
| Imarapague | 0.27 | 0.56 | 0.38 | 0.62 | 3 |
| Yaniri | 0.27 | 0.40 | 0.38 | 0.41 | 4 |
| Shakami | 0.22 | 0.16 | 0.00 | 0.23 | 4 |
| Shintori | 0.21 | 0.37 | 0.08 | 0.46 | 4 |
| Paguiri | 0.21 | 0.15 | 0.00 | 0.21 | 4 |
| Samani | 0.21 | 0.31 | 0.00 | 0.41 | 4 |
| Charagua | 0.15 | 0.15 | 0.08 | 0.18 | 4 |
| Kemari | 0.13 | 0.50 | 0.38 | 0.54 | 3 |
| Osheto | 0.08 | 0.36 | 0.14 | 0.44 | 4 |
| Tsigaro | 0.06 | 0.15 | 0.00 | 0.21 | 4 |
| Atawa | 0.00 | 0.20 | 0.08 | 0.23 | 4 |

*These results are different from the results of Table 6.1 (Chapter 6), because that table included all the interviewees (63 individuals) who answered the question "who has a soul," whereas here I am only considering the interviewees that ALSO answered the question "who is a taboo" (53 individuals). **Group 1: More than half of the interviewees (> 0.5) attributed a soul to species X and more than half (> 0.5) consider it a taboo; Group 2: less than half of the interviewees (< 0.5) attributed a soul to species X, and more than half of the interviewees (> 0.5) consider it a taboo; Group 3: more than half of the interviewees (> 0.5) attributed a soul to species X, and less than half of the interviewees (< 0.5) consider it a taboo; Group 4: less than half of the interviewees (< 0.5) attributed a soul to species X and less than half of the interviewees (< 0.5) consider it a taboo; Group 4: less than half of the interviewees (< 0.5) attributed a soul to species X and less than half of the interviewees (< 0.5) consider it a taboo; Group 4: less than half of the interviewees (< 0.5) attributed a soul to species X and less than half of the interviewees (< 0.5) consider it a taboo; Group 4: less than half of the interviewees (< 0.5) attributed a soul to species X and less than half (< 0.5) consider it a taboo.

In Tayakome, knowledge about *ivienkeki* and other protective herbs for bathing children is typically possessed by women, and it is typically the case that middle-age and older women, and a few younger women, are considered experts in the topic. Some of these experts have planted a variety of inchashi, mostly ivienkeki, near their homes, and they know where, in the nearby forest, certain inchashi species can be found and gathered. Young mothers are generally advised by their own mothers and other experts about these plants, as they usually know less about the, uses of different types of plants to bath their children. Since men, as they themselves admit, are not experts on the topic of plants to bathe infants, it is likely that this lack of knowledge accounts for their more frequent affirmation during the formal interview that omani is a dangerous species for infants, without referencing the use of inchashi to counteract the danger. Interestingly, women more commonly downplayed the potential danger of *omani* (because of the use of *omanivienki*) than of any other species, including the other species of large catfish *kuitapoari*. This may be related to the fact that omani is a species that is much more frequently caught and consumed than other harmful fish, or forest game, making the use of *omanivienki* more salient than the employment of any other type of protective *inchashi*.

It is also important to mention that I explored the possibility of additional differences between the majority of interviewees and members of the two subgroups mentioned in the previous chapter who seem to have less interest in the Matsigenka spiritual world – one subgroup comprising a few young adults who attributed fewer souls to items in the interview, and the other subgroup of mostly middle-aged men and women who did the same – by conducting two separate residual agreement analyses. However, neither of these resulted in significant consensus among interviewees. Furthermore, members of both subgroups registered varying degrees of agreement (according to their personal loadings) with the model determined by the CCM, indicating that there is also no agreement within these subgroups regarding the topic of species that are taboos.

Being a Taboo and Having a Soul

The analysis of correspondence between possessing a soul and being considered a taboo was, contrary to my predictions, inconsistent for the majority of the interviewees. I received different responses with regard to the reasons why specific species were taboo, and only a small subgroup of interviewees consistently related these to the possession of a soul (see next section). Thus, for most Matsigenka, only some of the stated reasons for a taboo

involved the attribution of a soul. The majority of interviewees appear to classify non-human beings on the list (and probably species in general) into one of four groups (see Table 2): 1) species that are spiritually powerful, and perceived as intentional subjects, that, consequently, have souls (some of them human-like souls); 2) species that have physical or behavioral characteristics perceived as potentially harmful, with an agentive power that is limited to harming children, and with few exceptions, are considered to be soulless; 3) species that are harmless and soulless, and with no apparent intentionality or power to affect Matsigenka; and 4) species that have souls as a remnant of being humans at the beginning of creation, but which nevertheless are harmless for children.

Among the first group of species are evil animals, such as the jaguar, the small owl jeroroni, and the snake (83%, 65% and 57% of the interviewed Matsigenka claimed that these species have souls, respectively, see Table 2). Also belonging to the first group are some powerful beings that are beneficial for the Matsigenka, such as the armadillos kinteroni and etini, the bird vuimpuiyo and harpy eagle, all of which have souls. Some of these powerful beings were mentioned in the previous section as general food taboos (i.e., they are usually not eaten in any context). However, interacting with them in ways that do not entail consumption, such as simply killing them, even for species that can be eaten outside of couvade, is also perceived to be dangerous for small children. This was the case for Saul, after butchering the giant armadillo (kinteroni) that he had killed (see above). He told me that his one-year-old baby did not stop crying for two days, despite the fact that neither he nor his wife ate any of the meat. Magali, Saul's mother, commented to me a few days after she gave me the fried kinteroni that she believed that the animal must have *ipuigatake* Saul's child because he had been responsible for killing and butchering it. As mentioned above, in Matsigenka, the verb puigatagantsi means to "pay back," but it also refers to the action of stealing the soul of an infant, also called *gasiretagantsi*, carried out by an animal or the soul

of a large tree. Fortunately, Magali knew how to treat her grandson. Despite the facts that she grew up in one of the Matsigenka communities in the Urubamba region, attended a Dominican boarding school that had the objective of assimilating indigenous peoples into Western society, and Spanish was her mother tongue, Magali learned the uses of medicinal plants from her grandmother, who only spoke to her in Matsigenka. Once she came to live in Tayakome as an adult, Magali became fluent in the language and combined her grandmother and mother's teachings about plants with those of other women in the community, and is currently a highly-regarded herbalist and expert healer in Tayakome. Along with a few other older women, she is considered to be especially knowledgeable in treating children's medical conditions, such as being *ipuigatake* by the spirits of animals, in addition to other more common illnesses. In the case of kinteroni, Magali suggested that Saul warm up one of its claws in the fire, and then pass it over her grandson's head and hands. Saul did as his mother advised and immediately after, he said, the child stopped crying. Neither Saul nor Magali provided me with an explanation of the mechanism underlying this cure. It just works, they said. I believe that this remedy may follow from the same logic used to explain why certain species cause harm, and others not, that I elaborate below.

This first group of species also includes large trees (see Table 2), with a trunk diameter (diameter at breast height, or DBH, a standard measure used by biologists for comparing tree sizes) equal to or larger than 1 meter, and/or that are more than 30 meters tall. People in Tayakome believe that such trees are capable of taking a child's soul if the tree is injured (e.g., with an axe or machete) or if its fruits are eaten. Among the most common examples of potentially dangerous trees are the fruit trees *kovieni* (*azucar huayo* in Spanish), *castaña* (Brazil nut tree), a large palm tree called *para*; the medicinal trees *potogo* (*ojé* in Spanish) and *kuimpe* (*copaiba* in Spanish); and species that are toxic or spiritually malign, such as *kamana* (sandbox tree), whose latex is poisonous, and the emergent *shirigari* (kapok

tree), under which cemeteries are established (see previous chapter). When I asked people whether any of these trees could harm children, their answers were often "yes, because they have a soul." The souls of these large trees are thought to live inside of the tree trunks, where the stolen soul of a child is also taken. Some Matsigenka told me that the souls of some of these tree species can take human form in the forest, and then vanish suddenly, causing anyone who sees the apparition to fall ill. However, for others, these trees are regarded as harmless to adults. In summary, species belonging to this first group, then, have types of souls that I described in the previous chapter, affording them human-like subjectivity. These species are, however, generally viewed as more powerful than human beings.

The second group of taboo species possess peculiar features that can damage the child or transform its body⁵² (see Table 2). Among these are predatory mammals, like *parari* (giant-river otter) and *oati* (tayra), as well as predatory fish with large or serrated teeth, like *chambira* or *joma* (piranha). Most Tayakome residents also affirmed that physically strong or heavy animals, such as turtles, woolly monkeys, and some large catfish like *omani* and the ripsaw catfish *toroshoke* (both of which can reach one-meter-long), can either crush the baby's soul, or simply carry it far away to where the animal lives. Most interviewees also explained that eating species like the fish *mavoro* (*canero* in Spanish, or), whose eyes are covered by a thin membrane and is thus believed to be blind, *shiani* (giant-ant eater), whose clawed front paw twists inward when walking, and *soroni* (sloth), which climbs slowly, can transmit their respective attributes to infants, making them blind, giving them twisted hands, or rendering them unable to walk. It is worth mentioning that, among species in this group, *kapiro* (bamboo) is the only one that most people claimed to be dangerous for pregnant

⁵² Baer (1984), Johnson (2003), and Rosengren (2006a) explain that these species that are taboo among Matsigenka of the Urubamba because they can affect the babies' body, are avoided during pregnancy, and can cause special problems during delivery. However, as mentioned in the text, for Tayakome residents these taboos are only practiced once the baby has been born, a stage in which her body is still vulnerable and still in the process of formation.

women. Virtually all people asserted that husbands of pregnant women should refrain from making arrows, which involve sharpening *kapiro* points and gluing on feathers with *taviri*, a sticky substance made with the latex of a tree called *eraptsa* and bees' wax. The sharp *kapiro* can cause pregnant women to have hemorrhages, and the use of *taviri* can cause the placenta to remain stuck in the uterus after the baby is born.

While the majority of the species in this second group (18 animals and *kapiro*) are considered to be soulless by the majority of the interviewees, there are a few exceptions. A considerable proportion of interviewees indicated that the small flycatcher bird *oeinti* and the yellow-legged tortoise *shakiriri* have souls (75% and 62%, respectively). A common response to the question of whether parents of infants could eat any of these species was "no, it has a soul, this animal *iripuigatake* the child" or "this animal has lots of soul, it can *iripuigatake* a lot." These reactions appear to be related to the fact that events entailing these animals harming children occurred relatively recently or are well-remembered, as I recount in the next section. This is the case for *shakiriri*, which was the responsible for the death of Ignacio and Jacinta's child, as I recounted in Chapter 1. In these cases, possessing a soul is associated with the power to harm young children, which differs from a soul that grants human capacities (discussed in Chapter 6). Half of the interviewees attributed a soul to a few species deemed dangerous to infants - kimaro or macaw (49%), toroshoke or rip-saw catfish (51%), saniri or caiman (53%), and shiani or giant anteater (56%). However, this is an effect of a particular subgroup of interviewees for whom there is a strong correlation between being a harmful species and having a soul, which, in such species, is associated with a desire to carry off children's souls to a faraway place. I discuss this particular case in the next section.

For those members of this second group of species that are considered to be soulless by the majority of people, there is no intention attributed to the harm inflicted. The effect produced on children by consuming or hurting these species is, rather, conceived of as similar

to an unintentional allergic reaction to a noxious substance. Children are susceptible to the effect of these non-human beings because of their weakness, which is related to the liminal state during which they are becoming newly-created human beings. In later transition stages during the life of a Matsigenka person (e.g., menarche), similar dietary restrictions are put in place. This is related to what is described by some scholars as the correct construction of bodies and a proper "constitution of human personhood" (Grotti and Brightman 2014:14; Vilaça 2002), that I discuss in more detail later in this chapter. For now, I wish to emphasize that the intentionality attributed to these species is less clear, even for those which possess souls, and there is less consensus among interviewees about them. With the exception of the mentioned subgroup, for the majority of interviewees there is no correlation between being harmful and having a soul, and, rather than attributing human-like agency or intentionality to such species, the existence of their soul is simply based on their capacity to carry off weak infants' souls for no apparent reason. Some authors associate this capacity to steal children's souls with intentional revenge (Izquierdo et al 2008, Rosengren 2006a). While the literal meaning (or one of the meanings) of *puigatagantsi*, "to pay back," suggests such an interpretation, below I propose an alternative explanation.

The third group of species identified through this interview task are those that were considered to be both soulless and harmless by the majority of the interviewees (see Table 2). These species are animals that are commonly hunted and eaten, such as all of the larger monkey species, with the exception of woolly monkey, mentioned above (a few people also considered *yaniri* or howler monkey to be dangerous to eat during couvade because, as they pointed out, it used to be a *seripigari* in the remote past), edible rodents such as agouti or *samani*, white-collared peccary, and the *shapaja* palm tree. As mentioned in the previous chapter, despite the fact that many of these animals are considered by the majority of Tayakome residents to have been humans in a remote past, they are perceived as soulless

animals in the present, without any particular capacity to harm infants. As such, their subjectivity is limited to that of any living being with no agency or capacity to affect humans. I am even tempted to assert that such species may be perceived as resources to be used, analogous to the Western objectification of certain animals and plants. Similar to these formerly-human species, other soulless and harmless species include introduced domestic chickens, as well as of *tsigaro* (*shapaja* in Spanish, *Attalea* sp.), a common palm tree, which is, in fact, often regarded as the safest food to consume. *Tsigaro* is consumed when a person is spiritually or physically vulnerable, for instance, when one (adult or child) is sick, when a girl is passing through menarche (see below), or when a relative has died and one runs the risk of being attacked by the dead person's spirit.

The fourth subgroup of species from this interview contains only two species, *imarapage* (white-lipped peccary) and *kemari* (tapir). A slight majority of the interviewed Matsigenka attributed a human-like soul to both of them (57% for *imarapage* and 50% for *kemari*, see Table 2), because they were, and/or still are, humans. However, only a small proportion of these interviewees affirmed that they represent a danger to infants if their parents consume them (23% and 12%, respectively). To conclude this section, I wish to emphasize that results for these two species, in addition to those for species in the other subgroups, contradict Viveiros de Castro's interpretation of food restrictions in Amazonian societies, explained above. He affirms that food restrictions are established as a way to prevent cannibalism, because there is an ontological continuity between human and not human beings based on the existence of a human soul. Yet, this thesis does not hold for the Matsigenka of Tayakome. First, prey animals that, according to most people in the community, were formerly human, are regarded as among the safest foods to consume. In fact, there was no correlation between species that are considered taboos and those species that were humans at the beginning of creation (Pearson Correlation Coefficient = -0.057),

most of which are common prey species believed to be soulless. Additionally, the cases of *kemari* and *imarapage* suggest that, for the majority of Tayakome residents, there is no problem consuming animals that do have human souls. Perhaps this is related to the fact that kemari are conceived to be humans only in their own (spiritual) world, where Matsigenka look like kemari. In the human-Matsigenka world, they are still *kemari*, suggesting that for the Matsigenka, the human soul attributed to non-humans does not remain equivalent through worlds. In sum, the Matsigenka case challenges VDC's particular thesis that the main reason to practice dietary restrictions is to avoid cannibalism, as well as his more general of multinaturalism, based on the idea that there exists a homogeneous humanity internal to all beings.

Soul as the Reification of Harmful Power

In the previous section, I mentioned that a few species belonging to the second group (species with strange physical traits) of the tentative classification scheme were perceived as "having lots of soul," and, therefore, could be harmful for children. This is the case of the flycatcher bird *oeinti* and the tortoise *shakiriri*. In this section I discuss the case of a subgroup of Matsigenka interviewees who attributed such a conception of soul to the majority of the species in this second category, that is, to species that have physical or behavioral characteristics that, if consumed by a child's parents, can be transmitted to or harm the child. As described above, the majority of interviewees affirm that these species are soulless, and the harm they produce is involuntarily transmitted to children when their parents consume the species. In contrast to this majority, fourteen (14) people were of the opinion that being a taboo and having a soul are intrinsically related, indicating that in average approximately 82% of the non-human beings on the interview list are harmful for children and taboo for their parents, and also possess souls. For the remaining participants (39), an average of only 47% of the species in the survey are taboos and have a soul at the same time.

For this subgroup of fourteen interviewees, the soul that they attribute specifically to species that cause harm to infants is different from the types of souls described for the species in the first category, that is, super-humanly powerful beings. In the former case, this dangerous soul is the reification of the (sometimes malign) power possessed by this group of (predominantly) animals to harm infants. For most species in this category this type of soul represents the intentional nature of the process of harming infants. This is, for instance, the opinion of Carmela (~45) and Eugenia (~55), who are regarded as experts herbalists, and part of this subgroup. According to them, the meter-long catfish omani (zúngaro, in Spanish) has "a bit of soul" because it can harm only when it is a large individual. While this is a widely shared conception, their attribution of intentionality to the fish is not. When I asked them why they believe *omani* hurts children, they answered that this species is just mean and wants to harm children in general. Still, the fish's intention to harm humans occurs for no reason in particular (see the next section for the similar opinion of Segundo, an elder who also is part of this small subgroup of interviewees). This answer is similar to that of many of the rest of the interviewees in this subgroup. Most of them are women, younger than Carmela and Eugenia (<30 years old), and had infants at the time of the interview, which may imply that the well-being of their children was a particularly salient concern for them. Attributing a soul to these dangerous species, then, may be associated to this fear for their children. It also may be the case that this conception of soul is similar to that attributed to *oeinti* and *shakiriri* by the majority of interviewees, such that recent experiences or current preoccupations lead people to reify anticipated danger in the form of an animal's soul.

Almost all the members of this group are part of a few kin groups. Some are the mothers (and a father, Segundo, who is regarded as an expert, see next section) of four neighboring clans in Tayakome, and most of the others are their adult daughters (and two sons and a son-in-law). The members of three of these clans are kin, and one of these clans is

in close proximity to the fourth clan that does not have blood ties with the rest. This suggests that this particular conception of a soul may have been socially transmitted among kin or close neighbors, and, especially, from parents to their adult female (and a few male) children. However, this possibility requires further investigation.

Revenge, Situated Agency, and Intentionality

As mentioned before, the action of harming infants by taking away their soul is called *puigatagantsi*, which literally means "to pay back" or "to return something in the same manner." Some ethnographers working with the Matsigenka have suggested that *puigatagantsi* can be translated as "to take revenge," and that it is this intention which motivates the souls of hunted animals, or large trees whose fruits have been eaten, to harm the child of the hunter or "aggressor" (Izquierdo, Johnson, and Shepard 2008; Shepard 2002a). In Tayakome, most people certainly believe that such beings harm or carry off the souls of small children as a consequence of the parents killing or eating them. However, I argue that this action on the part of animals and plants is not exactly one of revenge, or, at least, not a Western conception of revenge.

Rather than explaining *puigatagantsi* in terms of vengeance, the Matsigenka of Tayakome seem to envision a more direct connection with the damage inflicted upon children through the stealing of their souls, also referred as *gasiretagantsi*. The following conversation with Segundo (~65), one of the oldest men in Tayakome, and who belongs to the group of experts, illustrates not only an interpretation that many people in the community ascribe to *puigatagantsi*, but also the related notion of soul presented in the previous section. I asked Segundo what it means to have a soul, both for humans and for non-human beings that possess souls, and he answered the following:

Segundo: Because I have my soul, my body is strong, and I can go fishing, and visit people. Caissa: Does the harpy eagle [*pakitsa*] have a soul? Segundo: Harpy eagle, yes, he has a soul. Therefore, he can hunt spider monkeys.

Caissa: Does *omani* [large catfish called *zúngaro* in Spanish] have a soul? Segundo: [Doubting for a few seconds] *Omani* has a soul. If [the mother] eats it, [the *omani*] *impuigatakempa* her newborn baby... [*Omani*] has a bit of soul. When it is a big *omani*, it can *iripuigatake*, a small *omani* can't. Caissa: Why is it that the big *omani* can *iripuigatake*, and the small one can't? Segundo: [Thinking for a couple of seconds] The big one lives in the rocks in the river, and he brings the child's soul there. Then, the child [gets sick,] doesn't recover, and dies. Only the big one can. The small one can't. It doesn't have a soul. It can't *impuigatake*.

A few inferences can be drawn from Segundo's explanations. First, he is addressing the different meanings that "soul" can take depending on the species in question. For humans, as well as for *pakitsa*, the soul provides the vital energy that allows the performance of an individual's normal tasks. The majority of people in Tayakome affirmed that pakitsa has a human-like soul and is the epitome of a good Matsigenka hunter. Therefore, Segundo refers to pakitsa's quotidian activity as hunting monkeys, in a manner similar to Segundo's quotidian activity of going fishing. The soul attributed to omani is different. Segundo hesitates when deciding if this catfish has a soul, perhaps because it possesses a soul of a different kind, or because omani can sometimes, but not always, cause harm to infants. In any case, the soul of *omani* affords the fish the power to harm children by stealing their souls, through the action of *puigatagantsi*, but does not grant it any kind of human-like disposition. Second, in the case of this species, its size determines whether it has a soul, and, consequently, its capacity to harm the child. This was widely repeated to me by the other adults in the community. Interestingly, such size dependence of soul possession appears to be a characteristic exclusive to *omani*, which, as Segundo, Carmela and Eugenia (above) mentioned, is an animal that has "a little bit of soul." This may be related to the fact that omani is a fairly commonly caught fish in Tayakome, and, since it is relatively infrequent to catch large omani, people are dodging this dietary restriction by associating its power to harm with its size.

For species that have "a lot of soul" (like the small bird *oeinti*, for instance) there is no variation between individual birds. Most people state that all individuals of such species are

dangerous, regardless of size, which may be related to a recent event in Tayakome, recounted below, in which a child became ill as a result of this bird. Finally, instead of meaning "to pay back," *puigatagantsi* is equated simply with the carrying off of the child's soul, not necessarily with intention. This conception is clearer in the subsequent dialogue that I had with Segundo, when he explained to me how *puigatagantsi* occurs:

Segundo: First the mother eats armadillo, then he⁵³ *iripuigatake*, and then the child gets sick.
Caissa: Can the armadillo get angry?
Segundo: [Laughs] No, he doesn't get angry, he *iripuigatake*.
Caissa: Can Matsigenka *iripuigatake*? For instance, if a jaguar bites your son, then can you *iripuigatake* jaguar?
Segundo: [Laughing] No, I can't *iripuigatake*.
Caissa: Wouldn't you like to make the jaguar pay for hurting your son?
Segundo: Yes, but I can't *iripuigatake*. Matsigenka can't *iripuigatake*.
Caissa: Why can't you *iripuigatake*?
Segundo: Matsigenka can't *iripuigatake*. Armadillo *iripuigatake*. Armadillo takes the soul of the child underground, where he digs his tunnels, and the child gets sick.

Segundo's explanation illustrates the definition of *puigatagantsi*, and coincides with the explanations given to me by most other people in Tayakome. When discussing species that can harm children, people often answered like Segundo: Animals' or trees' spirits *iripuigatake* or *ompuigatake* because they take the soul of the children away. Certainly, the initial cause of this action on the part of the animal or tree is the fact that one of the parents has eaten, or has come into contact with, the species in question. However, people do not conceive of the animal or plant's reaction as an act of revenge. This is evident in the same conversation with Segundo, when I was attempting to understand why an animal would want to take the soul of a child:

Caissa: Why does *omani* want to *iripuigatake* children? Segundo: Because the child is small, he is weak. When he is older, he can eat it [*omani*]. His dad can eat it. Caissa: Can *omani* get angry? Segundo: Yes, it can. Caissa: Why does *omani* get angry?

⁵³ In the Matsigenka language, beings and things are either masculine or feminine, there is no neutral gender. When I refer, in the English translation, to an animal as a "he", this does not mean that the Matsigenka necessarily attribute to this animal any type of subjectivity. However, in the case of armadillo, for the reasons explained in this and in the previous chapter, I believe that most Matsigenka do believe it is a person.

Segundo: It gets angry because the woman has a child, he doesn't want the child to grow, he wants the child to die. Caissa: Why did the *omani* get angry in the first place? Segundo: Because *omani* is like that, it just gets angry. It gets angry only when there is a child. With adults he doesn't get angry.

From this conversation, it can be noticed that there is no direct link between a feeling of revenge on the part of the animal and the actions of the humans. Rather, the focus seems to be on the final outcome rather than in the cause of it. The child got sick because an animal or tree carried off its soul (the outcome). The causation process of the intention of the animal seems to be irrelevant for Segundo (and most other Tayakome residents), as his explanation for the reason why *omani* harms children (i.e., because he is angry) seems to have been forced by my inquiries. Put in different terms, the Matsigenka of Tayakome focus on a particular level of causation: They emphasize the proximate cause (e.g., the child is sick because an *omani* stole his soul), rather than the ultimate motivation (e.g., the reason why the omani harms the child). Moreover, as expressed by Segundo, there is no direct link between the fact that the infant's parents have eaten the *omani* and this animal's anger. As, Segundo states, this is just how *omani* is: he gets angry, but only with children, not with adults. As shown in Segundo's earlier quotation, this contrasts with armadillo, who can harm but does not get angry. These last statements suggest that "angry" may just reflect these animals' power to harm, their dangerous souls, and not necessarily the existence of emotion. This power allows such species to hurt children because the children are physically weak (as Segundo mentioned), but the species are not strong enough to affect adults. Segundo's explanation was similar to that of most people in the community. Many also did not go as far as Segundo in stating that animals like this (generally soulless but harmful) could get upset. In fact, most people laughed when I suggested that as a possible reason for the animals' behavior. Instead, they simply affirmed that this is what these species do, without any particular motivation, and certainly not with the intention of revenge.

It is likely that Segundo may have felt compelled to affirm that "omani can get angry" as the result of my insistence, and he actually had not thought about this particular capacity of *omani* before. This seems to have been the case when we were talking about armadillo, and he believe that it was incapable of becoming incensed (see above). In Tayakome, many Matsigenka agree with this conception, and seem to perceive the damage that armadillos (both etini and kinteroni) cause as involuntary. Nestor (55)'s explanation for armadillo's power to harm exemplifies this point. When I asked him why he believed that giant armadillos can harm, he affirmed: "Giant armadillos are strong. They have all of this energy because they are so heavy and dig holes in the ground so fast. Small [human] babies are still weak. For sure they get sick because of the giant armadillo." Nestor, like the majority of residents in the community, conceive of armadillos – both the small and giant varieties – as supernaturally strong animals. As a consequence, one must be careful when discarding the non-consumed body parts, because, Matsigenka affirm, they have the power to carve out large areas of ground. As thirty-two-year-old Edgar asserted: "When you throw the shell of an armadillo into the water, the shore of the river falls apart, and the river widens, it is dangerous to do so... [When we eat armadillo] we save his shell, we do not throw it to the water, sometimes we burn it... [Armadillo's shell is dangerous] because he digs." This feature is not necessarily perceived as negative, and was actually used in the interest of community members by Saul and his hunting companions, when they killed the giant armadillo. On their way back to the community from upriver, they threw the armadillo's intestines into a part of the Manu River that makes a sharp U-turn, in order to "cut" the ground, and make the course of the river go in a straight direction. Once, when I asked Micaela (25) what would happen to the Matsigenka if armadillos disappear, she asserted that the earth would crumble and fall apart, because armadillos hold it together with the underground tunnels that they dig. It would be an overstatement to affirm that Micaela's

opinion was widely shared in Tayakome. Still, this aids in understanding the conceptions that the Matsigenka have regarding armadillo's physical strength, and the threat it poses to children. It is possible that the unintentional power to inflict harm attributed to armadillos, as perceived by the majority of Matsigenka, is related to the fact that they are considered figurative relatives, *nosaro*, who care for the Matsigenka (see previous chapter). This resembles the cases of benevolent species, like the powerful birds *vuimpuiyo* and *tsonkiri*, whose damage is also perceived as involuntary by some Matsigenka (see General Taboos section, above).

In this discussion, addressing the difference between Matsigenka conceptions of agency and intentionality is essential in order to understand the construction of animal and plant *factishes* related to dietary and behavioral restrictions. In the previous chapter, I cited Gell's illustration of the conversion of idol-objects into social agents as a consequence of their participation of a network that include human beings or subjects. For the Matsigenka, beings capable of harming infants are social agents independent of their conceptualization as Matsigenka-like subjects (those with soul⁸ and soul^K that are more powerful than Matsigenka). In the particular context of taboos, this type of agency - sometimes reified by the attribution of a harming soul, and sometimes not - does not necessarily result in such species being considered humans or persons. This is the case of the second group of species mentioned as being taboo during the couvade (interestingly, most of these species are also avoided during menarche, and when boys begin hunting, see following sections). I contend that the agency attributed to these categories of beings is fluid and contingent, since they are not considered to be agents in other contexts. This is exemplified by the case of the large catfish omani (see above). Because this species is so conspicuous in the daily diet of the Matsigenka, the attribution of a soul, and its consequent agency to harm, is hard to reconcile with the fact that it is eaten so often. It is important to mention that, in these cases, agency,

understood as the power to harm, is not necessarily associated with intentionality, as explained above, in my discussion of the conversation with Segundo. The majority of Matsigenka agreed that beings perceived as malign, like jaguars and the owl *jeroroni*, intentionally want to harm people. However, people in the community doubt that other species, also considered taboo, consciously want to harm children, especially those that are super-humanly powerful but benevolent, like *vuimpuiyo*.

In sum, while, for some people in Tayakome, it is not clear why animals and trees harm the souls of small children, most do not believe that these beings take the souls of their children out of anger, the emotion that motivates the Western conception of revenge (also argued by Izquierdo, Johnson, and Shepard 2008). The majority of the people I interviewed in Tayakome believe, rather, that such animals and plants are not capable of becoming angry, and these interviewees did not seem to care about the ultimate motivation of species to harm children. In this regard, Izquierdo and colleagues affirm: "The Matsigenka's attribution of vengeful intent to animals, spirit beings, and even (inanimate) plants attests to the pervasiveness and psychological importance of these emotions: revenge is so natural as to be automatic, almost Newtonian" (Izquierdo, Johnson, and Shepard 2008:12-3). Indeed, "getting even" seems to be an automatic reaction to the initial action of a particular engagement (generally detrimental for the animal or plant). However, precisely because of this automatic response, there is no intentionality involved, and it should therefore not be call revenge, because that would ascribe a particular meaning (a Western one) to a Matsigenka phenomenon that is not perceived in those terms. While others share Segundo's view, i.e., that certain animals' constant desire to harm children motivates their stealing of children's souls, this incident do not entail an intention to exact vengeance.

Couvade Taboos Prevent the Uncertainty of Child Mortality

Rivière (1974) suggests that, rather than being isolated beliefs, taboos must be part of a broader phenomenon, which, he suggests, after analyzing the couvade in several ethnographic contexts, may be related to a universal concern regarding the human duality of body and soul, and the manner in which both come to be together. This does not seem to be the case for the Matsigenka of Tayakome, since there is no apparent questioning of the origin of their souls. As I discuss in Chapter 6, the majority of community members affirm that Dios or Cristo, and occasionally, *Tasorintsi*, created their souls, a belief that, according to some Matsigenka, was taught to them by school teachers brought by Dominican missionaries.

A major preoccupation among the Matsigenka of this community, in contrast, is the maintenance of their physical and spiritual well-being, and their good health. The *Tasorintsi* of the Matsigenka creation myth of the world, and his companion *etini* or *kinteroni* (see Chapter 5) as well as *vuimpuiyo* or *sangariite*, the good spirits of the forest, exist to guarantee the well-being of the Matsigenka in different contexts. Physical and spiritual well-being is even more of a concern in the case of children, and especially newborns, due to the high rates of infant mortality (Shepard 1999a). The maintenance of the fragile newborn's wellbeing is associated with parents' interactions with harmful species and spirits. Since illnesses are common, and, on many occasions, the causes are unknown, people relate their occurrence *a posteriori* with having consumed species that are not commonly consumed.

Importantly, Shepard (1999a) asserts that, since both parents are obliged to follow food taboos to protect their child, the Matsigenka conceptualize the body as an aggregate of the bodies of the nuclear family and, occasionally, of the extended family as well. In my experience in Tayakome, food taboos to protect infants are only practiced by parents, not siblings or extended family. Some people pointed out to me that, when a mother violates a taboo, the child receives the "effect" of the taboo animal or plant through her milk. However,

they were unsure how such harm is transmitted to the child when the father breaks a taboo. In any case, the remaining relatives in the clan (siblings, aunts, uncles, cousins, and grandparents) are not subject to these taboos. When babies are first born, the father and siblings are all forced to take a hot water bath, along with the newborn and the mother, effectively, in order to clean them and ensure the future good health of the baby. However, this seems to be the only moment when all members of the nuclear and extended family are involved in the infant's spiritual welfare. In addition, the materialist explanation provided by some of Tayakome residents, whereby the mother's milk is the means by which the harm caused by tabooed species is transmitted, suggests that such harm is conceived as not affecting the body of the mother. The fact that many people cannot explain how a fathers' taboo-breaking affects the child, essentially because of the lack of a direct physical connection, may indicate that people have not thoroughly thought about that before. Alternately, it may mean that they conceive of a metaphysical (spiritual rather than somatic) link between parents and children. This is similar to Rivière's (1974) thesis about taboos being established to avoid breaking the fragile link between the soul and body of the child, whereby such a link can be affected by her parents' actions due to the strong spiritual connection that exists between them (see above).

A Posteriori Reasoning to Explain Some Taboos

In his study of baseball players' rituals, Gmelch (2000 [1992]) suggests that rituals arise after an exceptionally good performance takes place. Because the abilities of the player are believed to remain constant, players attribute the cause of a good performance to something uncommon that also took place before the occurrence of the event. They, then, repeat these "good augur" activities (e.g., tapping home plate three times in order to get a base hit) as rituals, that is, the "prescribed behaviors in which there is no empirical connection between the means... and the desired end." He goes on to state that "[b]ecause

there is no real connection between the two, rituals are not rational, and sometimes they are actually irrational" (Gmelch 2000 [1992]:2). In this same vein of reasoning, he affirms that taboos are the opposite of rituals, because they emerge after exceptionally unsatisfactory events. Analogously, extraordinary occurrences prior to such events are perceived as their potential causes, and are later established as tabooed practices. Based on these observations, Gmelch concludes that people create such mechanisms to deal with uncertainty, as an attempt to gain some control over events that seem to be the product of chance.

Gmelch is clearly attempting to explain a practice that could be considered a "superstition," that is, an explanation that renders a superficial understanding of the link between two apparently unrelated events. However, in his account, it is problematic to regard ritual or taboos as "irrational," since it implies attributing a set of ideas and values regarding how the world functions – i.e. the "rational" manner of perceiving it – to potentially alternative manners of conceiving the world. The mechanism that Gmelch is describing to grant meaning to otherwise inexplicable events may actually lie in profound conceptualizations of worldly processes that need to be taken seriously in order to fully understand such events. Understanding people on their own terms is not only at the heart of the debate about the ontological turn, but is also crucial to the exercise of anthropology as a particular field of scholarship.

In this regard, Hallowell's "personalistic theory of causation," proposed for the Ojibwa, which has some points in common with Gmelch's interpretation, is a valuable attempt to elucidate the underlining reasoning behind certain practices, and provides a good framework with which to understand some instances of Matsigenka animism and environmental behavior. As mentioned above, causality for the Ojibwa is reified in the notion of "person," as explained by Hallowell: "With respect to the Ojibwa conception of causality, all my own observations suggest that a culturally constituted psychological set operates

which inevitably directs the reasoning of individuals towards an explanation of events in personalistic terms. *Who* did it, *who* is responsible is always the crucial question to be answered." (Hallowell 1960:45, emphasis added). Therefore, if Gmelch suggests that unexpected events are attributed to uncommon actions carried out before the event took place, Hallowell complements this argument by asserting that, in the animistic metaphysics of the society he studied (the Ojibwa, but potentially applicable to many other animistic societies), the cause of these events is always attributed to a subject, who is not necessarily human.

A similar explanation may underlie the existence of certain food taboos in Tayakome, as well as other types of events, where subjectivity is attributed non-human beings after the event took place. Community members cited animals' metaphysical and physical characteristics as the source of their power to potentially inflict harm on young children. Yet, in certain cases, such conceptions may have originated as consequences, rather than *a priori* causes, of events entailing child illness and death. The fact that some species can inflict harm seems to be an *a posteriori* rationalization of the cause of a child's illness. In a manner similar to how baseball players reflect on unusual past events that may have caused exceptionally unsatisfactory plays, when a child experiences an otherwise inexplicable illness or misfortune, Matsigenka retrospectively search for the possible reason. Like for the Ojibwa, this reason generally entails attributing responsibility for the illness to certain types of subjects, which are often animals and plants that are uncommonly eaten or seen, but with which parents have recently interacted. It is possible, then, that people may have linked a species' capacity to inflict harm with a particular unfortunate event, such as an illness, *after* the misfortune had occurred.

I was led to this conclusion by a conversation that I had with Gaby (22) and her parents. One early morning in September, Gaby's parents, Ignacio and Jacinta, caught two

large toroshoke (80cm long, ~20kg catfish) while fishing in the Manu River. They invited their neighbors, Aurelio and Nidia, and my husband and I to eat the toroshoke soup for breakfast, as they usually do whenever they have abundant meat. While we were all eating, together with Gaby and her children, Carmela (45), her daughter-in-law Livia (17), and Carmela's sister-in-law Victoria (26) passed on their way to the health post. Jacinta invited the three women to join us, but only Livia and Victoria ate the toroshoke. Carmela did not try it because the fish could *iripuigatake* (damage by taking the soul of) her baby since he was still a one-year-old. After the women and the neighbors left, I asked Jacinta and her family about other dietary restrictions. Then, Gaby, who had gone to sit at her parents' house after she finished eating in order to continue weaving the *shichakentsi*⁵⁴ that she had begun a few days ago, told me about the time that her youngest son, then three-year-old Samuel, ate *oeinti*, a white and black flycatcher (probably Eastern kingbird, see Appendix A), which carried off his soul. His face got swollen, Gaby said, and he could not stop crying. Under normal conditions, eating *oeinti* would not have posed any problem for him, she affirmed, though, in my experience, it is exceptionally rare for Matsigenka to catch and eat this small bird. However, because he had eaten toroshoke, as well as a 50-cm-long mota catfish at the same time as *oeinti*, this bird was able to carry off his soul. Ignacio added that *oeinti* took Samuel's soul beyond the sky, to the sky that exists above the sky (see Chapter 5). This was revealed to them by Mario, the seripigari who lives upriver, and who, in the end, managed to cure Samuel, by drinking kamarampi (ayahuasca), and going to retrieve his soul from where *oeinti* had carried it.

News of this event seems to have spread to the majority of adults, as 96% of the 53 interviewees in Tayakome mentioned, during the formal interviews above, that *oeinti* is

⁵⁴ *Shichakentsi* is a circular, generally striped, cotton cloth that Matsigenka women weave for carrying their children. They pass it over one shoulder and the baby is carried in front of the woman.

dangerous for infants, even when consumed by itself, and not only when eaten in combination with other dangerous animals, like the large catfish. When I asked them why this animal was harmful, many cited the case of Gaby's son, and some of them proceeded to further explain the origin of *oeinti*'s "power" to inflict harm. Some people mentioned the fact that this bird lives in the sky and descends to earth only occasionally, associating the strangeness of this behavior with the bird's capacity to harm. Like Ignacio, some people affirmed that *oeinti* lives in the "second sky", a spirit realm above the visible sky (see Chapter 5). Twenty-two-year-old Mateo explained to me the following: "Have you ever actually seen where *oeinti* comes from? No, right? It is never found in the forest; it always comes from above. If I eat it, who knows where my baby's soul is going to end up? The *oeinti* can harm (*ipuigatake*) a baby a lot." I tried to inquire about possible origin narratives for *oeinti* in order to determine if or how this bird fit with other powerful beings associated with the sky. However, no one (including people considered to be experts) could tell me any story about it. It is possible, then, that by attributing to *oeinti* such super-human, uncommon behavior and the concomitant power to inflict harm, Tayakome residents devised an a posteriori rationalization for Samuel's illness.

Importantly, there appears to be a crucial difference between Ojibwa metaphysics and Matsigenka ontology in this regard. Whereas for the former, Hallowell (1960) reports that all stones are potential persons, but only those which have a demonstrated interaction with an Ojibwa human are actually persons, for the Matsigenka, once an individual of a particular species has been proved to be in possession of a soul, or has demonstrated any other type of agency towards a Matsigenka, then such a quality is inductively attributed to every individual of the same species. This is fundamental in the context of food and behavioral restrictions towards species that are harmful to infants. Parents prefer to be on the safe side and avoid consumption of any individual of the species, since what is at stake is the well-being, and

ultimately life, of the child.

I cannot assert that all food taboos have their origins in such *a posteriori* reasoning. However, I believe that this example provides a possible explanation for Matsigenka taboos that seem inexplicable to me, as they appear to be rationalized using inconsistent rules. This is the case, for instance, of *shakiriri* or yellow-footed tortoise (*Chelonoidis denticulata*). Virtually all interviewees affirmed that this animal can damage children because it is very heavy and can crush their bodies or souls (versions varied). However, almost everyone asserted that a child is in no danger if her parents eat tapir (*Tapirus terrestris*), a much heavier animal with an average weight of 220 kg. When I asked people why tapir could not damage children, given that it is much heavier than *shakiriri*, no one could explain it. Many simply said "Tapir just can't." Ignacio said that he and his wife Jacinta lost their first baby because he got sick after Ignacio ate *shakiriri* (see Chapter 1). He mentioned that he did not know that the father of a newborn baby should not eat this tortoise, but after that event, he followed this dietary restriction while his other eight children were infants. It is possible, then, that the origin of this taboo for *shakiriri* is similar to that which I propose for *oeinti*, above.

Under this interpretation, it is reasonable to assert, as most people in the community do, that commonly-eaten animals do not pose a threat to children, since all can observe that they are eaten regularly, and children are not regularly sick. This is related to the fact that the group of species that were consistently described as constituting safe foods (i.e., those in the third group of the CCM results, see above) included most monkey and edible rodent species, as well as white-collared peccary, tapir and some large birds, like trumpeters, tinamous and wild turkeys, all of which are commonly hunted, as well as abundant palm trees, like *tsigaro*. The notable exception to this rule is *omani*, which is a fairly commonly consumed fish. However, as I alluded to above, there are some socially-acceptable strategies for

circumventing this taboo. First, the majority of people repeated Segundo's claim, that only large *omani* – approximately one-meter-long – are dangerous and must therefore be avoided by the parents of an infant. In contrast small *omani* – less than approximately 50 cm – which are caught more often, may be consumed by parents without expecting any harm to befall their child (I recount an interesting experience avoiding this taboo in Chapter 8). Second, many people explained that mothers often use *omanivienki*, a type of sedge (*Cyperus* sp.), to bath their children, thereby protecting them from the power of *omani*, and allowing parents to eat it.

Since experience dictates whether certain species are dangerous or not, when presented with an unknown animal or plant, instead of first thinking of it and categorizing it in some manner, Matsigenka may just refrain from consuming it out of an abundance of caution. This is particularly evident whenever the Matsigenka visit colono towns or the nearby cities. I witnessed this once while I was in the colono town of Atalaya with Victoria (26), her husband Angel (26), and their 14-month baby that Victoria was still breast-feeding. They went to Atalaya to collect a payment owed to Angel by a *colono* boat owner. The dish of the day in the restaurant where we were having dinner was a small variety of komagiri (paco or gamitana in Spanish, or Piaractus brachypomus or Colossoma macropomum). *Komagiri* is not considered dangerous for infants by the majority of people in Tayakome (only 29% of the 53 interviewees indicated that they are dangerous for infants; Victoria and Angel were not among them, see Table 2). However, the fish that was served, coming from a fish-farm, was considerably smaller and not the same species as the komagiri commonly caught in Tayakome. As a consequence, Victoria did not even try it, and, shyly, ate only the rice, and some of the fried potatoes. When I noticed, and asked her why she did not eat the fish, Angel explained to me that she could not eat it because they did not know if it might harm their baby. I asked him why he himself did not refrain from eating, along with his wife, and he said that it was not necessary. On another occasion, my husband met Fermin (22) and Manuela (21) in the colono town of Salvacion. They went to this town to attend the medical center because their 10-month son was seriously sick. Fermin mentioned to my husband that Manuela could only consume viracocha (colono) food that they know is safe to eat, like cooked white rice or noodles without any type of sauce or condiment, oatmeal with milk and sugar, and chicken. In this instance, similar to the case of Angel above, it is interesting to note that Fermin did not think it important that he follow these dietary restrictions while in colono towns, which contrast with that fact that both he and Angel follow taboos while in Tayakome. However, such beliefs varied among other Matsigenka. For instance, Mario (~55), the seripigari who lives upriver from Tayakome and was visiting the community, and our neighbor Aurelio (\sim 48), were once teasing my husband about the types of food that he should not eat if we ever have a baby. It was interesting that these two experts did not agree about which *colono* foods should and should not be eaten. Mario was more conservative than Aurelio, and affirmed that parents should not eat anything other than chicken meat. In contrast, Aurelio, more relaxed about the topic, was of the opinion that parents could eat beef and pork without any problem.

This variation in beliefs may arise because of the different experiences that each person has had (or has heard about) with these types of "exotic" *colono* foods. In the case of Aurelio, he has traveled many times to the *colono* towns around Manu National Park (MNP), and certainly has more experience with *viracocha* (*colono*) food than Mario, who has left MNP on very few occasions. In contrast, Fermin, who has spent even more time than Aurelio in the *colono* towns, because he attended the boarding school in Boca Manu for several years, and then worked in tourism, was more reserved about the food that his wife could eat because their child was ill, and he was probably being extremely cautious about foods that could potentially harm the baby. Still, the fact that both he and Angel exempted themselves from

dietary restrictions while traveling outside of the community may be related to the fact that they both have spent considerable time living in these *colono* towns, studying and/or working in tourism, far from the community monitoring and reinforcing of these rules. Future years will reveal the extent of the influence of Western schooling, and the experience of working outside of the community during the high tourist season, on the continuity of Matsigenka dietary restrictions during the couvade.

In sum, it is possible that the Matsigenka universe of species capable of causing harm to small children may have been populated, at least partially, through the process of inductive reasoning and a posteriori justification as a manner to explain the unpredictability of children's illnesses. People may seek to explain past experiences of illness by relating their occurrence to the recent consumption of, or interaction with, species that are not normally consumed or encountered, constructing a causal theory linking the co-occurrence of these events by attributing power to the consumed animal or plant, and legitimizing this theory through confirmation by the influential figure of the *seripigari*. My interpretation suggests that, rather than only conceiving of the world as a pre-organized configuration of beings definitively described in mythical accounts of animals and plants that have been transmitted across generations, the Matsigenka conception and organization of animals and plants, may be better viewed as, at least partially, emergent, arising from lived experience, interpreted in light of causal rationalization, and consequently, more flexible that what ontologists might recognize.

Maize as a Child

Maize constitutes an interesting parallel to the couvade taboos described above, and serves to reinforce my interpretation of the *a posteriori* rationalization of some dietary restrictions. Maize is a crop that is considered by the Matsigenka of Tayakome to be

susceptible to harm inflicted by animals, through the same action of *puigatagantsi* that may be enacted upon infant humans. Johnson has described a similar account for Matsigenka communities of the Urubamba region, near the highlands of Cusco (Johnson 2003). Interestingly, maize is the only crop that is believed to be affected by the animal and plant species consumed by the person who planted it. Manioc, the staple food crop of the Matsigenka and most other Amazonian societies, is not affected in this way, nor are other secondary crops, such as plantains, papayas, peanuts, pineapples, etc. The peculiarity of maize may be due to the fact that it is a fragile crop, especially vulnerable to disease and pests during its early development. People may also take special care of it because it is a valued plant, constituting an essential source of starch-derived carbohydrates in Tayakome, particularly in November and December, when newly-planted manioc is still too small to harvest. Corn is also an important (though not strictly necessary) ingredient in the preparation of manioc beer, called *owiroki*, which is a pillar of Matsigenka social life.

Like the parents of a Matsigenka infant, the person (of either gender) who plants maize takes on the role of a parent, which obliges her or him to avoid eating animals and plants that can potentially cause harm to the maize seedlings. In Tayakome there is much variation between individuals regarding beliefs about the food species that must be avoided by the maize planter. Some people include in this list the same animal and plant species that can harm infants, but others do not. Nevertheless, most seem to agree that one must avoid eating animals with physical characteristics that one could imagine capable of damaging the leaves of recently-sprouted maize plants. Among these taboo species are fish with sharp teeth, such as the predatory *chambira*, *joma* (piraña), and the *komagiri*, widely known throughout the Amazon region as *paco*, with strong teeth similar to human molars. Also taboo are edible beetle larvae, like *pagiri* or *pigiro* (which have relatively strong mandibles), and iveto (capybara -the largest rodent in the world – with beaver-like teeth). Other species

considered taboo by some Tayakome corn growers include avocado and howler monkeys, on the premise that they will cause the young corn leaves to turn yellowish and dry out.

Although the Matsigenka use the same word for the harm inflicted on both infants and maize after a food taboo is broken, *puigatagantsi*, the mechanisms by which the taboo animals and plants harm these fragile victims is different. Unlike the case for children, the damage caused to maize does not originate from the stealing of its soul, as maize is not believed to have a soul. For maize, the relationship between the "victim" and the "culprit" appears to be symbolic, and most people in Tayakome seek to avoid any behavior that might conceivably harm such a fragile crop, even if the mechanism by which such harm occurs is not well understood. It is possible that, due to the fragility of this crop, and through the same *a posteriori* process explained above for some of the couvade taboos, people have seized upon the qualities of the taboo animal as those causing the damage, based on past experiences with some of these species.

Menarche as a Formative Process of Matsigenka Womanhood

Other specific food restrictions are associated with the transition from puberty to adulthood, specifically because they involve the proper formation of bodies and character, as also occurs in other Amazonian groups (Vilaça 2002; M. Brightman, Grotti, and Ulturgasheva 2014). For girls, this transition period occurs at menarche, when they are locked in an enclosure built with woven palm-leaf mats in the family houses. These enclosures are constructed in such a manner that daylight can barely pass through the walls and girls cannot see outside. If any men or boys see (or are seen by) the sequestered girl, it is believed that the male hunting abilities will be spoiled by the girl's menstrual blood. Girls stay sequestered (*ashitakotake*), for several weeks to months depending on the girl's tolerance. Some middle-aged and older women told me that they endured a full year of

sequestration. However, during my time in Tayakome, girls generally spent only one to three months in the enclosures, in some cases, as a result of their motivation to attend elementary school. Their main activity during confinement is improving their cotton-spinning skills, as this is one of the principal tasks of a married woman. In recent years, however, some girls are also allowed to do the work sent home by their elementary school teachers, if they so desire.

According to some Tayakome residents, the purpose of the seclusion period for girls is to construct their adult personality according to Matsigenka parameters. I heard some stories of girls in Tayakome who, before sequestration, were boisterous and carefree, and, upon emerging from seclusion, were calm and reserved. However, in my opinion, it is difficult to affirm that this is the norm, or the model for women to follow in Tayakome. It is true that, in some contexts, the majority of Tayakome women appear to be more reserved than men, for instance, during communal meetings, where men tend to be more outspoken, and women appear to be shyer. Nevertheless, in more private realms, such as during daily life in the household and clan, most girls and women are as outspoken as their husbands. This is even more apparent during manioc beer parties, where it is socially acceptable for both women and men get drunk, and consequently, to talk more freely, making jokes, tease each other, and, occasionally, to discuss problems or express anger in ways that are otherwise unusual during daily face to face interaction. Among people who have more exposure to broader Peruvian society, either because they came to live in Tayakome as adults, or because they spent considerable time in the surrounding *colono* towns to attend high school or to work in tourism, the role of women is definitively seen as more submissive, and both men and women with this experience reinforce this norm. However, this still constitutes only a small proportion of the population of Tayakome.

In any case, a widely shared notion in the community is the understanding that the period of menarche seclusion is a liminal or threshold state between childhood and

adulthood. Upon arrival at this threshold, the Matsigenka girl enters an ambiguous state where her body and personality are extremely susceptible to being affected by the features of the animals and plants that she eats. Thus, special dietary taboos play a fundamental role in this process of constructing a healthy and "proper" adult Matsigenka woman, and the list of foods that a girl can eat is dramatically reduced. According to the majority of Tayakome interviewees, the only foods that are universally considered to be safe for sequestered girls to eat, other than manioc, are the fruits and the heart of the palm tree tsigaro (or *shapaja* in Spanish), mentioned in the previous section, and *korio*, a 20cm-long catfish commonly caught in the Manu river. These food item are considered, in general, to be the default "safe" foods for spiritually-vulnerable people, like sick people, or infants, in addition to girls in seclusion. Furthermore, due to the high fat content of *tsigaro* fruits, this common palm is among the most appreciated fruit trees in Tayakome.

In contrast, there is a variety of dangerous food species that are believed to negatively affect a sequestered girl's appearance and personality. While talking about the *ashitakotake* (sequestration) period with Jacinta (~45), the matriarch of her clan, she mentioned to me that one of the animals that should not be consumed by girls is the macaw (*kimaro*), which is commonly eaten under normal circumstances. She said "Eating macaw is very bad for any girl that is sequestered. You have seen Emilia, my sister-in-law? You know how much she talks, right? And that she is always talking aloud and screaming? There you have it, she ate macaw when she was sequestered, now she speaks and screams as much as the macaw." Compared to the majority of women in Tayakome, who, as I mentioned before, tend to be reserved in public, Emilia (32) stands out for her strong, outgoing personality, loud voice and laugh, and expressiveness in almost any context. Jacinta is also a very outspoken woman, but the fact that she mentions these characteristics in Emilia, make reference, in my opinion, to Emilia's exceptional loudness in public and strong will, which is certainly uncommon among

women, as mentioned above, and is perceived as a negative quality, at least for Jacinta. While Jacinta was the only person who mentioned Emilia's case as an example of the consequences of eating macaw during sequestration, other Tayakome residents also associated this taboo with the negatively-perceived characteristic for women of being extremely talkative.

Other taboos were also related to the acquisition of undesired characteristics from food species. For instance, residents were also prompt to suggest that a sequestered girl should not eat spider monkey, a primate with exceptionally long arms and legs, since, as they affirm, the girl's arms will become equally large. Eating *tsiaro*, a common caterpillar whose body turns yellow after being steamed and peeled for consumption, will make a girl's skin yellowish. In all of these cases, people in Tayakome do not believe that the food animals that can affect a girl's appearance or personality are aware of the harm that they cause, nor that they consciously impose their animal characteristics on her. In fact, most of the animals in this taboo list belong to the second group of species resulting from the CCM analysis in the previous section (see Table 2), which are regarded as soulless and spiritually harmless outside of this context.

In sum, in the same manner as that described for other Amazonian societies, several specific food taboos practiced by the Matsigenka during liminal life-stages are conceived as contributing to a proper construction of as-yet-immature bodies and personalities. As Urban (1981) proposed in his semiotic approach to taboos (see above), the Matsigenka avoidance of certain food species in liminal contexts is related to an "iconic" association between the species and a particular quality that will be acquired by the person who consumes it, during the transition from pre-pubescent girl to woman at menarche, or the transition from infant to toddler during the couvade. In these cases, the animal (there is no plant that presents this type of danger) possess an agentive capacity, but it does not harbor any intention to affect the human; "it just happens," as people say.

Hunting Taboos Among Young and Old

In the case of adolescent boys, no counterpart to menarche sequestration exists, and their personalities seem to be influenced by the social pressure of older male peers and kin regarding what is proper behavior. However, the development of future hunting skills, fundamental to fulfilling the male role in the family as the provider of meat, is ensured through the practice of special food restrictions by teenage boys and their parents. Shepard affirms that the Matsigenka of Manu "view the nuclear family, and in fact the extended kin group, as sharing a single body. Harmful substances or spirits that come into contact with one body affect the bodies of all" (Shepard 1999a:149). While the taboos practiced during the couvade corroborate the fact that spirits that come into contact with parents also affect infants, this appears to occur only in a limited number of specific life-stages, and asserting that the Matsigenka believe that parents share the same body with their children over the entire lifespan would be overstatement, at least in Tayakome. For a start, for the members of this community, only parents' bodily experiences can affect their child's body and soul, and not the other way around. Furthermore, during my time in Tayakome, only in the context of interaction with certain animals and plants during the couvade, or when boys were starting to hunt, did the action of food consumption by parents have consequences for their children. This implies that the link between the bodies of kin is associated with the temporary vulnerability and development of children's bodies and souls, rather than being a permanent conception of the Matsigenka body. According to Tayakome residents, dietary restrictions apply when a boy (usually a teenager) first begins to hunt. Neither the boy nor his parents are allowed to eat any of the first five to ten animals (the number varies according the interviewee) of a particular species that the boy has shot. If this taboo is broken, then the boy's aim (kovintsate) will be spoiled and he will not be able to hunt. Consequently, during this time, the boy's preys are distributed to siblings and neighbors.

Other behavioral (non-dietary) restrictions are followed by adult hunters in order to maintain their good aim. For instance, people in Tayakome believe that when a man shoots a game animal, unless he is by himself, his hunting partner (either another man, his wife, or his children) is in charge of carrying the game back home. If the man breaks this taboo and carries his own prey, he will not be able to hunt successfully again. His arrows will not go straight the next time he shoots. Even if the archer tries repeatedly, people affirmed, the arrows will continue to miss their target until the hunter runs out of arrows. Similarly, when a woman is boiling a particular animal, she has to be very careful not to let the pot boil over. If she does, her husband will also lose his aim. Some men say that using *ivienkeki* for hunting or fishing for specific species, such as *oshetovienki* for *osheto* (spider monkey) or *koriovienki* for the small catfish *korio* (*bagre* in Spanish) also improve their chances to obtain these animals. In Tayakome, a few hunters mentioned more elaborate dietary and behavioral restrictions (e.g., refraining from sexual intercourse the day prior to going hunting), and the consumption of particular herbs or *inchashi* that improve aim (see Shepard 1998 for an account of these customs in Yomibato).

While I observed some instances of these male hunting taboos in Tayakome, in many cases it was difficult for me to obtain an explanation regarding the mechanisms underlying their effectiveness. Previous studies among the Matsigenka maintain the same thesis advanced by these researchers for taboos related to the couvade, namely, that vengeful spirits of game animals are responsible for the loss of a hunter's aim, if the hunter does not treat them respectfully, e.g., he touches them after shooting them, or his wife allows the pot to boil over while they are being cooked (Casevitz-Renard 1972; Shepard 1999a; Izquierdo, Johnson, and Shepard 2008). However, people's responses to my attempts to relate these taboos to the vengeful intentions of the game animals resembled their explanation for couvade taboos. When I asked people whether a hunted animal was capable of getting angry

at the hunter (in order to establish a link with the emotional desire for revenge), most dismissed this as ridiculous, in the same manner that they, and others, responded when I asked the same about food species that are taboo during the couvade. This is consistent with the fact that game species are regarded, for the most part, as soulless, and consequently lacking any capacity to affect humans outside of the liminal life stages mentioned above. In addition, most of the men and women with whom I discussed this topic did not explain to me the mechanisms underlying these taboos, and, importantly, they did not seem especially concerned about them, in a manner similar to their lack of concern regarding why certain species damage children during the couvade.

Perhaps, at some point of the history of Tayakome, fear of spiritual revenge may have been the original motivation for the invention of these hunting taboos and behavioral rules. However, conceptions changed, and perhaps only the practices related to these restrictions remained. It may also be the case that previous studies of the Matsigenka only reported the opinion of certain key or expert informants, such as shamans or healers, for whom the underlying danger in breaking these taboos is related to the spiritual power of game animals. However, such reasoning may not be shared by the majority of the "lay" population, and their opinions were left out of the main narrative of those prior ethnographic studies. In Tayakome, even people who are considered experts in matters related to the spiritual realm did not believe (or, at least, did not reveal to me) that there was any particular explanation for the need to follow hunting taboos, apart from the ultimate consequence – i.e., that the hunter will lose his aim. While I have not collected any evidence to support it, it is possible that some of these Matsigenka customs may have arisen inductively, as I proposed above for some food restrictions during the couvade, and that men follow such restrictions "just in case."

Conclusions

My objective in this chapter was to explore the *factishes* that the Matsigenka of Tayakome have with regard to animals and plants in the particular circumstances associated with dietary restrictions, since this is an especially salient context of physical and spiritual interaction between the Matsigenka and certain non-human beings in their environment. My observations in the community indicate that such conceptions are produced and reproduced through continuous relational experiences in various spheres of Matsigenka quotidian life. As a result, I propose a tentative context-dependent categorization schema of *factish*-species as conceived by the majority of adults in Tayakome. Accordingly, there is a group of animals that are general food taboos because they are either evil and have human-like malign souls (e.g., jaguar, *jeroroni*) and/or they taste bad. Among the edible species, those that are considered to be benevolent super-humans, and therefore tend to have a human-like soul (e.g., *vuimpuiyo*, the two species of armadillos), are avoided by parents during the couvade. Another category of species comprises species that are soulless, but have unusual physical or behavioral characteristics deemed undesirable or harmful by the Matsigenka (e.g., blindlooking mavoro fish, long-toothed predatory chambira fish). Such species can steal infants' souls and they, along with members of a more inclusive group of species, can pass their characteristics on to humans during liminal life-stages, but are perceived as agentless in other contexts. The last two categories of *factishes* include species that are harmless, and are either currently soulless – such as the majority of game animals, most of which were once humans, but are not anymore -, or which have human-like souls (but are not super-humans) - such as tapir and white-lipped peccary. In addition, in the context of the couvade, parents must avoid not only consuming, but also interacting with (mostly avoid killing) species that are general taboos (primarily predators), are either evil or benevolent super-humans, and which have strange physical or behavioral characteristics. The fact that the most commonly consumed

game species that are not subject to taboos during the couvade (e.g., spider monkeys and peccaries) are also species frequently associated with a current or former humanity, contradicts the perspectivist proposal that taboos exist in order to prevent a form of spiritual cannibalism.

It is worth mentioning the case of the armadillos and the owl *jeroroni*. As shown in Chapter 6, souls were attributed to these species by less than 70% of the interviewees, and consequently I did not include them among the species conceptualized more uniformly by Tayakome members (such as *jayapa* or *yairi*). The interviewees that considered that these species are soulless were mostly young and middle aged adults who are not interested in Matsigenka spiritual, as mentioned in Chapter 6. However, in the context of food restrictions, even these interviewees (who pointed out that such animals are soulless, and, in the case of the armadillos, do not think of these animals as kin who care for them) affirmed that these species are able to steal children's souls. It is possible, then, that in a more abstract context (such as my formal interview asking which beings have souls), animist dispositions are not salient. However, when asking about a concrete consequence of interacting with these beings (e.g., the potential to harm an infant) such a notion becomes more tangible, and then the super-human characteristics of these species are recalled. Another possibility that would apply only for armadillos is that this capacity to harm is not associated with the notion of soul, but rather with their extraordinarily physical strength.

Some scholars, mentioned at the beginning of this chapter, explain the existence of dietary restrictions as a behavioral consequence, or enactment, of society-specific species classification schema. Thus, certain species' characteristics result in their assignment to categories that then preclude their consideration as appropriate food (Douglas 1966, Urban 1981, Kensinger 1981). I have proposed that, in the Matsigenka case, the situation is more complex. With the exception of some species may be considered taboo because of their

invariant ontological condition (like species considered to be general taboos or superhumans), there appear to be no general, consistent rules that can be extended to the rest of the species in the Matsigenka world. I suggest that, in some cases, certain species are deemed taboo as a result of an *a posteriori* rationalization of their power to harm. Some such factishes may have emerged after an unfortunate event took place, which also coincided with an outof-the-ordinary interaction between humans and an individual non-human. People then retrospectively assigned the individual non-human with the power necessary to have generated the observed negative event. Subsequently, people inductively generalized the detrimental power of the non-human individual to all members of its species (and sometimes reified this power in the form of a dangerous soul, that is not similar to a human soul), often with an expert, such as the *seripigari*, playing a legitimizing role. I suggest that this may be origin of the power, and concomitant taboo, associated with the bird *oeinti*, and perhaps also with the tortoise shakiriri. Additionally, because of seeming inconsistencies in the causal explanations for the power to harm infants associated with some of the species belonging to the second group of taboo species described above (species with unusual physical characteristics), some of these taboos may also have developed as a result of this process. If this theory is correct, the correspondent attribution of agency to a non-human takes place only if there was a perceived consequence of an interaction with such a being - e.g., someone became ill, etc. As a result, some food restrictions developed in Tayakome may be partially the result of trial-and-error experimentation and accumulated experience interacting with animals and plants, rather than to a static a priori classification of animals, as has been interpreted for other Amazonian societies.

Such rationalizations of events are applied to circumstances that seem to be inexplicable, and taboos may occasionally be created in order to provide a feeling of control for the person who is experiencing such events, as proposed by Gmelch (citation) for the

taboos practiced by baseball players. Among the Matsigenka, as in all human societies, one context that generates a great deal of anxiety and preoccupation is that of infants' health, which explains the saliency and abundance of dietary and behavioral restrictions that parents must practice in order to ensure the health of their children. Another context of uncertainty is that of hunting and the development a good aim with a bow and arrow. Shepard asserts that, for the Matsigenka, there is no intrinsically good hunter, only good herbs and habits that contribute to a good hunter. I certainly have less experience than Shepard in this domain, as hunting is generally not considered to be appropriate behavior for a woman. Nevertheless, I can say that the stoic and time-intensive normative habits associated with a good hunter, still practiced by a few men in Tayakome, seem to be broadly analogous to the types of rites that Gmelch describes for baseball players. However, in contrast to his account of apparently superficial associations between practiced rites and the intended outcomes, such hunting practices reflect fundamental beliefs about the complex relationships between the different types of subjects that inhabit the Matsigenka world. Yet, as I describe in the next chapter, there seem to be community-wide changes in hunting rites and behavior, toward lessrestrictive habits, which may also be the result of the increasing experience of young men in non-Matsigenka settings, where more restrictive behaviors, in general, are deemed unnecessary.

In their volume comparing the animism practiced by indigenous societies from the rainforest and the tundra, Brightman and colleagues ask whether the animist conception of personhood, understood as the "human(-like) subjectivity, agency and emotion" (Grotti and Brightman 2014:14), normally attributed to humans and animals, is also attributed to non-human non-animal things. Based on my experience in Tayakome, I would take a step back, and begin by questioning their assumption that animals and non-human beings are always associated with a type of subjectivity based on personhood, or that necessarily resembles

humans. The animism practiced by the Matsigenka, as I describe above, suggests that, instead of a universal personhood, they attribute different kinds of subjectivities to various nonhuman beings, such that certain subjects may have the capacity to act and affect others, but that does not necessarily mean that they also possess human-like consciousness – that is, human judgement, intentionality or agency. Subjects may or may not be endowed with souls, and, even when they have a soul, they are not necessarily conceptualized as persons. For instance, powerful beings like jayapa or jaguar have human-looking souls that represent their human-like consciousness because they can interact with Matsigenka people, even though they are more powerful than them and have the agency and intentionality to affect them in different manners. In contrast, the also human-like soul of tapir represents a more similar category to the Matsigenka, but because they are humans in alternate worlds (tapir is a Matsigenka and the Matsigenka is his tapir-prey), they cannot interact as equals in the same plane of existence (see Chapter 6). As such, there is no problem with consuming tapirs. The bird *oeinti* and the tortoise *shakiriri* also have souls, but they are not human-shaped, and rather represent their power (agency, not necessarily intentionality) to harm infants by taking their souls. Finally, the predator fish *chambira*, and the blind fish mavoro also can take children's souls away, but they are soulless, and their power to harm resides in their physical characteristics. In this regard, if species harm infants as a result of a type of revenge against their parents, the Matsigenka concept of revenge can be better understood as an agencydriven, unintentional reaction to an action. In sum, these different kind of subjects have particular forms and degrees of agency, and sometimes intentionality and human-like consciousness. However, it is important to remember that while the conception of dangerous species, and consequently taboo, is more consistent throughout the interviewees, the attributions of souls varies more among those species that are not super-humans (see Chapter 6).

In conclusion, these findings shed light on the complex mechanisms involved in the emergence of ontological configurations. They illustrate the existence of a variety of *factishes* that exist as part of the social networks that the Matsigenka establish with non-human beings in their surroundings. Some Matsigenka factisches may be the product of accumulated experience that has been socially transmitted among individuals and across generations, and are currently reified in the categories of powerful beings with human-like agency and, in some cases, intentionality. However, in addition, as I illustrate for more recent instantiations of dietary restrictions, other contingent *factishes* may originate as *a posteriori*, inductive explanations for extraordinary (usually unfortunate) events. The theory I elaborate in this chapter is not an exhaustive attempt to explain the origin of Matsigenka ontological conceptions, as other mechanisms are certainly at play and contribute to their establishment. I merely emphasize that it is through interactions, such as the context of food restrictions, that conceptions of non-human beings arise and are enacted, and emergent ontologies become "real."

CHAPTER 8: RECONCILING CONCEPTIONS, VALUES, AND PRACTICES

In order to explore whether *what people believe (or what they say they believe)* corresponds to *what they do*, I contrast the ethnographic data that I collected among Tayakome residents through casual conversations, and formal and informal interviews, against the results of two formal interview tasks eliciting people's behavior, as well as my own experience conducting participant observation in the community. First, I present the results of a ranking task in order to show how people value animal and plant species, and consequently, how they may potentially behave toward them. Following this, I then show the results of a second formal interview of self-reported behavior, aimed at determining the correspondence between people's beliefs and their actions. I use the results of this task as an initial proxy for actual behavior, since conducting a rigorous study of a large sample of individuals' actions is fairly invasive and will require additional years of fieldwork. Nevertheless, as mentioned above, I combine insights derived from this interview with my own ethnographic experience living in the community for twenty-two months. The second formal interview included both factual questions about what people have done in the past, as well as hypothetical inquiries about what they believe constitutes correct behavior. This latter type of inquiry serves as an exploration of general Matsigenka notions of the forest, abundance of species, and the effects of human actions in this realm. Consequently, I first discuss the performed conceptions held by residents of Tayakome, i.e., their *factishes* of the forest and its components. Then, I examine notions of morality regarding humans' role in the forest (if, indeed, they believe that have a role at all).

While this chapter attempts to establish a link between conceptions and actions, it is inevitable that, due to the constant feedback between both, new notions will emerge that I have not explained in previous chapters. As a disclaimer, then, I emphasize that I am in no way arguing that the Matsigenka conceptions and beliefs discussed in previous chapters are

the only guidelines that people in Tayakome employ when conducting themselves in their daily engagements with their surroundings, since environmental decision-making is a more complex process. Rather, my endeavor here is more exploratory; I investigate whether what people think (or what they tell me that they think) corresponds with what they actually practice, and what they say they practice.

Valuing the Forest

In order to examine the relative value that people assign to particular species, and the criteria that they use to assess such value, I asked 53 Matsigenka (26 men and 27 women) to rank-order twenty species according to what they consider to be more important for 1) themselves, and 2) the *seripigari*. I presented the methodology for this experiment in Chapter 4. Here I briefly reiterate that the plant and animal species presented in this experiment included the most salient species of initial free-listings that I conducted with the interviewees, as well as other species that were not so salient, that I decided to include based on particular conceptions described in previous chapters. For the prompt of the task, I asked people to compare two randomly-chosen figures of species and assert which one they would prefer to maintain if one of them were to disappear, and why. Based on these paired-comparisons, I assembled the species ranking (see more in Chapter 4). I then asked Matsigenka participants to rank the animal and plant species, taking the perspective of the seripigari (Matsigenka healer or "shaman"), because he is considered the expert regarding the spiritual world inhabited by many of these species. As such, people's perceptions of the seripigari perspective may shed light on their conceptions of entities that they consider to be important in the spiritual domain to which they do not have direct access. I analyzed the resulting rankings of 53 Matsigenka (52 for the seripigari rankings, 26 men and 26 women) using the

Cultural Consensus Model (CCM, see Chapter 4) to determine if there was a statistical consensus among the answers of the interviewees in each group.

Valuation According to Themselves

The results of the CCM analysis for the rankings made according to individuals' own personal valuation reveals high concordance among the interviewees, with statistical consensus and similar explanations to justify their specific rank arrangements (1st factor eigenvalue = 33.61, 2^{nd} factor eigenvalue = 2.92, proportion of $1^{st}/2^{nd}$ eigenvalues = 11.51; proportion of variance explained by 1^{st} factor = 90.69%; all interviewees have positive competency scores) (see Figure 5.1). Initially, I hypothesized that generational, gendered differences within the Matsigenka community would greatly affect people's rankings, and that, consequently, I might not find consensus among the interviewees. Specifically, I hypothesized that younger adult males, who have more exposure to *colono* conceptions (because some of them work in *colono* towns), would use Western utilitarian criteria in their valuation of most species presented in this experiment. Accordingly, I predicted that the remaining population of Tayakome (mostly older men, and women of all ages) would assign the highest ranks to species such as *jayapa* and *kamarampi*, which are considered fundamental for curing serious illnesses and common diseases, respectively, but, from a *colono* perspective, are not useful. Similarly, I believed that certain species that are rarely hunted, such as vuimpuivo, which, as mentioned above, is considered to be a benevolent forest spirit, and *etini* (armadillo), which is perceived to be an ancestral relative, but also a powerful being (see Chapters 6 and 7, and below), both of whom care for and protect the Matsigenka, would be valued highly by this same subgroup of the community. Nevertheless, I found little evidence to support these hypotheses. As shown in Chapter 6, the group of young adults is not homogeneous, and only a few men and women of this subgroup responded to the interview questions in the way I had predicted. Unfortunately, when

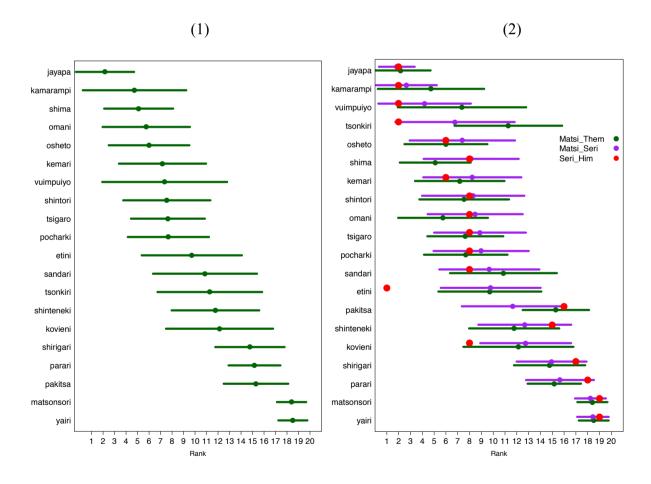
designing the stratified sample and conducting interviews for this task, I assumed that the subgroups of young men and women were homogenous in themselves, and did not anticipate the level of variation within each subgroup regarding aspirations and valuation of Matsigenka conceptions. In fact, I only realized this after I had analyzed the "soul" data (Chapter 6). Therefore, for this task, I did not interview the majority of young men and women of the subgroup mentioned in Chapter 6 who tended to answer very differently from most other Matsigenka. The residual agreement analysis, indeed, showed that young men who have more experience with colonos do not have a submodel of agreement that differs from that of the rest of the interviewees. Consequently, in this interview I seem to have included mostly those young people who think in manner more similar to that of the majority. While here I did interview many members of the subgroup comprising mostly middle-aged adults who appear to be less interested in Matsigenka metaphysical knowledge (see Chapter 6), the analysis of residual agreement also did not show any difference between them and the rest of the interviewees.

As an additional hypothesis, I predicted that that those Matsigenka who belong to the group of experts (12 men and women) would value spiritually powerful species more highly than would the rest of the participants because these individuals are more knowledgeable about, and more in contact (to a certain extent) with, such species. However, the residual agreement analysis indicated no significant difference between the opinions of experts and non-experts.

Results of this ranking experiment among Matsigenka are shown in Figure 5.1, where I plot average ranks assigned to each species (the average ranks correspond with the answer key determined by the CCM) and their respective standard deviations, representing the variability of answers among interviewees. In general, valuation based on utility accounts for the average ranks assigned to most species presented in this task. These useful species

include the medicinal plants *jayapa* and *kamarampi*, that were ranked by almost all Matsigenka in the highest positions. *Jayapa*, in particular, is regarded as the most important species because it is able to cure serious ailments, such as snake bites, bone fractures, and, in the case of illness caused by witchcraft (*gagetirentsi*), *jayapa* reveals the identity of the witch responsible. Its powerful status is comparable to that of the *seripigari* (see Chapter 6), who also uses his power to cure people.

Figure 5: Average rankings for each species. Bars are standard deviation of the mean. Rankings ordered according to (1) the Matsigenka according to themselves (green), and (2) the *seripigari* according to the Matsigenka (purple). (2) also shows ranking results of the *seripigari* according to himself (red), in addition to the comparison with the ranking of the Matsigenka according to themselves (green).



Kamarampi is considered less valuable and less trustworthy than *jayapa (see Chapter 6)*, which may be reflected in the higher variability of responses with regard to the former in

comparison to the latter. Still, *kamarampi* is deemed important, primarily because it is used by Tayakome residents to cure more common illnesses, such as colds or minor pains. The *seripigari* is the only person who can cure solely with this plant, requiring his most serious patients, often victims of witchcraft, to drink *kamarampi* frequently with him.

Highly desired edible species such as the fish *shima* (*boquichico* in Spanish) and *omani* (*zúngaro* in Spanish), as well as *osheto* (spider monkey), and *kemari* (tapir) were ranked as the next most valued species (on average), all of them, almost without exception, for their importance as food. I will refer to these as group 2 species. The same is true for the species that follow these in rank, which I refer to as group 3: *shintori* (white-collared peccary); the palm tree, *tsigaro*, the fruits and heart of which are highly sought-after, *pocharki*, a tree that produces red, sweet fruits, called *chimicua* in Spanish, eaten by both people and animals; and *etini* (armadillo), considered by the Matsigenka to be a protective figure, and called grandfather or *nosaro*, but valued, in this case, as food.

Importantly, *vuimpuiyo* (screaming piha bird) was ranked (on average) between groups 2 and 3, for different reasons. Some interviewees pointed out that they indeed would eat this bird if they could shoot it, which is difficult because it is so small. However, precisely because of its small size, and its ability to hide well, it is not preferred prey, and people tended to assign it to a lower rank, below the most desirable edible species in group 2. In contrast, many people pointed out that an infant could be harmed if her parents ate *vuimpuiyo*, not because the bird wants to damage her, but because it is a powerful being, whose strength can affect her. In addition, a few interviewees from two related clans (not all of the members of these clans had this opinion), assigned *vuimpuiyo* a very low rank because they blame this spirit for having killed a Matsigenka man several decades ago (see Chapter 6). Some members of these clans maintain that *vuimpuiyo*, in its spiritual form known sometimes as *sangariite*, was responsible, while others attribute the murder to the *sangariite*,

but they do not associate them with the bird *vuimpuiyo*. At the same time, other participants, two experts, who are a couple, and most of their kin relatives (children, children-in-law, a few of their grandchildren) and a few other experts and non-experts, indicated that they value *vuimpuiyo* because it, in its form as *sangariite*, protects the Matsigenka and is a close associate of the *seripigari* (see Chapter 6). Shepard (1999b) describes the *sangariite* as spirits protective of the forest and of all species that inhabit it, an idea he claims is held by the Matsigenka of Manu. From Shepard's description, it is unclear whether this was a widespread belief in the communities where he worked, or whether this was, rather, the understanding of a few experts. According to my experience in Tayakome, the majority of people considers that *vuimpuiyo* protects people in the forest, but the belief that it protects non-human species is only common among few elders, and it is currently not widely-shared among the rest of the community.

In sum, while some people value *vuimpuiyo* because it is useful as food and others for its benevolent predisposition toward the Matsigenka, some interviewees instead emphasize the negative effects that are associated with consuming it or coming into contact with it. As a consequence of these highly divergent views regarding *vuimpuiyo*, the standard deviation for this species, reflecting the variability in responses, is large (Figure 5.1). It is also important to mention, that the criteria interviewees used to assign value to this and other species were not mutually exclusive: Some people who considered *vuimpuiyo* to be a protective, Matsigenka-like spirit also mentioned that it is a tasty bird. Therefore, the fact that this species could be labeled as "sacred" in Western terms, because of its importance as a forest spirit and its relation to the *seripigari*, does not impede people from hunting and eating it.

The case of the giant armadillo, called *etini* (which is equated with the larger giant armadillo *kinteroni*) is similar, although this species is not as salient as *vuimpuiyo*. Many interviewees referred to this animal as *nosaro*, "my grandfather," and mentioned that,

occasionally, it walks at night near the houses of the Matsigenka to check that they are doing well (see more in Chapter 7). However, as evident by the variance around its average rank (Figure 5.1), there was heterogeneity in how *etini* was conceived. Interviewees who assigned it a high rank, justified their responses less frequently by citing this kin association with Matsigenka, but often emphasized its value as prey, providing a large quantity of meat. In contrast, most interviewees ranked etini lower than other edible species based on its perceived non-favorable ecological characteristics, e.g., it is rarely seen in the forest, and it competes with Matsigenka for *paguiri*, the large beetle larvae that the Matsigenka harvest from fallen palm trunks. Thus, in the context of this interview, that elicits the importance of species for participants themselves, it appears that the most salient characteristics of armadillo are its utility as food and the more mundane interactions that the Matsigenka have with this animal. Such interactions also include armadillo's less commonly mentioned (in the context of the interview) detrimental effect on infants when parents consume it as a result of this animal's physical and spiritual strength (see Chapter 7). People that recounted this capacity, mostly women with infants, assigned etini a lower rank. Thus, in contrast to vuimpuiyo, the beneficial role that etini plays in the life of the Matsigenka as a consequence of its emotional association with them with them, seems to be less relevant, or at least less salient, for most participants than are the interactions mentioned above.

The ranks of the following species were also justified by Matsigenka interviewees using utilitarian criteria: *Sandari* (Cuban cedar, *Cedrela odorifera*) is the preferred wood for Matsigenka canoes, but for younger Matsigenka men who have more experience working in surrounding *colono* towns and in broader Peruvian society, it is also known to be a valuable timber-yielding species. Matsigenka build blinds under the tree *shinteneki*, in order to hunt the many species of birds and mammals that are attracted to its fruits. *Kovieni* produces seeds covered with a sweet powder that is readily consumed. Despite high variation in assigned

rank (again, high standard deviations, Figure 5.1), the low average ranks of these tree species may result from the fact that they provide only indirect or infrequent benefits for most people, compared to the edible species with higher mean ranks. For instance, only a few people in Tayakome know how to carve canoes, and, due to MNP regulations, no park residents can profit by selling *sandari* wood (see Chapter 3). Similarly, not every man in Tayakome has the patience to build a blind and hunt under trees like *shinteneki*. Finally, *kovieni* is a tree that a few people consume more often because they have planted it around their houses. However, in general, it is less frequently searched for and harvested in the forest. This contrasts with *pocharki* (*chimicua*), mentioned above, whose red, sweet juicy berries are highly preferred, searched for and harvested when it is fruiting.

The hummingbird, or *tsonkiri*, was ranked among the less important species on average, and also had relatively high variance. The principal explanation might be its rather low "utility" for most interviewees. *Tsonkiri* was mostly seen as a pleasant bird to spot and listen to, but that does nothing directly beneficial for the Matsigenka. A number of people mentioned the relationship between this bird and the *seripigari*. Some explained that this species was a *seripigari* in the past, and, consequently, it was similar to a Matsigenka. Others believe that this bird is still a metamorphosed *seripigari*, but that it can only be recognized as such by another *seripigari* (see Chapter 6). Some of these interviewees assigned a high rank to *tsonkiri*. However, the majority did not, reserving the higher ranks for edible species. As I show below, this ranking changes considerably when interviewees are asked to assume the perspective of a *seripigari*.

The remaining five species were perceived as either neutral or harmful to the Matsigenka. *Shirigari*, the kapok tree, is admired by tourists, biologist, conservationists, and Manu National Park staffers due to its large size, but the Matsigenka associate this tree with death because they bury their deceased under it. Occasionally called the *panteón*, a Spanish

word for cemetery, *shirigari* is considered to be dangerous for children because it can *cutipar* or *opuigatake*, by taking their soul away, causing them illness and, eventually, death (see Chapter 7). Some people believe that this evil power is substantiated in a human-like soul that one can see in the forest, near the tree. Parari (the giant river otter) was classified by some interviewees as a competitor with Matsigenka for desirable fish, such as *shima* (above). However, like tsonkiri, parari elicited neither positive nor negative feelings for most interviewees. The case of pakitsa (harpy eagle) is interesting because, despite the confessed admiration that many men have regarding this bird's hunting abilities (for which it is considered to have been, and still be by some, a human man), most men (along with women) ranked it in lower positions. Some justified its low ranking by alluding to the fact that it is a competitor spider monkey hunter for the Matsigenka, similar to the giant river otter case. Many, mostly women, mentioned that *pakitsa* is detrimental because it hunts the small chickens that run freely around houses. The threat of this, and other types of eagles, is the reason why women constantly protect and carry their small chickens with them in baskets whenever they know they will be away from their house for a long period (e.g. visiting a neighbor, or away in the forest).

Finally, and importantly, the species that were most consistently assigned the lowest ranks (with low variability, Figure 5.1) were *matsonsori* (jaguar), and *yairi* (*stingless bee* also known as *cortapelo* in Spanish, because when encountered in the forest, these bees annoyingly tangle themselves in people's hair). Indeed, besides snakes, *matsonsori* is the animal most feared by the Matsigenka (see Chapter 6), and is believed to have an evil soul due to its "wicked" nature. As recounted in previous chapters, there have been two cases in which people were attacked by jaguars, both of them in Yomibato, the larger, more isolated Matsigenka community, located one day upriver from Tayakome. There are also sporadic encounters with old jaguars, thought to be evil spirits and/or elders from other communities,

transformed into jaguars by the evil soul of these predators. *Ivegaga matsonsori* (evil jaguar spirits) are characterized by being skinny and infested with botfly larvae, a fly whose larval stage lives under the skin of host mammals. If killed, a jaguar is generally burned by the Matsigenka until it is ash, because otherwise it is believed to return from the dead in a more ferocious form, generally described as two-headed and armored with a turtle shell that is impenetrable to arrows (see Chapter 6).

Almost without exception, the Matsigenka of Tayakome claimed that *yairi* is one of the numerous evil spirits that inhabit the forest. People fear *yairi* because it causes spiritual damage if encountered in the forest, which manifests as inexplicable symptoms, like bodypain or fever, that, if not treated properly, can be fatal. A number of interviewees mentioned that *yairi* can transform itself into a human, and, due to this type of power, many equated it with a *matsinti* or witch.

In sum, the results of this task show that Matsigenka tend to value species according to utilitarian criteria, prioritizing plants and animals that are fundamental for guaranteeing their well-being in daily life. Based on interviewees' justifications of the rankings they assigned, the utility of some of these species to the Matsigenka is associated with their different "ontological" statuses: some are different types of subjects with varying degrees of agency and different kinds of intentions. Others are conceived as agent-less beings, to the extent that they cannot spiritually affect humans, similar to Western notions of resources. The low variability of the (high and low, respectively) ranks attributed to benign plants (*jayapa* and *kamarampi*) and malign animals (jaguar and *yairi*) reinforces the high agreement among people in attributing human-like conditions to these species, represented by the attribution of a soul (see Chapter 6), that endows these beings with the capacity to either benefit or harm the Matsigenka. The case of *vuimpuiyo* is similar to *jayapa* and *kamarampi*, to the extent that some people (mostly those who place this bird at the top of their rankings) ascribe to it the

same super-human qualities associated with these two powerful plants. However, perhaps as a consequence of the fact that lay Matsigenka cannot directly engage in a relationship with *vuimpuiyo*, and only the *seripigari* can enter the realm in which these birds' true human-like essence is discernable, most interviewees did not rank them highly, considering them unimportant for their more immediate existence. For this reason, exploring how Matsigenka rank such species from the perspective of the *seripigari* provides a more complete understanding of the Matsigenka conceptualization of their world.

Most of the species that are both considered to be soulless and are also highly valued by the Matsigenka of Tayakome, are commonly-eaten fish and game animals. The perceptions of interviewees with regard to some of these species resemble Western notions of animals, in which species are considered sentient subjects only to the extent that they are alive, but no further resemblance to human subjectivity is attributed to them. Some of these species, however, have the capacity to harm Matsigenka, especially infants, while a few interviewees associated others with spiritual owners that intercede for these species in their relationship with humans (see Chapter 6).

It is worth mentioning that I attempted to replicate Atran and colleagues experiment among the Itza' Maya, in which this Central American indigenous people assigned high – ranks to species that are ecologically important for the forest, because Itza' consider such species to be valuable for the forest spirits, called *aruxes* (Atran et al. 2002). In order to do so, I additionally asked the participants to construct rankings from the perspective of the *vuimpuiyo* or *sangariite*, who, following the accounts of some elder Tayakome residents and Shepard (1999b), are spirits that play a similar role to that of the *aruxes*, by taking care of game animals and raising them as their pets. With this purpose in mind, in the list of species, I included the tree *shinteneki*, which attracts birds and small mammals because of its fruits, as explained above. Besides potentially considering it important due to the indirect hunting

benefit that it provides to themselves - the Matsigenka set blinds near shinteneki to hunt these species –, I wanted to test whether people would value this tree because of its ecological value (i.e., its importance as food for different species, in addition to the Matsigenka), in a manner similar to species that the Itza Maya valued highly(Atran et al. 2002). However, asking people to construct rankings from the perspective of vuimpuiyo/sangariite did not function, mostly due to the variation of conceptions regarding these spiritual beings. Indeed, the majority of Tayakome residents do not share the elders' opinion regarding vuimpuiyo. Rather, they affirm that these spirits only help Matsigenka. A few interviewees were of the opinion that this spirits are evil (see above). Therefore, for the majority of interviewees, the idea of establishing a relationship between *vuimpuivo/sangariite* and other species seemed nonsensical, and many claimed that they did not know what species this bird-spirit valued when presented with the prompt of the task (see above). Only a couple of interviewees affirmed that *vuimpuiyo* are interested in protecting the forest as a whole, and as such, they believed that all the species were equally important to these birds. However, these participants were the exception, and, in general, no ranking could be constructed from the perspective of this species-spirit.

Valuation According to the Seripigari

The *seripigari* connects lay Matsigenka to the spiritual realm that is usually invisible to them. As a consequence, exploring how the Matsigenka believe the *seripigari* would value species can shed light on people's indirect valuation of species. According to the CCM analysis, there was consensus among the interviewees $(1^{st} \text{ factor eigenvalue} = 32.18, 2^{nd} \text{ factor eigenvalue} = 3.72$, proportion of $1^{st}/2^{nd}$ eigenvalues = 8.66; proportion of variance explained by 1^{st} factor = 88.32%; positive competency scores for all individuals), and the results are shown in Figure 5.2. People's ranking of species from their own perspective (analysis above) and from the perspective of the *seripigari* are highly correlated (Pearson

Correlation Coefficient r = 0.91). The principal differences between the two sets of rankings are related to vuimpuivo and tsonkiri, and, to a lesser extent, sandari and pakitsa, which were all assigned higher positions in the *seripigari* rankings than in those made from the interviewees' personal perspective. As mentioned above, Matsigenka believe that the spirit of vuimpuiyo is a Matsigenka, sometimes equated with the sangariite spirits, who live in the forest and are normally invisible to common Matsigenka. Only the seripigari, because of his training and special knowledge, can interact with these spirits as equals. Similarly, most Tayakome interviewees hold the idea that *tsonkiri* was, or is, a *seripigari* that has temporarily metamorphosed in order to travel quickly, for instance, to visit Matsigenka in distant communities for the purpose of looking after them. As mentioned above, most Matsigenka consider vuimpuivo and tsonkiri important from their personal perspective because these species take care of the Matsigenka. However, participants did not consistently assign them high ranks when performing the experiment from their own perspective, probably because it is commonly believed that lay Matsigenka cannot inhabit the same realm as vuimpuiyo, and, therefore, establishing a direct personal relationship with this bird-spirit is not possible. While many interviewees consider vuimpuivo to be helpful for themselves, most interviewees seem to believe that the seripigari is the only person who can access the spiritual power of these birds on behalf of the community. For instance, it is the seripigari alone who receives the knowledge shared by vuimpuivo about new varieties of domesticated plants and strategies to cure illnesses

The justification that many interviewees gave for ranking *pakitsa* (harpy eagle) highly (from the *seripigari*'s perspective) was related to the fact that *pakitsa* gives its power to the *seripigari*, and, in that way, the *seripigari* is able to cure illnesses. Some mentioned the fact that the *seripigari* who lives upriver once raised a harpy eagle from a chick, which is an unusual type of pet (*piratsi*) for the Matsigenka (see below).

During my time in Manu I had the opportunity to visit one of the few seripigari in the region, Mario, who is known and respected by everyone in Tayakome. My conversations with him afforded me a glimpse of certain aspects of the Matsigenka world (including the spiritual one) from his perspective. In one of these visits to his house, I did in fact manage to interview Mario and ask him to do the same ranking experiment, the results of which are shown in Figure 5.2. His answers resemble those of most Matsigenka of Tayakome, with two important differences: First, Mario ranked etini in first place, arguing that it is nosaro, my grandfather, a notion that is indeed held by most Matsigenka of Tayakome, but that was apparently not salient when valuing species according to their personal perspectives during the interview task. Second, Mario ranked *jayapa*, *kamarampi*, *vuimpuivo*, and *tsonkiri* at the same level. As mentioned in Chapter 6, a soul similar to the *seripigari* is attributed to all of these species, and Mario's ranking pattern coincides with this conception. He affirms that all these beings are his friends and that he can meet them whenever he drinks kamarampi or jayapa. While many people in Tayakome regard him as an expert on issues relating to nonhuman subjects and the Matsigenka metaphysical world, I wish to clarify that his perspective is equal in value to that of any other of the members of Tayakome, most of whom behave in their quotidian life without necessarily considering the opinion of such spiritual experts.

Different Ontological Statuses Imply Different Engagements?

In order to systematically examine the relationship between Tayakome residents' environmental conceptions and practices, I conducted a self-reported behavior interview. In this formal interview, I enumerated a list of activities that involve interactions between Matsigenka and different species, and designed a series of additional questions that I hoped would shed light on Matsigenka perceptions of the effect of their activities on the forest (see Table 3). I asked different numbers of interviewees (sample sizes presented in the table)

whether they practice these activities, and their opinions regarding the hypothetical activities proposed.

Hunting Animals with Matsigenka-Like Souls

Some animals, mostly commonly-hunted game species, are believed to have been humans in the past. However, for the majority of interviewees, there is no longer any remnant of such species prior human-like existence. The exceptions are species whose existence affects the Matsigenka in more aspects of their daily life than solely that of consumption. This is the case of *pakitsa* or harpy eagle which is venerated as an exemplary Matsigenka hunter. As such, people, especially men, actively seek to hunt it whenever possible, in order to obtain its feathers, that are considered the best for constructing arrows (see also Shepard 2002), and also to fabricate amulets out of its talons to improve men's hunting skills. While women are aware of these qualities attributed to harpy eagles, they are indifferent toward interacting with them. Furthermore, as pointed out in Chapter 6, some men in Tayakome affirm that men can eat harpy eagle, but women should not do so, as they would then acquire the desire to go hunting, which is perceived as a purely male activity.

| Item N° | Self-Reported Behavior | Sample Size | Proportion Yes/Right |
|---------|---|----------------|-------------------------|
| 1 | Do you or your wife avoid(s) letting the pot boil over when cooking food? | 15 | 1.00 |
| 2 | Did you and/or your young son practice food taboos for hunting? | 19 | 0.95 |
| 3 | Do you bath your baby with inchashi and/or ivienkeki? | 16 | 0.94 |
| 4 | Who carries the prey that you shot, you or your companion? (Companion=yes) | 15 | 0.93 |
| 5 | Did you practice food taboos when your children were infants? | 25 | 0.92 |
| 6 | Do you plant sekatsivienki in your manioc field? | 25 | 0.84 |
| 7 | A woman does not want to raise a baby <i>osheto</i> , and prefers to kill and eat it. Right or wrong? | 38 | 0.63 |
| 8 | Do you or your husband use <i>ivienkeki</i> or <i>inchashi</i> for hunting? | 26 | 0.62 |
| 9 | A woman eats her adult pet osheto. Right or wrong? | 37 | 0.59 |

Table 3: Results of Self-Reported Behavior Interview

| 10 | Do you or your husband use <i>ivienkeki</i> for fishing? | 27 | 0.56 |
|----|--|----|------|
| 11 | Do you harvest Brazil nut if you have an infant? | 26 | 0.54 |
| 12 | Do you cut a <i>kamana</i> when you are making a manioc field? | 22 | 0.50 |
| 13 | Does the forest need to be cared for? | 16 | 0.19 |
| 14 | Will <i>shima</i> be extinguish? | 26 | 0.15 |
| 15 | Will osheto be extinguish? | 26 | 0.15 |
| 16 | Will <i>tsigaro</i> be extinguish? | 26 | 0.12 |
| 17 | Do Matsigenka take care of the forest? | 12 | 0.08 |
| 18 | Do you avoid cutting <i>pocharki</i> when you are making a manioc field? | 31 | 0.00 |

In the case of *etini* or *kinteroni*, the reactions are more varied among the members of Tayakome. The different reactions I observed among people involved in the hunt of a kinteroni (mentioned in the previous chapter) shed light on these different perceptions. As I recounted, Saul (22) went upriver one day in November on a five-day-long fishing trip. He was accompanied by his younger brother Wilmer (19), who had just returned to the community after completing a year of voluntary military service in Puerto Maldonado, their friend Benjamin (30), and his wife, Emilia (30). The day after their return to the community, I, along with other women, heard Emilia's version of the hunt while we and our husbands gathered at Paula (28)'s house, Emilia's sister, to drink her manioc beer. The men were joking and telling stories under the elevated house where Paula and her family sleep, while the women (nine, including me) were sitting in a circle, on the ground of the kitchen, listening to Emilia. She seemed mortified while narrating the story, speaking in the same manner that Matsigenka women do when they recount a painful event: she was talking in a very soft voice, sometimes almost as if crying, most of the time looking down at her lap and her hands, which she moved occasionally to imitate the men or the *kinteroni* during her narration. One of the men had discovered the animal, half of its body inside of a hole in the sandy ground, right as they were preparing to return home from the fishing trip. The three men unsuccessfully tried to pull the *kinteroni* out of the hole, and, due to its extraordinary strength and the quickness with which it tried to dig itself further into the hole, as well as its

hard shell, they could only injure it with a sharp stick at a soft spot on the side of its body. However, even after pulling it out, and, thinking it dead, they left it lying on the ground, the large animal ran away, and, with an impressive swiftness, dug itself into a new hole. It was only stopped when one of the men grabbed its tail, another one dug the sandy ground below it, and then the third gave the final blows with a machete. None of the men involved in the hunt (with whom I talked some days later) wanted to take responsibility for carrying out the final machete strikes, and they all blamed the other participants for having done it. Emilia said that she and her husband, Benjamin, were, the whole time, reluctant about killing the kinteroni, and wanted to abandon the hunt. At a certain point in her narration, Emilia imitated the manner in which the *kinteroni* suffered while one man was hitting it once it had been dragged out of the hole. She held her arms half raised and moved her head from side to side, maintaining her afflicted tone while mimicking the cries of the animal. At that moment, Nidia (39), who was sitting right in front of her in the circle, said: "Oh yes, kinteroni was a human a long time ago," and some women assented. Emilia continued with her story, but I remained surprised with Nidia's remark because it was one of the only occasions that I have heard someone making reference to the previous humanity of an animal in a context other than a mythical narration, or my own specific questioning. I asked Nidia some days later about her commentary. She asserted: "Yes, kinteroni was a Matsigenka a long time ago. Now he is not a Matsigenka anymore, but he still suffered like a human [when] they were killing him. [Emilia] did not want them to shoot at him, because he was a human a long time ago. [The men] did not have compassion for him [when] they killed him, no compassion. Benjamin did not want to shoot at him either, no. [...] Emilia did not want to eat it later."

Emilia's distress over the killing of the *kinteroni*, and Nidia's allusion to its previous humanity appeared to result from observing (or hearing of) the animal's strong resistance to the initial attempts to kill it, and to its extreme suffering during the final moments of the

process. A few days after the manioc-beer party, I attempted to talk to Emilia, but she seemed to be still affected by the event, and refused to discuss it with me. Benjamin was more open to talking about the hunt, but was still apprehensive, like Emilia, so I did not want to push him either. He said that he did not want to kill the *kinteroni*. Besides recognizing its previous human state, Benjamin argued that he was fearful about what could happen to him personally if they killed it, given that it is a powerful being.

However, Saul and Wilmer's reactions towards *kinteroni*'s humanity and/or power was expressed differently. According to Benjamin, the two brothers were particularly excited about bringing it home. When I talked to Saul about this event, he was more relaxed and confirmed Benjamin's version. "[*Kinteroni*] is a Matsigenka, it is powerful, like a *shaman*... if you find it on the trail, you catch it, and grab it by its shell with both hands, you flip it face up and it gives you its power, and you feel something, as if something enters into you. Then, you let it go... After that, you can lift heavy things, as if it were nothing, with one arm." Many people in Tayakome recognize *kinteroni*'s super-human abilities, such as its impressive physical strength. However, Saul, in contrast to other Tayakome residents of his age, always expressed more enthusiasm regarding powerful animals and the spiritual world. "[People] say that you can drink [*kinteroni*'s] raw blood, it gives you strength," he added. I asked him if they did that after they killed the animal, but Saul stated "No, you have to be careful. The ones who drink it are elders, they can control themselves. Young people can't do that."

Saul confirmed Benjamin's account. He and his brother Wilmer were more interested in hunting the *kinteroni* than Benjamin: Saul, out of his fascination with this powerful animal, and Wilmer, because of the rare opportunity to capture such an elusive animal, Saul affirmed. However, when the *kinteroni* escaped the first time, Wilmer wanted to give up out of tiredness, and abandon the wounded animal in order to return quickly to the community. Saul, in contrast, was still excited about the hunt, and convinced his companions to go after

it, finally killing it and bringing it home. Before arriving Tayakome, Saul and Benjamin threw the animal's intestines in a part of the river that makes a U-turn, so that the strength of the animal would excavate that piece of land, and the river would run straight, reducing future travel time.

Saul's attitude towards the *kinteroni* differs greatly from that recounted by Emilia and Benjamin, as well as from that of his brother Wilmer. Emilia and Benjamin were more worried about hurting such a powerful animal that was suffering like a human being, partially because of the negative implications that this event might have for them. Saul, in contrast, seemed to be rather excited by the hunt, perhaps more because of the challenge that it represented than because of the possibility of actually acquiring the *kinteroni*'s strength, as he mentioned. I could not talk to Wilmer because he stayed for only a short time in the community and, as he claimed the few times that I attempted to ask him about the *kinteroni* hunt, he was "just visiting," and actually did not want to be interviewed nor discuss things with me in more detail. In sum, *kinteroni* is generally believed to have been a human in the distant past by some people.

It would have been interesting to observe actual interactions between this species and other people in the community, for instance, those who affirmed that *kinteroni* is soulless and do not refer to it as their grandfather (most of whom are members of the subgroup of young people who least value certain aspects of Matsigenka knowledge about the spiritual world, mentioned in Chapter 6). With such observations, I could have tested whether their indifference to this species' potentially dangerous spiritual power was real. Unfortunately, *kinteroni* is rarely seen by Tayakome residents, likely due to this animal's low population density in Manu. However, I was able to elicit some additional conceptions of this animal held by these few interviewees when I inquired about more concrete consequences of interactions with these beings, for instance, during the interview about species that are

spiritually harmful for children (Chapter 7). As I mentioned in Chapter 7, most of these individuals agreed with the majority of interviewees, in that *kinteroni* can steal infants' souls if their parents interact with it, suggesting that they do attribute some super-human quality to this animal. However, since all of them recognized that this is an extraordinarily strong animal, it is possible that these interviewees related this power to harm to such physical quality rather than to a remnants humanity. In any case, for different motives, most Matsigenka in Tayakome interact with armadillos in manners that differ from their interactions with other game species, as will be shown in the next section.

Hunting Soulless Animals

Hunting more common game animals, such as monkeys, agouties or game birds, is different, as they are not associated with any special physical or spiritual power. The prior humanity of these species is not evoked in the context of hunting, nor in other situations unrelated to storytelling. In contrast to *kinteroni*, most of these species are considered to be harmless, and, if they are dangerous in some manner (e.g., capable of stealing infants' souls), this capacity is not associated with their formerly-human state (see Chapter 7). Among these game animals, there is greater consensus among the Tayakome population with regard to the correct manner of performing the hunt, following established rules and practices, the main purpose of which is to maintain hunters' good aim. Some authors affirm that Matsigenka hunters carry out certain practices in order to elude the vengeful spirits of the hunted game (Casevitz-Renard 1972; Izquierdo, Johnson, and Shepard 2008). These include avoiding contact with the prey's carcass, and treating it with respect by not allowing the pot to boil over while it's being cooked. During the formal interview, I asked interviewees if they practiced these rules (questions 1 and 4, Table 3), and almost everyone's answer was yes.

If I carry the prey that I shot [instead of letting my friend to carry it, then] the next time I go hunting I won't be able to shoot straight, I won't have aim. If my wife allows the pot to boil over while she is cooking the spider monkey, then it is not good. I won't have aim. My arrows will be finished [before I hit the animal]. My aim will die, it will get sick, and then, it will die. If my wife burns the food, my aim will die as well. If another day, I drink *ivienkeki*, I will have good aim again.

However, when I asked German to explain why he would lose his aim if he or his wife behave in this manner, he answered that that is just the way it is, that is what happens when you break these rules. Aurelio explained it this manner:

[Only] when I go to hunt spider monkey by myself, I carry it [but not otherwise]. When I get home, my daughter is there. Then, I give [the spider monkey] to her to cook, not to my wife. If Juvenal [his son-in-law] shoots [a spider monkey], then Nidia [his wife] cooks it. That is how they say that the first people did it a long time ago, they learned to do it like that.

I asked him why people started doing that a long time ago, and he replied that that is just the way they did it. Following what has been described by other anthropologists working with the Matsigenka (e.g. Casevitz-Renard 1972; Izquierdo, Johnson, and Shepard 2008), I asked whether the spider monkey or its spirit would get upset with him if he were to carry his own prey. "No, spider monkey does not get angry when I shoot him. You just lose your good aim" he answered, smiling, almost making fun of my suggestion, "If you shoot [a spider monkey], and the other person carries it, then, you can keep hunting well.

Other people placed more emphasis on the sharing aspect of this prey-carrying custom, coinciding with that pointed out by Shepard (2002a). Twenty-five-year-old Modesto and his wife Juliana live in the clan of his maternal grandfather, Amador (70~), where he and 28-year-old Ismael, are the main providers of game meat. For Modesto, trading places with Ismael during the carrying of hunted prey facilitates sharing it with the rest of the clan:

If Ismael shoots [a spider monkey], I will carry it, he does not do it. If I shoot it, he carries it. If he shoots and I carry it, I give it to Juliana. She removes the fur with hot water, then cooks it. Then, when it is completely cooked, she brings it, she takes it from the warm water, and she says "let's go to eat," and we all eat together. When I shoot a monkey, it is the same, Maria Isabel [Ismael's wife] cooks it and we all eat together.

Ismael also shared Modesto's opinion, as he recounted to me during another conversation: "We take turns to share," he affirmed in Spanish, but he also explained that if he has shot a prey, and then does not let his companion carry it, then his aim will be gone. Modesto explained to me why it is important to continue the custom of preventing pots with hunted game from boiling over while cooking:

If your wife allows the food to boil over, you will lose your aim. She allows it to boil over, she scares away your good aim, it goes away. You finish your arrows [before shooting something], you have no more, you come back only with your bow. [When she allows it to boil over], the water falls into the fire and extinguishes it next to the pot with the spider monkey. Your aim gets mad, and dies, you don't have good aim anymore. You shoot, and you finish all your arrows.

Modesto's opinion was shared by almost every male and female adult in Tayakome. However, not even experts could explain why the hunter's aim would "run away" or "die," as many affirmed. It is interesting how nearly all of the men with whom I conversed about this topic, consider their aim to be a subject that becomes hurt or upset when the hunter's wife allows a game animal's pot to boil over, attributing human-like dispositions, like getting mad, sick or the ability to die, to "aim". Still, in contrast to the explanations provided by other anthropologists, no one in Tayakome seemed to associate these restrictions with the vengeful souls of the hunted animals, because, for a start, most such animals are perceived as being soulless. It is possible that previous generations of Matsigenka believed that remnants of the prior humanity of game animals endowed them with the capacity to exact revenge, similar to the case of *kinteroni*, and that fear of these animals' vengeful souls inspired the original development of these particular customs. Nevertheless, in the present day, at least in Tayakome, only the practices remain, and people appear to believe that there is no ultimate explanation for them.

Another custom associated with maintaining a hunter's good aim is the observance of dietary taboos established for a particular species that the hunter has caught for the first time.

Such taboos are most often practiced by boys who are learning to hunt (see Chapter 7). In these instances, the boy and his parents restrict themselves from eating many of the first game animals that the boy has shot (sharing the meat, instead, with his siblings and neighbors), in order to ensure that he will continue to have success when hunting those species in the future. According to the self-reported behavior interview (question 2, Table 3) and to my personal observations, this is a widely-observed taboo, believed to ensure boys' future good aim. Similar to the practices mentioned above, people appear to be uninterested in (and/or not know) the ultimate causality behind these restrictions. If such causality was indeed more salient in past generations, only the convention is maintained and enacted by current Tayakome residents.

Plants that are Medicine

The results of the rankings discussed in the first part of this chapter indicate that, for the majority of Tayakome members, the plants *jayapa* and *kamarampi* are the most valuable species in the forest because of their powerful curing abilities. In previous chapters, I have described the manners in which the Matsigenka of this community engage in social interactions with these plants as a consequence of the fact that their souls are perceived to be conscious subjects that are more powerful than human beings. In contrast, other medicinal plants that are also important to the Matsigenka for improving people's abilities to conduct certain activities, or that provide protection, are not considered to be subjects in themselves. They are rather perceived as the vehicle through which the *seripigari* or *vuimpuiyo/sangariite*'s power is passed to, or shared with, the Matsigenka. These are generally conceived as soulless, agentless medicines, instead of conscious actors like *jayapa* and *kamarampi*. These agentless plant species include *inchashi*, a generic name for herbaceous plants, and *ivienkeki*, different sage species that belong to the Cyperaceae family. Aurelio described them to me in this manner: *"Sangariite* knows about *ivienkeki* and

inchashi. He gives them to the *seripigari*, and the *seripigari* brings it to the Matsigenka. Only the *seripigari* knows about *ivienkeki*, but everyone knows about *inchashi*, women know... [These plants] don't have souls, it is the *sangariite* who helps you." Indeed, in Tayakome people generally gather the different species of *inchashi* directly from the forest, where they grow wild, and plant the different species of *ivienkeki* around their houses. They acquire these *ivienkeki* either directly from the *seripigari*, or indirectly through a known herbalist or a relative, who originally acquired them from a *seripigari*.

As quoted by German in the previous section, some *ivienkeki* are used to improve hunters' aim or to recover it if it is lost. Some of the most commonly known ivienkeki in the community are *pakitsavienki*, named for the harpy eagle, the hunter par excellance, and oshetovienki, used specifically when hunting spider monkeys, as its name indicates. Ismael, considered one of the best hunters in Tayakome, explained to me how he always uses ivienkeki: "I have pakitsavienki. I bite a bit of it, and then I shoot spider monkeys. I eat it, and then I go to the forest to shoot spider monkeys. It helps me to have a good aim." Following other scholars' accounts about the manner in which this *ivienkeki* works, I asked Ismael if the soul of pakitsa comes to help him (see Shepard 1998; 2002a), but he asserted "No, nobody comes, *ivienkeki* alone helps me. Mario [the seripigari] gave it to me in Yomibato. He got it from the forest." When I asked Ismael about other herbs that are also good for hunting, he told me that he did not know of any, but that his father German knows. Later, German did not wish to go into detail with me regarding the plants that he knows. The reason why both men were reticent to share information about hunting herbs with me may have been modesty, or perhaps because I am a woman, and hunting knowledge is a male domain, or maybe they just did not want to share this knowledge with me. However, they, as well as other men, did tell me that these plants have purgative, cleansing effects, and often make the one who consumes them vomit, for the purpose of purification (for a more detailed account of this type of

inchashi, see Shepard 1998; 1999a; 2002b). Other *ivienkeki* are used to improving one's chances of catching particular fish species, i.e., the common *shimavienki*, for catching shima, and *koriovienki*, for the small commonly-caught catfish *korio*.

According to the self-reported behavior interview, the majority of people affirmed that either they themselves (in the case of men) or their husbands use *ivienkeki* and *inchashi* for hunting (question 8, Table 3). However, it is interesting to observe that some good hunters, not including Ismael, also affirmed that they do not use any of these plants and yet still have good aim. This was true mostly among younger hunters (<35 years old) and their wives. It is probable that reliance on these types of plants for hunting is not as extensive as it was in the older generation, and only Ismael and a couple of young hunters still use them due to the strong influence of their fathers who are knowledgeable regarding these plants. This tendency was even more obvious in the use of *ivienkeki* for fishing (such as *koriovienki* used for korio, a small catfish called *bagre* in Spanish), where only half of the interviewed Matsigenka (most of the young men, including Ismael) stated that they use such plants to improve their chances of catching fish (question 10, Table 3). Possibly, because it is easier to be a successful fisherman and fisherwoman than a hunter (for which a good aim with an arrow takes many years to develop), people do not rely as much on the external help that plants provide for this purpose.

In contrast to these results, most interviewees, especially women, were adamant in pointing out that species of *ivienkeki* and *inchashi* used for bathing babies are essential for their wellbeing, and they therefore always use them (question 3, Table 3). Indeed, I observed that virtually all women of Tayakome with infants and children under age two used warm infusions of different species of herbs to bath their children. Common among these species are *kamagarivienki* and *yairivienki*, used for driving away evil spirits, and a variety of *inchashi* used to prevent crying, to make children walk well, or to assure that they will grow

fat. Specific *inchashi* are also employed to protect children from the different animals that their parents consume, and which can potentially steal their souls (*puigatagantsi*), as explained in the previous chapter. Among such commonly used *inchashi* species are *katsarishi* (against *katsari* or yellow-rumped cacique), *motashi* (against the medium size catfish called *mota*), *shakiriripini* (against *shakiriri* or yellow-footed tortoise), or *etinishi* (against armadillo). In the same manner that there is strong consensus that certain species are taboos, people seem to strongly agree about the importance of these protective plants, in that both relate to the fundamental issue of protecting the health of their children.

An additional variety of *ivienkeki*, the use of which I explored, was that of *sekatsivienki*, whose bulbs are masticated and then spit over the manioc field to ensure the growth of large manioe. *Sekatsivienki* must also be planted on one side of the manioc field in order to guarantee its effect. Many young men are increasingly leaving Tayakome to engage in wage labor in the tourism industry around the MNP during the manioc planting season, and thus are less often making an annual manioc field. Consequently, I predicted that such men would not consider the use of *sekatsivienki* to be important. According to the results of this task (question 6, Table 3), some of these young men, indeed, do not plant *sekatsivienki* in their fields, if they have fields at all. Furthermore, even those who have planted it do not consider it to be indispensable for growing good manioe. These opinions sharply contrasted with those of middle age and older men, and all women, who always plant this type of *ivienkeki*, mostly sharing it among relatives, and consider it to be essential for success in growing this staple food.

I conclude this section with a comment about the current use of *seri* or tobacco, despite the fact that I did not include this species in the formal interview. Tobacco is another plant with medicinal and protective qualities. Like *ivienkeki*, it is considered a medicine rather than an active subject. As mentioned in the previous chapter, the leaves of tobacco are

made into a powder that is used to treat respiratory diseases and to intensify the effect of *kamarampi* during drinking sessions. Two people, more commonly men, sit face to face, and take turns blowing the tobacco powder into the nostrils of the other with a *seritonki*, a V-shaped device made with curassow bones. In Tayakome, *sokagantsi*, the act of blowing tobacco snuff, is mostly practiced by older men, and I did not observe young adults to engage in this activity very often. This contrasts sharply with my later observations during subsequent visits to Yomibato and Sarigemini, the two communities upriver from Tayakome, where *sokagantsi* is often practiced by both young and older men.

Practicing Dietary and Behavioral Taboos for Protecting Infants

Dietary taboos, along with the use of protective herbs for bathing babies and those restrictions observed to ensure hunters' good aim, are among the most rigorously practiced proscribed behaviors associated with animals and plants in Tayakome. According to the self-reported behavior task, food taboos are practiced more consistently (question 5, Table 3) than other behavioral restrictions that are also implemented to protect children, such as refraining from killing particular animals, refraining from cutting harmful trees such as *kamana* (question 12, Table 3), which has a caustic sap, and avoiding all contact with the Brazil nut tree (question 11, Table 3). As shown in the previous chapter, consumption is an essential context of interaction between humans and non-human beings, in which the extent of the agency of different species, with regard to their effects on human beings, is most clearly manifest.

While these results, and my own experience in the community, suggest a generally strict adherence to these customs, there were some instances in which I observed these restrictions to be infringed in certain circumstances. During a conversation with 20-year-old Jaime while visiting him and his wife Zaida in their house, he "confessed" to me that he had broken a dietary taboo by eating *chambira*, a predatory fish that is dangerous for the souls of

infants because of its large projecting teeth, as had previously been explained to me by many others in Tayakome (see chapter 7). "Yesterday I ate, remember? You also were there, at Micaela's. But I didn't know that it was chambira," he argued. The day prior to our conversation, there was a *faena*, a communal work party to cut the grass around the health post. Typically, every man arrives early in the morning on the agreed *faena* day and starts working with his own machete, cleaning the grass and weeds in some communal space (either the health post, any of the kindergarten or elementary schools' buildings, the soccer field, or the communal manioc-field). Some women sometimes accompany their husbands and also clear with their own machetes, or gather the accumulated cut grass and plants onto empty *costales* (large rice plastic bags) which they drag away to empty in the nearby secondary forest. The faena had ended around mid-morning, and a few men and women went to Micaela's house, the house closest to the health post, to eat some fish that Rufino, Micaela's husband, had caught the previous night. My husband and I were also there, eating with the 10 other people, including Jaime. Zaida, Jaime's wife was also there, but she was next-door visiting Jacinta, Micaela's mom, and did not eat with us. "I ate the chambira, like everyone else. Then, I came home and Zaida asked me 'Have you eaten the chambira that Micaela cooked?' 'Yes' [I said]. Aurelio was also there, but he said no [he did not eat because he has a baby at home], but I didn't know, I forgot to ask Rufino 'what is this?' I only learned later, after I ate it. Then, [Zaida] gave the baby ivienkeki, and then he was fine."

It may be the case that Jaime did not hear when Rufino was narrating how he caught the chambira the previous day, while we were all eating with him and Micaela. However, in comparison to Aurelio, who was more careful about asking the identity of the food that he was being served and, then, rejecting it, Jaime seemed less concerned about the possibility of harming his child through his food, and, in general, about rigorously following these couvade restrictions (see Chap 7). Because of the faena, he did not have time to go fishing that

morning, and probably did not have any meat at home. Nevertheless, his wife did not touch the *chambira that Micaela served*, and nor did Aurelio, who probably also did not have meat at home for the same reason. Also, Jaime, more than Aurelio, relied on the fact that he and his wife could always use an *ivienkeki* to fix his taboo infringement and avoid any harm to his child. This is one instance in which the concern of current mothers (e.g., Zaida) and experts (e.g., Aurelio) is greater than that of non-expert (generally young) men (e.g., Jaime) regarding the effect of these non-human beings on their children. As mentioned in the previous chapter, the stronger concerns of young mothers and some experts may be related to the fact that these interviewees generally attributed a soul to such dangerous animals, unlike the majority of men, and despite the fact that nearly everyone agreed that such species are harmful for infants.

Aurelio's rigorous observance a food taboo in this situation contrasts with his flexibility and willingness to break this restriction on another occasion that involved Eva, Aurelio's daughter: Many weeks later, when the rainy season had begun and fishing in the river was difficult because fish were not concentrated in the river due to the seasonal inundation of other areas, Ignacio and Jacinta caught a medium size *omani* (large catfish) for breakfast. Because the fish was of good size, they called my husband and me to share the fish with them, as well as our neighbor Aurelio and his family. Aurelio had not caught any meat that day nor the previous one, so they were happy to be invited. The last person to join us at Jacinta's house was Eva, who was still lactating her eight-month daughter, whom she was carrying. I noticed that she was hesitant about sitting down on the mat where we, the women, were sitting. She was apparently nervous about eating the *omani*, because, as many Tayakome residents affirm, a large *omani* can carry away the soul of child if it is eaten by the parents. Noting Eva's reaction, Ignacio stated aloud that it was okay that Eva eat the *omani*, because "it was not so big." Based on my experience with *omani* in the community, the one

that he and Jacinta had caught was rather on the larger side (approximately 70cm long), although it is true that *omani* can grow much larger than that (the largest I've seen in Tayakome was approximately 1m long). Jacinta and her daughters, and then Nidia and Aurelio, Eva's parents, seconded Ignacio, repeating similar expressions in an attempt to convince Eva to sit with us and eat the omani. However, from my perspective, it also seemed that these rationalizations were also meant for themselves, justifying the breaking of a taboo in that particular situation. In fact, by affirming that the *omani* was "not so big," they were all asserting that no taboo was being broken, since, as is generally believed, only large (rather than small) omani are dangerous to infants (see Chapter 7). At that moment, Eva was having problems producing enough milk for her baby. Therefore, it is possible that everyone considered it to be better that she eats some fish, whose spiritual damage is relative to its size, than to forgo a source of protein which might be necessary for adequate mile production. In the end Eva sat on the mat and ate the *omani* with us.

This is one of the few occasions that I have witnessed in which, in face of food scarcity, people dodged taboo rules by appealing to the perceived characteristics of the food, in this case the size of the omani. As discussed in the previous chapter, my interpretation is that, given that omani is a fairly commonly caught fish in the river, its taboo status has been associated with its large size, such that it is safe to consume small *omani* individuals. This is not the case with other large catfish species that are more rarely caught. These are always considered dangerous, even if they are small specimens.

In sum, I do not have enough information to suggest that avoiding the *omani* restriction in this manner is common in Tayakome, nor have I observed many other instances of taboos that are consciously broken. As mentioned above, according to the self-reported behavior task, only one of 25 interviewees admitted to having broken dietary restrictions on one or more occasions (see Table 3), and, based on my observations in the community, this

tendency to abide by taboos appears to be generally representative of the larger Tayakome population. Still, a rigorous observance of food restrictions may reflect situations in which food is generally abundant. As Shepard affirms: "... the widespread occurrence and tremendous variability of fish, game, and other food taboos among traditional Amazonian populations reflects a certain degree of affluence: only those with plenty to eat can afford to be choosy" (Shepard 2002a:107).

Matsigenka Notions of the Continuity of the Forest

A few years before the ontological approach was formally introduced in anthropological scholarship, the main premise of which is that people must be understood on their own terms, Paul Nadasdy (2005) set a remarkable, though perhaps overlooked, precedent by questioning the misguided attempt on the part of researchers to attribute a "conservationist nature" to indigenous people. While discussing the notion of the "ecological noble savage" in the context of his research among the Kluane First Nation in Canada's Yukon Territory, he proposed an idea that was apparently radical at the time: that 'conservation' and 'environmentalism' are Western conceptions. Therefore, by judging Native American peoples on the basis of whether they are environmentalists or nonenvironmentalists, he affirmed, one is "impos[ing] a whole set of inappropriate cultural assumptions on Yukon First Nation people and their relationship to the land and animals" (Nadasdy 2005:311).

In the previous chapters, I have attempted to avoid such an imposition by illustrating Matsigenka notions of the environment in general, as well as the particular elements and beings that populate it, in order to better understand the conceptions that may underlie their decisions to perform particular environmental practices. In Chapter 5 I discussed how, for the Matsigenka, the forest is a realm that the Matsigenka do not inhabit, but rather visit in order

to obtain food and other goods, and also where they may encounter super-human beings that either help or harm them. Because of the constant growth and encroachment of the forest in the absence of human labor, people in Tayakome see it as a realm that they must keep in check in order to maintain their own domain, which is the house and the manioc field (as German said: the forest is where he has not yet worked or cut trees). Based on these conceptions, I wondered whether Matsigenka feel that the forest needs protection in general, and needs to be protected by them in particular. These are notions that are common in both old and recent discourses of conservationist institutions (including MNP administrative staff) and regional indigenous organizations. In fact, the latter are increasingly depicting themselves as the original protectors of the forest with the purpose of pressuring the government to recognize the territorial sovereignty of the indigenous communities that they represent (e.g. Peña 2018). By asking these questions, my objective was to explore current Matsigenka notions and evaluate the extent of the influence of these external actors. With this in mind, I asked people if they believe that the forest must be taken care of, and if the Matsigenka, in particular, practice particular activities to care for the forest (Questions 13 and 18, Table 3). I also explored Matsigenka conceptions of the abundance of species, which can potentially shed light on people's own behavior with regard to interaction with these otherthan-human beings (Questions 7,9, and 13-18, Table 3).

Chichata Oshibokake: Caring for the Forest (or not)

A minority of interviewees answering the former two questions (13 and 17) affirmed that the forest needs to be protected (19%), and that the Matsigenka protect the forest (8%). On the contrary, many agreed with Emilia's opinion: "The forest grows by itself, nobody needs to take care of it. The Matsigenka don't take care of it because it grows by itself really fast." Despite this overall agreement, there were a few dissenting voices. On the one hand, a few young men agreed with Rufino: "The Matsigenka do care for the forest because we don't

cut it. We go to *imitayota* [hunt]⁵⁵, and we do it well, we don't cut the trees." For them, taking care of the forest means not cutting it because, as they mentioned, outside of the MNP, timber extraction is a major problem, and the MNP administration is constantly worried about the *viracocha* (*colonos*) who cut all the lumber species around the periphery of the park.

On the other, when I asked this question to German (\sim 50) and Tito (\sim 45), both asserted that one way in which the Matsigenka take care of the forest is by harvesting oshi, a 1-to-2m-tall palm bush that the Matsigenka and other Amazonian peoples use as thatch for the roofs of their houses. Oshi is harvested in a manner that does not kill the plant, as I observed (and practiced) on several occasions while accompanying different members of Tayakome. The leaves of *oshi* grow out from a central stem close to the ground. The leaves are cut close to this central stem, but the newest leaves growing at the upper tip of the stem are never cut. In this manner, a particular oshi plant will continue producing new leaves, and can be harvested again several months later. Interestingly, German is familiar with Western notions of conservation, since he participated a few years ago in a MNP initiative to raise and reintroduce small yellow-spotted river turtles to oxbow lakes within the park. Therefore, it is possible that he associated my question about "taking care of the forest" with this manner of harvesting oshi, which resonates with notions of "sustainability," that is, using elements of the forest without exhausting their populations. Tito, for his part, comes from a Matsigenka community in Urubamba, and has worked to open and clear trails for employees of oil companies that have been extracting natural gas in that area since the 1990s (Shepard 2012b; 2012a). As such he has more experience with *viracocha*, foreign extractive activities, and

⁵⁵ *Mitayar* is the Spanishization of the Quechua term *mit'a*, which means "turn" or work-shift. A *mitayo* was an indigenous person that conducted any type of forced labor in the period immediately after the Spanish conquest. The current meaning of the term in the lowlands refers to a person who goes to the forest to hunt (Falcón Ccenta 2012).

conservationist organizations, and may have assumed that my question was related to using the forest in a "sustainable" manner.

No other person in Tayakome made direct reference to the harvesting of this palm tree as a way to care for the forest, despite the fact that the majority (and perhaps all) of the interviewees collect *oshi* in this manner. Edgar (35) was the only person who answered my question in the following manner: "The forest needs protection, yes. In the forest there may be growing small trees, that will later grow, but [the forest] needs to be protected by the human beings. It should not be cut down or destroyed, everyone needs to be careful. Trees are delicate things of nature." Edgar came to live in Tayakome as an adult and grew up in Urubamba. However, in contrast to Tito, he grew up in a boarding school run by Dominican missionaries, and learned to speak Spanish before he learned Matsigenka. As such, he may have internalized more of (or learned to recognize) the conservationist discourse, as he can communicate with MNP staff, and other conservationist actors, better than most other Matsigenka, who do not speak Spanish as well.

Still, as mentioned above, these are but a few exceptions to the general pattern that the Matsigenka do not seem to see their actions as either destructive or beneficial to the forest, nor do they believe that the forest needs to be cared for. In the same manner that Tayakome residents use machetes and shovels to clean around their houses every day in a constant battle against the invasion of *towaseri*, the weeds that eventually become a forest, for the Matsigenka, the forest, as they say, *chichata oshibocake*, "grows by itself", and is never at risk of disappearing. It is crucial to mention, however, that Tayakome residents are aware of the harm done to the forest by *viracocha*, and others who live outside of MNP, either by extracting timber or by hunting and fishing in excess. Almost without exception, every adult that I talked to asserted that they value the protection afforded by MNP, because, in its

absence, the *viracocha* would have entered a long time ago, cutting the forest around them and exterminating all the game species that the Matsigenka consume.

A Giving Environment

In contrast to the *viracocha*, people in Tayakome do not see themselves as harmful to the forest because they still find within it an abundance of the beings that they use to survive. In this regard, the forest is for them "a giving environment" (Bird-David 1990; see also Rival 1998 for a similar argument regarding the Huaorani), because it provides everything that they need. Food is not scarce. One must simply be capable of going to look for those goods that the forest provides.

These ideas of plenty are partially reflected in Matsigenka notions of the abundance of species, which I attempted to explore through questions 14-16 (Table 3). I inquired whether participants believe that particular species can ever be exhausted by hunting, fishing, or harvesting them. I included some of the most commonly eaten and desired species (according to the ranking task): the 50cm (~20inch) scaled fish *shima*, the spider monkey, and the palm tree *tsigaro*. Considering that people also cut down most of the trees in a patch of forest when they make their manioc fields, I also asked whether interviewees would refrain from cutting a species of tree that they value highly, the *pocharki* fruit tree (see rankings section, above), if they happen to find one in an area where they intend to make a future field (question 18, Table 3).

An overwhelming majority of the interviewees answered that they do not believe that these species can ever be exhausted by the Matsigenka (only 15% said that shima and spider monkeys could eventually be exhausted, and 12% said the same of tsigaro, see Table 3). Similarly, all participants affirmed that if they find useful species, such as *pocharki*, in a plot of forest that they are clearing for a new manioc field, they would just cut it down, because such trees are plentiful elsewhere in the forest. For both *pocharki* and the palm tree *tsigaro*,

which is highly appreciated for its palm heart and fruits, and is considered to be one of the safest foods to consume (see rankings section), interviewees affirmed that there are plenty of them in the nearby forest. Whenever one is cut, many asserted, the seeds of others make new ones grow.

With regard to game animals, I asked participants what they think has happened in Yomibato, the larger community upriver, which, according to many Tayakome residents, has run out of fish and monkeys. People commonly commented that, because there are more people living in Yomibato, and because they go fishing with *cogi* (fish poison) so often, they have exterminated all of the fish in the river. However, a few years later, when I had the opportunity to spend several months in Yomibato, I observed that meat and fish are not nearly as scarce there as Tayakome residents had said. While it is true that one must walk a few hours in order to find monkeys or other game animals, the same is also true of hunting in Tayakome. I have only visited Yomibato during the rainy season, which is when fish is more difficult to catch, and *cogi* is more often use. However, since I have not yet worked in this community during the dry season, when fish more common, I cannot confirm Tayakome residents' impressions of fish scarcity in Yomibato.

Thus, I asked participants to explain what they think happened in Yomibato, given that they believe that spider monkeys are rare in Yomibato, yet cannot be exhausted. The majority of interviewees explained that spider monkeys have just run away, out of reach of Yomibato hunters, because this community's population is larger, and, as they affirm, one must walk very far from Yomibato to find the monkeys again. A few people, mostly men, asserted that the monkeys have actually been exterminated from the surroundings of this other community. However, this was a minority opinion; most believed that the monkeys had simply run off to a different part of the forest away from Yomibato.

Interestingly, a few interviewees commented that, if the river were ever to become contaminated, then fish in general would die and the populations would be depleted. Some, like Maria Isabel blame gas companies for such a scenario. She affirmed: "Fish will be exterminated if oil companies enter and stay in the Park [the MNP]. If they don't come, then fish will not be exterminated." Her husband Ismael expressed a similar opinion: "If the gas company comes, fish will die, shima, omani, they will be exterminated. But if they don't come, there will always be fish, there will be korio [small catfish]." In Tayakome, people have heard of the disastrous effects of natural gas drilling conducted by a consortium of oil companies, including PlusPetro and Hunt Oil, on the environment surrounding the Matsigenka Native Community of Camisea, located "on the other side," in the Urubamba River Basin. While this and other communities in Urubamba have benefited monetarily by allowing gas extraction from their territories, gas leaks, chemical spills, and the increment of fluvial traffic has depleted fish populations in the region's rivers (Shepard 2012a; 2012b). While this concern was raised by a few people during the interview, I had additional opportunities outside of the interview to converse at length with others about this issue. For a few, the amount of money that Urubamba Matsigenka communities have received from the gas companies is tempting. Still, the majority of Tayakome residents, perceive the presence of MNP as positive insofar as it prevents such deleterious resource extraction initiatives that are affecting other areas, and that may endanger their way of living. In general terms, apart from hypothetical scenarios of large-scale viracocha resource extraction, Tayakome residents believe that the forest's abundance is inexhaustible, and that it is always possible to obtain what one needs to live well as long as one works hard, because the forest always provides.

A No-Waste Ethos

Some foraging theories from human behavioral ecology suggest that hunter and gatherers prefer to invest time and effort in obtaining larger preys (which in the case of

tropical forests, includes large mammals, birds, and fish) (M. S. Alvard 1995; Hames and Vickers 1982; Hill et al. 1987; Winterhalder and Smith 1981). In my experience in Tayakome, Matsigenka believe that the forest offers diverse possibilities for hunting and foraging, from which people chose according to season, current weather, the state of the river, and mood. Food is not scarce, but one must generally work hard to get it. As a result, people generally take advantage of any opportunity that arises to obtain food, after, however, paying due attention to the type of entity one is about to engage with, and the associated constraints and rules governing this engagement, given the entity's ontological status (see previous sections). If a hunter sees a palm tree full of ripe fruits during an excursion into the forest, he either comes back to the tree at the end of the day's hunting, or he returns on a subsequent day, often with other family members, to cut it down and harvest the fruits and the palm heart. He knows that the rotting trunk of this tree will provide a source of beetle larvae (called *pagiri* or *pigiro*, depending on the species) that will be large enough to harvest in the following weeks to months. Similarly, during the dry season, whenever the Matsigenka see that a stream is low, they make plans to take advantage of the low water level, generally lasting a few days, that concentrates the small fish so that they can use *cogi*, the milky fish poison extracted from the roots of the vine Strychnos sp. Depending on how large the stream is, they either apply cogi together with the members of their nuclear family or clan, or, for large streams, they pass the word to other community members so that everyone can participate. During these events, people attempt to collect every single fish, no matter how small. They do not waste anything. Thus, even if people catch many large fish, such as *shima*, during a *cogi* fishing trip, they also process, cook, and eat all of the tiny minnows as well.

For some Tayakome residents a no-waste ethos is also enforced by interactions between Matsigenka and the spirits associated with some prey species. This is evident in conversations I had with two different women, involving differing conceptions of master

spirits or *itinkame*. On one occasion, I asked Mercedes if she ever accompanied her husband Edgar to hunt. She said that she used to go all the time with him, some years ago, when he was hunting very often. She said they always went to fish often and they always had plenty of meat, but still he kept hunting. They often had to give away meat from the monkeys Edgar shot because it was too much for themselves. However, she said that after Edgar fell ill he doesn't go to hunt so often anymore. I asked her why he got sick and Mercedes answered:

We both saw a *duende*⁵⁶ in the forest, probably because we went to hunt so often. One day I was in the forest and I saw a hand, close to a big tree, that was inviting me to come. Then I felt a hand on my head that suddenly was trying to choke me and I couldn't breathe. I managed to get free and run away back home. In Edgar's case, he was drinking [manioc beer] at Pilar's house once, and saw two women who were chasing him. He tried to run away but finally decided to confront them. Then, he felt like he was choking. He managed to run back to where everyone was drinking. My dad [Nelson] who was there, brought his *seri* to smoke with him. Later, he was cured and felt better, but since then he doesn't go to hunt as often as he did.

Mercedes believes that these spirits were some type of manifestation of the *itinkame* of the animals of the forest that were upset because she and her husband were hunting too much. I recounted Mercedes' opinion on this topic in Chapter 6, where she asserts that the *itinkame* get upset "when the Matsigenka kill too many [game species] and then throw away the meat, when they waste it." This notion resonates with that held by a minority of interviewees who believe that certain animals, primarily the white-lipped peccary, and, to a lesser extent, the spider monkey have owner spirits, or *itinkame*, that protect them (see Chapter 6). Similarly, on another occasion, Carmela explained to me how she perceives the soul of *etini*, the common armadillo, and how this is different from the physical animal, fulfilling a role similar to that of the *itinkame*. In our conversation below, I am trying to

⁵⁶ *Duende* is a Spanish term widely used in the lowlands to refer to a malign spirit that inhabits the forest.

understand how it is that, given that etini is called the grandfather of the Matsigenka, they

would still eat it:

Carmela: *Etini*, has a soul. It looks like a Matsigenka. His soul is my *noshaninka*, he says we are "*nosariegi*." His soul [like a Matsigenka] comes from the ground. But when he comes here, it looks like an *etini*. Later, somebody kills it, and then we eat it, it is tasty! His soul goes underground and says "my grandchildren have eaten me," "my grandchildren have killed me." His soul went away. Then, I smoked it and, when it was cooked, I ate it. Caissa: So, *etini* is your grandfather? Carmela: Yes. Caissa: And you ate it? Carmela: Yes. Caissa: Is that ok? Carmela: Yes, it's ok, I ate his shell too, I didn't through it away. If you eat the shell, then he says that you have done well, you have eaten it in the way that it should be eaten ... I did not eat his soul, his soul escaped to go to the ground. I ate the *etini*. I didn't eat his soul, I didn't see it. His soul went down, it went away. *Etini* is not a Matsigenka.

For Carmela, the Matsigenka-like soul of *etini* is different from that mentioned by the hunting party that caught the large *kinteroni* with Saul, as recounted at the beginning of this chapter. Since the *etini*'s soul is different from the physical animal, Carmela seems to be referring more to a conception of *etini*'s owner spirit or *itinkame*. It may be the case that *etini* and *kinteroni* are different entities for Carmela, or that she simply has a different notion of these animals than that held by Emilia, Benjamin, and Saul. In any case, she affirms that the proper use of the *etini*'s body, e.g., not wasting its shell, is what makes it acceptable that she ate it. This resonates with Conklin's findings among the Wari', regarding the proper treatment of carcasses of a category of animals called *jami karawa*, in order to avoid offending their human souls. She affirms: "What is notable about the rules surrounding the treatment of meat is that what offends *jami karawa* is the improper treatment of their carcasses, not the consumption of their flesh. To not eat its meat—to let its body parts rot—would be a sure way to provoke the spirit's wrath and vengeance. Eating properly demonstrates respect for the one whose flesh is consumed and pleases spirits so they will allow hunters to kill them again in the future." (Conklin 2001:97). While, for the Matsigenka,

interactions with other prey animals are not necessarily mediated by owner spirits or the animals' souls, a no-waste ethos still seems to be pervasive with regard to the consumption of the bodies of all species that they consume.

Raising Pets

It is common among the Matsigenka, as well as among other Amazonian indigenous groups, to keep the live offspring of animals hunted as game, and to raise them in the house (Cormier 2003a; 2003b; Erikson 1997; 2000; Fausto 1999; 2007; Cepek 2011; A. C. Taylor 2001). Beckerman and Valentin (1996) have suggested that the custom among different Amazonian societies of raising pets corresponds to a conservationist ethic, namely, forgoing a small immediate gain (i.e., eating an immature animal) in favor of a larger long-term reward (i.e., eating the animal after it has grown to adult size). Erikson (1997) has criticized this interpretation, citing numerous examples suggesting that pet-keeping among Amazonian societies is a practice in which human qualities are symbolically attributed to pets, and, in this manner, such individuals are no longer seen as fit for consumption. He further proposes that pet-keeping is performed as a manner of balancing common interactions with game species, based primarily on hunting, or, in a more general paradigm, predation. Raising pets, then, is perceived as an attempt to reciprocate and compensate for hunting, with pets becoming "the semantic counterpoint of prey animals," and constituting the other side of a hunting-nurture relationship (Erikson 2000:7). This is exemplified in Cormier's ethnographic work among the Tupi-Guarani speaking Guajá of Western Brazilian Amazonia (Cormier 2003b). For this indigenous group, Cormier argues, animals and plants are kin, with monkeys, particularly howler monkeys (*Alouatta sp.*), being seen as the most closely related to the Guajá. According to a Guajá creation myth, the creator god Mai'ira found certain Guajá people and transformed some of them into a tree, and others into howler monkeys. Then, Mai'ira recommended that the remaining Guajá people eat the monkeys. This 'symbolic cannibalism'

is, according to this scholar, based partially on the view that 'what eats you is what you were', and this belief explains the case of the howler monkeys, as well as those of many other animals in the Guajá ontology (Cormier 2003b:142). Interestingly, this author points out that, at the same time that monkeys are considered to be food, many young offspring of monkey adults that have been hunted are subsequently adopted as pets and nurtured as children, even serving as substitute-children for some women.

The practice of raising pets in Tayakome seems to differ substantially from that described by these authors. Among the Matsigenka, pets, or *piratsi*, are usually the offspring of game animals and are brought back by hunters to be raised in the household by women. In the case of monkey species, it is common for men to kill female individuals and bring back any surviving offspring to be raised by their wives, or any other woman in the extended household. In general, people explained to me that, if the offspring is not hurt, it is acceptable to raise it until it is an adult and then release it back into the forest. Only then, when the former-pets are adults and have integrated into a wild population, found a partner, or belong to a larger group, is it okay to hunt them. If, on the contrary, the young offspring are hurt in some manner during the hunt, and it is apparent that they will not survive, Tayakome residents kill and often eat them. However, generally only elders eat small offspring of game animals, since, as many explained, if such individuals are eaten by children and teenagers, they will become lazy. For the Matsigenka, good *piratsi* are species that can be tamed (i.e., won't run away), such as tapirs, peccaries, agouties, most of the monkey species, small birds (often kept in their own nests when found in the forest), and large terrestrial birds, such as trumpeters, curassows, tinamous, and guans (wild turkeys).

According to my experience, Matsigenka women may relate in to their *piratsi* in several different manners. The particular style often seems to be more a matter of idiosyncratic dispositions and social transmission (e.g., how daughters see their mothers

doing it), than of a generalized community-wide ideal about how to raise pets. In general terms, women feed each species according to what they believe is appropriate for them. Thus, they tend to give insects to small birds, worms to larger terrestrial birds, fruit to baby tapirs, bananas to monkeys, and raw or masticated manioc to other larger animals.

Some women keep their monkey pets tied to the posts of their houses, and only interact with them while feeding them. In most of these cases, the pets do not look healthy, having hairless patches on their bodies, or being emaciated. They often die, either because of their weakness (and likely unhappiness), or because, by being tied, they are an easy catch for ocelots at night, or during the day when people are out visiting. Other women, in contrast, raise beautiful, healthy monkeys, that wander freely around their houses, eventually climbing into the nearby forest, but nearly always returning. Elderly women tend to be among this latter group. Many such women carry their pets with them during the day, and sometimes feed them like children, that is, masticating manioc and then feeding it to the animal from their hands or mouth.

Sara was among the women who used to be very close to her pets, and, according to others, she used to have many of them. Later, when I met her, she was approximately in her mid-70s, and did not have the strength to care for them, despite the fact that she continued going to the forest and visiting people until her death in 2016 from complications of a respiratory illness. Before her passing, she told me that it was normal to eat one's pet. She had done so with some of her pets: a trumpeter and a spix's guan (wild turkey). When I met her, Sara still had an immature wooly monkey that she carried with her everywhere, and with which she was very affectionate. This particular monkey was widely-known for being mischievous, which is, incidentally, the reason why some people affirm that pets are sometimes killed and eaten. However, given the fact that the monkey was so close to Sara,

she would not eat it. In Sara's case, then, there seems to be a distinction between the types of pets that are acceptable to eat, and others that, given close affective bonds, are not.

Still, opinions regarding whether and when to eat pets vary among Tayakome residents. For instance, according to Gaby, pets, especially monkeys, should not be eaten when small: "It is not good if a woman eats a young monkey, because it's small. When it has grown up, yes, then it is okay [to eat it]. It is good to eat an adult spider monkey, not a small one. The woman has to raise it until it is an adult, then, she can eat it." Thirty-six-year-old Olga, one of the women in Tayakome who are particularly dedicated to raising pets, had an opinion similar to that of Gaby. In addition to raising healthy monkeys, with which she is very caring, she also has other types of pets, mostly trumpeters and parrots (aurora). Similar to older women, she feeds her parrots by first chewing some manioc and then approaching their beaks, so that the bird can eat directly from her mouth, without harming Olga. Once I asked her if she was planning to eat her wooly monkey pet. She said no because "he doesn't taste good anymore. Only wooly monkeys, both babies and adults, that grow in the forest all the time taste good. The ones that are raised at home don't taste good anymore." Several other people I talked to were of the same opinion, associating the bad taste of *piratsi* with the type of food that such pets receive at home. For instance, Ismael explained that pets should not be eaten because "they eat bananas, therefore they don't have fat and are not tasty, it is wrong to kill them... You can eat the mother, but not the small one. When they grow up, they go to the forest. There they eat fruits, then you can eat it, [because] they have fat, and I can shoot them. Then it is ok. But if it stays being a pet, you don't eat it, not even as an adult, it is not tasty."

However, others in Tayakome disagree, affirming that there is no problem with eating younger pets. Such is the case for Mercedes, who, nevertheless, asserts that young pets can only be eaten by elders: "When you are older like Segundo and Marina, you can eat small offspring [young pets]. But children, teenagers, and adults should not eat them. We get lazy

and then we sleep all day [laughs]." Other women and men held similar opinions. When I asked them, in the context of the self-reported behavior interview, if, hypothetically, it would be acceptable for a woman, rather than raising a pet, to instead eat it, the majority of these same people affirmed that the ideal is to raise pets and eat them only when they are adults. However, most believed that eating a young pet was also acceptable (63% of 38 interviewees, question 8, Table 3). Only a minority (roughly 37% of interviewees) believed that small pets should never be eaten.

In addition, there were also diverse opinions regarding what should ultimately be done with pets. For instance, a few people did not consider it to be good that Sara was so close to her *piratsi* because, as Segundo (~65) told me once, "she should leave her [the monkey] looser, so she can go to the forest, and then she will eventually live there." Mateo (22) was of the same opinion: "It is not okay that she carries her wooly monkey like a Matsigenka. She [the wooly monkey] should go and climb into the trees, and [eventually] stay in the forest. She should be by herself, jumping between the tree branches, that is how she should be." As mentioned above, a number of Tayakome residents believe that the main purpose of having a pet is that one day it will grow up and return to the forest where, as an adult, it can serve either as potential prey for a hunter, or as a decoy to attract other members of its species near the house where they can be shot. While this was a general opinion among interviewees, slightly more than half of the people who participated in the self-reported behavior interview also agreed that it is acceptable to eat monkeys raised to adulthood as pets, but that have not yet gone to the forest to live on their own (question 9, Table 3). The main justification cited was that, when one is out of meat and hungry, it is acceptable to kill adult pets, exactly as if they were reservoirs of food.

Among those women who take very good care of their pets, many were of the opinion that they would not eat their pets, even if they did eventually go to the forest to live

independently. Like Sara, many of these women develop close bonds with their pets and, as a consequence, would not like to kill and eat them. For instance, Maria Isabel (30), who was raised by Sara as her daughter, does not like to raise pets because, when a pet grows up, "I would feel pity for killing [it], I wouldn't want to kill it nor eat it. It would be my pet." Paula (28) held a similar opinion, although, in her case, it would be acceptable if she was not the person directly responsible for killing the pet: "I raise *shakami* (white-winged trumpeters). They go to the forest and later, or on another day, they come back home. I don't want to kill them. But, if they go to the forest and my husband shoots at them in the forest, it is okay. If they come back home, it is also okay." Olga also mentioned that she would not eat her pets, however, as mentioned above, she attributed her reticence to the bad taste that all pets acquire as a consequence of the domestic food with which they are fed. However, independent of their personal opinions, most of these women affirmed that other Matsigenka are free to do as they please, and it would be acceptable if they eat their own adult pets, regardless of whether the animals remain at home, or run off to the forest.

In sum, while opinions regarding pets vary widely, in Tayakome I found no evidence that pets are associated with human-like qualities, in contrast to the interpretation of Erikson, and, for most Matsigenka, the consumption of pets is not perceived in a negative light. Furthermore, I suggest that Matsigenka do not engage in pet-keeping in order to balance the effect of hunting, since, for many Tayakome residents, it is acceptable to eat a pet even if it has not returned to the forest. Still, rather than raising pets as a strategy to maximize the longrun return of meat by forgoing smaller short-term gains (Beckerman and Valentine 1996), pet-keeping for the Matsigenka often appears to entail delaying consumption of these small animals until they attain adulthood and live on their own in the forest, out of consideration for their perceived bad taste or potential to transmit lethargy to younger Matsigenka who eat

them. In some cases, consumption is delayed indefinitely when an emotional bounding is established.

Conclusions

The different sections of this chapter constitute an attempt to explain the variety of engagements between Matsigenka and non-human beings. The initial formal interview, exploring people's valuation of different species, shed light on how the different ontological statuses of animal and plant species affect Matsigenka conceptions of quotidian interactions with them. Results of this task demonstrate that, despite the varied natures of these beings (e.g., the various types of soul attributed to them – Chapter 6), their value is judged primarily on the basis of how useful they are in Matsigenka daily life.

With this in mind, I then examined in more detail how utilitarian conceptions of these species manifest in actual interactions, taking into account their varying ontological statuses. Finally, in an attempt to explore the moral implications of Matsigenka *factishes* of the forest and its elements, I provided a general account of Tayakome residents' conceptions of responsibility (or lack thereof) with respect to the well-being of the forest. These preliminary observations of Matsigenka engagements with the forest, and the beings of which it is composed, suggest that, to a certain extent, the conceptions of animals and plants presented in previous chapters entail particular practices, and therefore constitute actual *factishes*, insofar as people enact them in constant engagements with the forest. Some of these *factishes* coincide with anthropological descriptions of other animistic ontologies, namely, that Matsigenka interact with conscious (that is, beings possessing human-like minds), agentive non-human subjects that are personified as such in their spiritual form. This is the case for powerful medicinal plants, evil entities, and also for master spirits that monitor the correct use of the animals under their protection. At the same time, other Matsigenka *factishes* (e.g.,

some soulless game species) resemble Western notions of these same animals, in that they constitute agency-less beings that the Matsigenka treat mostly as food. The fact that Matsigenka value many species highly (across categories of soul-possessing and soulless beings), and may conceive of interactions with them in terms similar to those of biologists (an example of an expert "Westerner"), suggest, as Rival asserts, that we would be mistaken to overlook, in the name of radical alterity, the potential similarities between indigenous people's conceptions of the world and those developed on the basis of "scientific knowledge" (Rival 2014b).

I want to conclude this preliminary discussion with a note on customary practices. As mentioned above, the Matsigenka *factish* for pets is particularly interesting in that it appears to mirror the conservationist idea of "investing" a short-term benefit (refraining from eating a small prey now) by converting it into a larger, long-term gain (eating an adult later). However, the reasons behind this preference are different. For some Matsigenka, the correct "construction" of a prey animal's body determines its appropriateness for consumption, and is signaled by the proper taste of the animal (i.e., the meat should not be sweet, like that of a plantain-fed pet monkey). For others, the proper raising, treatment, and consumption (or not) of pets is a matter of tradition or custom (e.g., "This is just the way it is done."). In this regard, the practice of raising pets resembles the hunting behavioral restrictions (described in the previous chapter) established to maintain the good aim of hunters (e.g., food restrictions practiced by boys for their first kills), in that people are un-concerned about the ultimate causes of the proximate effects of such practices. Rather, they must be performed because, if not, negative consequences will ensue, or, commonly, such practices are simply the correct manner to proceed. This, in turn, coincides with my interpretation of the practice of dietary taboos, discussed in the previous chapter, since some of these hunting restrictions seem to have been established as an attempt to impose a semblance of order on what seem to be

unpredictable and uncontrollable events, in this case, preserving a hunter's good aim. This interpretation coincides with Shepard's statement that "[t]here is no such thing as good practice, or good luck, or good genes [for hunting]. There are only good hunting medicines. For the Matsigenka, hunting ability is acquired solely by the use of special plants that sharpen a hunter's visual acuity, aim, sense of smell, stamina, and luck." (Shepard 2002a:115). These plants (e.g., pakitsavienki, discussed above), like the dietary hunting restrictions, are perceived to be more responsible for maintaining a hunter's good aim than is his own training and natural aptitude. However, in contrast to some dietary taboos like *oeinti* (see Chapter 7), the origin of these hunting customs seems to be different. Thus, as older studies among the Matsigenka suggest (i.e. Casevitz-Renard 1972), it is possible that previous generations of Matsigenka believed that all of these practices were established to avoid enraging the spirits of prey animals, and that current generations of Matsigenka no longer believe in such causal explanations, but continue to follow hunting and dietary restrictions out of habit and custom. Alternatively, it may be also the case that such beliefs about causation were never held (or not widely held) in Tayakome, and the origins of the currently-practiced restrictions and taboos came about by other mechanisms. In any case, I believe that it is essential to recognize that much of Matsigenka (and probably human) behavior may be based on performing "traditional", customary, or habitual practices, the origins of which are often unquestioned, and the folk-explanations of which are mostly rather proximal.

CHAPTER 9: MATSIGENKA EMERGENT ONTOLOGIES AND THE EXTENT OF INCOMMENSURABILITY

What Emergent Ontologies Exist in Tayakome

Throughout this dissertation I have explored the environmental *factishes* or materialsemiotic formulations held by the Matsigenka that have given rise to their particular environmental ontologies. For this purpose, I have defined ontology as an emergent abstraction of the world inhabited by the people under study, but constructed by the anthropologist. The emergent characteristic of ontologies is similar to that of complex systems: through the interaction of individual people, larger features of the broader configuration emerge and are reified at the moment that the researcher recognizes commonalities and discontinuities between the conceptions of people who belong to the same social group, and share a history. In such a process, while putting into practice what some proponents of the ontological turn suggest about "taking people seriously" (e.g., Henare, Holbraad, and Wastell 2007), I have attempted to connect, when possible, such people's statements with actual environmental behavior, in order to assess whether they mean what they say. This is why I have also proposed that ontologies are enacted.

Matsigenka emergent ontologies exist (i.e., are reified) at different levels of abstraction. Within a lower level it is possible to observe the nuances of the Matsigenka relational ontology, which appears to be based on a combination of both widespread and narrowly-distributed environmental *factishes*. Among the former are spacial realms (e.g. house/swidden field, forest) that constitute places of beings' categorization and definition (Chapter 5); or conceptions of certain non-human beings (e.g., datura or *jayapa*, moon, spider monkey, the predator fish *chambira*) with varying degrees and kinds of agency, intentionality and consciousness that grant them particular ontological statuses, based on varying notions of the soul or its absence (Chapters 6 and 7). Such conceptions are *factishes* because they are

enacted and both derive from, and influence, the relationships that the Matsigenka maintain with these beings and realms (Chapter 8).

Additionally, other notions of non-human beings (e.g., armadillo, tapir, the catfish omani, Chapters 6,7, and 8), and the relationships that the Matsigenka maintain with them, are more narrowly distributed and heterogeneous within the population of Tayakome. The inter-individual variation in conceptions regarding these non-human beings has several causes. In some cases, this variation may result from individuals' particular interactions with such beings in accord with their gender and age roles (e.g., hunters, primary care-givers of children, Chapters 6, 7, and 8). In other cases, idiosyncratic experiences with certain species can also result in different conceptions (e.g. vuimpuivo/sangariite forest spirits, Chapter 6). On still other occasions, diverse conceptions of the same species seem to be related to the different value that people attribute to the species' metaphysical condition. Thus, an animal that is spiritually powerful for many people, may not be deemed as such by others, either because of a lack of general interest in the spiritual world, or because the colono lifestyle and associated conceptions are prioritized over those typical of most Matsigenka (Chapters 6, 7, and 8). However, disagreements over certain species' nature and capabilities seem to disappear, and consensus regarding their human-like agency emerges, when the same species are brought to mind in more concrete contexts of human - non-human interaction, such as dietary and behavioral taboos during the couvade (Chapter 7).

Importantly, other widespread practices associated with the treatment of prey animals by a hunter (e.g., not carrying dead prey, not eating the first prey animal killed, see Chapter 8) do not seem to be associated with the hunter's particular conception of the prey. Instead, such practices tend to be perceived as necessary rituals that are performed in order to retain a feature that is essential for Matsigenka livelihood (e.g., preserving one's aim), but whose maintenance is apparently conceived as beyond one's own control.

Based on these results and my observations, it is possible to tentatively conclude that patterns of agreement and disagreement among people with regard to the ontological status of non-human beings seem to be associated, to an extent, with actual practice. This is exemplified in the varying notions of "soul." Since these conceptions tend to be abstract and are rarely applied in everyday interaction with the majority of non-human beings, they may be more malleable and dynamic than conceptions related to concrete domains of interaction, such as taboos to protect infants from dangerous species, which must necessarily be taken into account in order to ensure people's well-being. Similarly, notions of the nature of benevolent super-human species (i.e., their anthropomorphic souls) are less variable (e.g., *jayapa*) because they are reaffirmed by the fact that the Matsigenka direct or indirectly interact with these species' human-like souls. Thus, practice reinforces the permanence of conceptions: The more an interaction occurs (both in the physical and the spiritual worlds), the more widespread, stable, and salient such *factishes* are.

In sum, at a lower level of abstraction, it is possible to observe variation in the content of conceptions, and consequently, develop hypotheses about the processes underlying the dynamics of such conceptions within a population. People's conceptions are constantly affected by influences both internal and external to the social group, as well as by idiosyncratic characteristics. Therefore, there are no conceptions that are inherently Matsigenka. Rather, these ideas emerge and come to be shared for different reasons (see below). Here it is fundamental to assert the ephemerality of ideas, in contrast to the essentialization that some proponents of the ontological turn seem to uphold for non-Western cultures.

In this regard, it is essential to recognize the potentially contradictory nature of conceptions, not only within a social group, as I am describing in this dissertation, but also even within a single individual's narratives. Such heterogeneity occurs because the majority

of people do not wander the world with a pre-formed idea of what this world is or how it functions. We may have some fragmented notions of the world transmitted to us from our family or peers, which we then reconstruct, each in our own way (Sperber 1996). We may occasionally create our own explanations when we consciously conceptualize our engagements in the world, or when we or others begin questioning them. Therefore, ontologies are not unitary, and need not to be coherent within a population, or even within an individual. This is why I affirm that neither individual ontological configurations, nor those that are emergent, (i.e., those resulting from the coincidences of individual ontologies), exist "out there," nor are they realities, or worlds in themselves, as some affirm (e.g., Kohn 2015). Matsigenka experts, such as those who were trained as *seripigari*, may have more experience trying to explain their conceptions both to themselves and to others, and, as a result, they may develop a more structured narrative about how the world works. Still, this is their own particular version of an ontology, and it should not be considered an official account of a society's ontology, since each person conceptualizes her world through an integration of transmitted ideas and her own personal experience.

That said, and while all of these different explanations of events in the world are usually connected ad hoc (if connected at all) in an individual's mind, I contend that they are drawn from underlying, broader conceptualizations that lie at a higher level of abstraction. These broader notions are not specifically about content, but comprise the parameters attributed to new information that help to organize and make sense of it. The potentiality of a person in the Ojibwa world (Hallowell 1960), which entails what Hallowell calls a "personalistic theory of causation" to explain phenomena that occur in the world, is a good example of this type of higher level of abstraction. Viveiros de Castro's perspectivism could also be considered as such. However, as perspectivism seems to be empirically-inspired (rather than empirically-based), and many of the detailed elaborations of the theory do not

seem to be supported on ethnographic evidence, any ontological implications tend to be rather hypothetical and far from what Amerindians actually conceptualize (Turner 2009). Importantly, in contrast to these authors, I am not arguing that these higher level abstractions are intrinsic to the group of people that I am studying. Rather, I suggest that this is a folk theory constructed by me, the researcher, for the Matsigenka, based on the patterns of agreement and disagreement that I have observed, and on my experiences with them during participant observation.

With this research I am just beginning to gain familiarity with the Matsigenka and their relational world. Therefore, my suggestions of a broader ontology must be taken with caution. As I have argued in previous chapters, the particular type of animism that the Matsigenka practice appears to be based on the conception that the world is full of different kinds of subjects with whom humans engage in diverse kinds of relationships that affect them in various manners. Importantly, these conceptions vary within the community. As shown in the previous chapters, the different manners by which the Matsigenka construct subjectivity mean that the resulting subjects are different from the other-than-human "persons" that Hallowell suggests populate the Ojibwa cosmos. Accordingly, for the Matsigenka, subjects do not necessarily possess a human essence, as Viveiros de Castro and Descola contend. In fact, the varying notions of soul preclude the concept of "human" as a homogenizing principle applied to both humans and non-humans. Rather, soul, in its different variants, is applied as a reification of particular relationships, granting varying kinds of human and super-human-like dispositions (e.g., agency, sometimes intentionality and/or consciousness) to these other non-Matsigenka entities. Perspectivist dispositions, then, are attributed by the Matsigenka to only a few species (e.g., tapir), and, even in those cases, it is not a widespread conception among members of the community. Furthermore, while predation may characterize some perspectivist engagements between humans and non-humans (e.g., tapirs,

or the master spirits of white lipped peccaries), it is not possible to assert that this is the predominant mode of interaction – as proposed by other Amazonian researchers (e.g., Descola 1996; 2013; Fausto 1999). As observed in the different forms of exchanges between the Matsigenka and super-human entities, such as the jaguar or *jayapa*, the Matsigenka maintain their human condition and are not perceived as prey by more powerful beings (Chapter 6). In some cases, integration, or the spiritual-material incorporation of a subjective order into another (e.g., transformation of humans into jaguars), rather than predation, also takes place (Rosengren 2006a). In contrast to Rosengren, however, who uses his analysis of Matsigenka myths to suggest that this type of interaction is the norm, I contend that integration only occurs in a limited number of actual engagements (e.g., elders' transformation into jaguars, spirits of relatives taking relatives with them to the underworld, see Chapters 5 and 6). Moreover, as evident in previous chapters, changing points of view associated with human-like souls do not characterize most Matsigenka interactions with non-human beings.

Other scholars of the Matsigenka consider revenge as a particular, over-arching intentional characteristic of their relational order. In this view, retaliation for the consumption or killing of certain species structures the relationships between the Matsigenka and non-human beings. However, as I have discussed, I would suggest, rather, that some of these interactions are better understood as being structured by the mostly unintentional capacity of non-humans to get even, or to reciprocate. Additionally, I would like to highlight the fundamental role played by benevolent entities who contribute to the well-being of the Matsigenka (see rankings in Chapter 8).

Consequently, more than being concerned with revenge, or pure reciprocity, I contend that, in a broader sense, the Matsigenka relational order is associated with their constant concern about health and well-being. Given their history of epidemics suffered since the time

of the Spanish Conquest, and of subsequent exploitation and its inevitably detrimental consequences for their health (e.g., the *correrias* during the Rubber boom and after, see Chapter 3), it is logical to assume that one of the main concerns of the Matsigenka of this region is the maintenance of their well-being and health. In particular, child mortality is a constant worry, and many parents of different ages have experienced the loss of one or more of their infant children. This concern has continued to the present, even despite a newly-installed system of clean, running water that is diminishing the frequency of stomach illnesses in children, and the fact that the rate of child deaths has decreased noticeably, according to community members themselves.

The centrality of well-being as a focus of Matsigenka relationships with non-human beings does not preclude their awareness of the varying types of engagements that occur in their world only between non-human beings (e.g., between jaguars and peccaries). However, my impression is that the subjectivity attributed to these entities tends to arise as a result of the different manners in which these other-than-human beings affect the Matsigenka. This is not to say that species are not subjects in other contexts, when they are engaging in relationships that do not include the Matsigenka. For this reason, I have emphasized throughout this dissertation that notions of non-human beings and elements of the environment are fluid and contingent on context. Still, many of the consequences of the interactions that the Matsigenka establish with other beings that they consider to be subjects seem to be based on their potential to affect Matsigenka well-being – either in a positive or a negative manner.

In consequence, at a higher level of abstraction, ontologies explain the manners in which new knowledge is produced. In Hallowell (1960)'s interpretation of the Ojibwa, the cause of an event is always attributed to a subject, which may be non-human. However, the animism practiced by the Matsigenka is different in that not every element in the

environment is potentially a subject, and agency and human-like consciousness are attributed differently to only certain animals and plants. How does this heterogeneity become a reality at the level of the population? One potential mechanism for the generation and diffusion of new conceptions is illustrated by my interpretation of the origin of some food and behavioral restrictions (Chapter 7). I have suggested that, in some cases, such as that of the bird oeinti (see pages 310-312), Tayakome residents attempt to make sense of an unfortunate, apparently inexplicable event, such as an infant falling seriously ill, after the event has taken place. Then, the Matsigenka healer (seripigari) retrospectively determines what may have been the cause of the incident, usually attributing it to unusual or extraordinary interactions with nonhumans, such as uncommon food that the sick infant or her parents consumed. This a posteriori process of causation determination relies on a particular conception of how the world functions, namely, the Matsigenka ontology at a higher level of abstraction – the subjectivity of certain beings associated with their capacity to affect Matsigenka well-being. This is the default conceptual landscape in which people construct explanations. From here, mechanisms such as this interpretation of *a posteriori* rationalization for the origin of certain taboos, take the content of specific *factishes*. The permanence of the terrain features of this landscape may vary, depending on how widely these notions are transmitted, who transmits them, and who has the power to legitimize them. Yet, the question here is, then, how do these notions become widespread and agreed upon? My interpretation above is just one potential mechanism that may contribute to the origin of certain features of the Matsigenka ontology, and it points to the need for further historical and developmental research in this regard.

Implications of Emerging Ontologies for Ontological Approaches in Anthropology

The results of this research serve to question theoretical implications of the ontological turn in anthropology. Such accounts tend to assume that ontological

configurations are static, atemporal, and intrinsic to non-Western societies, in the same manner that the notion of culture has been previously criticized for being reified as a bounded phenomenon. I have proposed that ontologies are the broader configurations of material-semiotic formulations that result from the conceptions of individuals within a social group. For some proponents of the ontological turn, the commonalities observed at the group level are often essentialized as *the* ontology of the people under study, and in some cases, only the commonalities between those considered experts in a group are conceived as the *original* ontology of a society (e.g., Blaser 2010; de la Cadena 2015). In these approaches, there is no critical scrutiny of how such ontologies originated in the first place.

The results of this research demonstrate that Matsigenka ontologies are emergent dispositions comprising heterogeneous notions, that are also contingent. In complex systems, emergence is the relationship between lower-level units and the larger phenomenon that result from their interaction (Bar-Yam 2002). The fact that emergent phenomena, such as the social structures of a social system, result from a dynamic relationship with lower-level units explains the fluidity of such phenomena. Sawyer (2005) indicates that social emergence has a dialectical property that is not present in other complex systems, namely, the capacity to influence the individuals who gave rise to such emergence in the first place, through a "downward causation" effect. Partially resembling Bourdieu's habitus, this type of causation entails the internalization of social structures, reinforcing individual dispositions and conceptions of what is socially acceptable (Bourdieu 1977). However, in the same manner that Bourdieu does not explain how *habitus* comes into existence, and ontologists fail to address where ontologies come from, such an approach neglects how individual conceptions come to be shared in the first place, and therefore become an emergent phenomenon. In my application of the concept of emergence to the understanding of ontology, I consider such phenomenon to be composed of a configuration of agreement and disagreement among and

within individual people. By looking at the distribution of conceptions, we can attempt to explore and understand why such a configuration exists – i.e., what are the mechanisms that propitiate the manifestation of shared notions, as well as those that differ, in that particular context.

Indeed, one of the take-away lessons of this research is that animist (or perspectivist, for this matter) dispositions are not widely attributed to every element of the environment. Even some prey species which, based on their more intimate interactions with hunters, are thought to be more prone to animist conceptualizations (as suggested by Descola 1996, and then Viveiros de Castro 1998), may not be associated with human-like qualities. This specificity of heterogeneous conceptions attests to the situated and contingent character of ontologies. Common individual experiences, then, give rise to specific configurations, some aspects of which are more stable than others. It is not that these ideas are intrinsic to the Matsigenka, or to Amazonian or Amerindian people, as atemporal characteristics that are essential to the Matsigenka ethos. Instead, ontologies have come to be shared for specific reasons, and such reasons have not been adequately addressed by ontologists.

One of the ways in which certain animistic ideas come to be broadly shared is associated with the *seripigari* (Matsigenka healer), and his power to legitimize the nature of certain beings whose nature becomes manifest through interaction with other members of the community. This was obvious in the case of the bird *oeinti*, whose ontological status came to be recognized as a result of the fact that the *seripigari* assigned to it responsibility for Gaby's son's illness (see pages 310-312). The majority of Tayakome members came to believe in the damaging nature of this bird because they trust in the role of the *seripigari* as an expert in spiritual and physical well-being, in the same manner that many of us blindly trust Western medical doctors. Still, there was a subgroup of Tayakome residents that did not believe in the dangerous character of *oeinti*, perhaps because they are less confident in the power of this

seripigari in particular, or of Matsigenka healers in general. This heterogeneity of *oeinti* ontological status contrasts with the widely-shared notions of healing plants, the apparent stability of which, as I have proposed above, may be related to the constant verification and reinforcement of these plants' power, through their frequent engagement with them by the majority of the members of the community, and the positive results that they provide.

Concepts may become established as a result of the common experiences of individuals. The fact that imarapage (white-lipped peccary) was a human in the past, and, according to some people, still has a master spirit (see Chapter 6), contrasts with the case of shintori (white-collared peccary), that seems to be objectified as a prey, despite the fact that both species are physically similar and are highly desirable game species. It is possible that the danger posed to humans by the large wandering herds of *imarapage* individuals – occasionally comprising of a few hundred animals running together through the forest -, make them more amenable to the attribution of human-like agency. In contrast, the smaller groups of *shintori* (generally comprising less than ten to twenty individuals) may not be perceived as dangerous to the same degree as *imarapage*. These differences in behavior, and potential danger, between the two peccary species are well-known and can be readily observed by everyone. Thus, the widely-shared perceptions of differences in agency between these species may result from common experiences observing and interacting with them. Note, however, that this is just a hypothetical explanation that may or may not reflect the actual origin of these species-specific differences in perception. The point that I want to make is that the objectification of certain animals and plants among the Matsigenka are ideas that may have arisen within the indigenous group itself, and were not necessarily transmitted to them from individuals with a naturalist ontology (e.g., *colonos*). It is not the case that certain ideas are intrinsic to certain societies. The fact that the Matsigenka conceive of some beings are more "object-like" may be related to the fact that, during their common history,

individuals have never had any experience with such animals that suggested a subjective disposition, while such experiences may have occurred with other species like *imarapage*.

This diversity of kinds of entities for the Matsigenka, partially based on the existence of different conceptions of souls, is in direct contrast to the perspectivist tendency to generalize across all non-human beings, based on the premise that all have the same interiority, or human soul (Viveiros de Castro 1998). In this regard, the results of this dissertation are an important contribution to Amazonian ethnography in that they point to a much more sophisticated conceptualization of a society's relational order than that proposed by Viveiros de Castro, Descola, and other proponents of structuralist "ontologies". Instead of conceiving of the world and its elements as dualities (nature vs. culture, object vs. subject, soul vs. body), we have observed that it tends to more closely resemble a spectrum with more than one dimension (e.g., agency, consciousness), and that such conceptions are dynamic and contingent. Furthermore, these notions, as well as their enacted consequences, are not always homogeneous or widely-shared within a society. Such characteristics remain unaddressed in these authors' work, and in the work of others who use their conceptions to describe particular instances of Amazonian and Amerindian ontologies.

The broader implications of the outcomes of this research is pertinent for our understanding of both non-Western *and* Western ontologies. Is it still possible to maintain that ontologies are as radically different as Viveiros de Castro and other ontologists suggest? What type of differences do exist? Descola (2006) concedes that people's ontologies do not fit solely into one of the ontological categories that he proposes (i.e., animist, naturalist, totemic and analogical, see Chapter 2), and that an actual society comprises a combination of them. Yet, through the development of his typology, it is difficult to imagine how these different ontologies coexist within a particular society, since he ultimately seems to confine each into a bounded reality. By doing so – i.e., by attempting to establish intrinsic

characteristics to certain societies –, are not ontologists mirroring modernists' eagerness to purify hybrids (according to Latour), by doing the same with non-Western hybrids, and presenting them as different? These inquiries do not seek to erase the particularities of Matsigenka ontologies presented in this dissertation. My intention here is to question the homogeneity ascribed not only non-Western societies, but also to those of the West, by some ontologists. After all, Westerners also consider certain non-human beings to be subjects (e.g., biologists who attribute human-like features to the animals that they study, see Candea 2012; 2013), and therefore, it is inaccurate to classify them as purely "naturalists." Since heterogeneity of conceptions appears to characterize all social groups to some extent, and such conceptions themselves seem to be dynamic and contingent, differences between societies' ontologies may not be as static and incommensurable as certain ontologists suggest.

Implications for Theories of Natural Resource Management

The results of this research speak to disciplines relating to natural resource management and biological conservation, in so far as they contribute to our understanding of the ontological basis for indigenous or local people's environmental behavior. As pointed out in Chapter 2, theories such as the Institutional Analysis and Development framework (IAD) proposed by Ostrom and colleagues, subsequently integrated into the Socio-Ecological System Framework, as well as frameworks designed to guide policy using the results of scientific research, such as that proposed by the IPBES, are all conceived within Western environmental logic. Despite recent criticism, the authors of these frameworks appear to neither acknowledge nor realizing this fact (Löfmarck and Lidskog 2017). While their stated objective is to design frameworks that are inclusive to different kinds of "knowledge systems," they fail to recognize more fundamental differences that exist between their Western environmental conceptualizations and those of non-Western societies, and,

importantly, that such differences may be ontological rather than epistemological. Furthermore, in Ostrom's IAD approach, potential conflicts over the use of resources that may arise when more than one community or social group is involved are not problematized. This is particularly important for understanding environmental conservation disputes that generally involve different agents and stakeholders that do not share a common view of the problem at hand. The IPBES initiative has attempted to resolve this conceptual difference by including alternative knowledge systems in the working framework that they propose. However, again, incompatibilities of conceptions are not addressed in this approach, nor are the political conflicts that arise from the prevalence of these competing notions.

With this research I have attempted to illustrate how an instance of non-Western environmental conceptions does not fit into Ostrom and colleagues' theories of natural resource management. By emphasizing the complexity, variability, and dynamism of Matsigenka ontological configurations, the results of this study demonstrate that any framework to represent processes of Matsigenka environmental decision-making would entail a design completely different from those proposed above. As demonstrated through this research, any Matsigenka framework would not be unitary, given the diverse conceptions of different non-human beings that sometimes vary among Matsigenka people within a single community, due to the emergent condition of their ontologies. As argued above, Western factishes (e.g., "actors" or stakeholders separated from resources, "resources" conceived as agentless objects) are not appropriate to representations of Matsigenka factishes. The forest, for the Matsigenka, cannot be translated as "biodiversity" (IPBES) or "resource systems" (IAD-SES), since it is composed of beings with different subjectivities and varying forms of agency, some of which inhabit invisible realms similar to that of the Matsigenka (e.g., *vuimpuivo* lives in a clear, tree-free space and tends a manioc field). Furthermore, in the Matsigenka world, inhabited by these different kinds of agentive and agentless beings, the

notion of "resource" is not appropriately applied to those which are used by the Matsigenka, as the relationships established by humans with even the more agentless beings are distinct from the Western notion of "exploitation." For instance, as observed in the case of species that are taboos, the decision-making process involved in killing a particular animal or gathering the fruits of a specific tree, entails the reaction of such species and their effects on the souls of humans (e.g., infants), and not simply the negotiation with another Matsigenka person over the use of this species. If retaliation is a threat, people are likely to think twice before engaging with potentially harmful species. In this regard, temporal variables such as having infants at the moment of interaction would also need to be incorporated into inclusive frameworks of environmental behavior. Similarly, common game animals tend to be considered agentless, and, in this regard, similar to Western notions of "resource." However, hunting them must be conducted according to specific practices that sometimes involve the presence of master spirits, or which serve the purpose of protecting the hunter's aim (see previous section). Accordingly, "rational" behavior in order to maximize a person's own benefits from interaction with the environment involves consideration of the consequences of engaging with the particular animal or plant, which may or may not be an agentless entity.

In addition, dietary and behavioral restrictions, established to restrain one's own behavior when interacting with particular species, would not be considered institutions in the sense that Ostrom defines them. Taboos are not rules that have emerged from collective action to control access to a "resource." Such conceptions may have arisen from the concrete experiences of an individual, which are then transmitted and widely shared among residents of Tayakome – probably as a result of the political influence of the *seripigari* –, and, based on these experiences, taboos are implemented with the particular aim of avoiding harm to infants, crops, or other people. Furthermore, these restrictions are individually enforced, with each person or family responsible for the ultimate consequences of not complying with them,

and heterogeneity of beliefs arising as a result. The unintended secondary consequences of such taboos may be the "preservation" of a particular species, as the Western notion of management implies. However, for dietary restrictions, such unintentional conservation is highly variable, because the fact that some members of a household follow a taboo, does not imply that all do, as, for instance, not everyone in the household may be the parent of an infant. Similarly, there are other behavioral taboos that forbid any type of interaction with certain animals and plants, but that does not impede other members of the household, not bound by the taboos, from hunting or harvesting the species for the good of the clan. Therefore, it would be a mistake to equate Matsigenka taboos with "resource management institutions" since, first of all, management is not the intended aim of the Matsigenka, and researchers would be attributing a Western conception to behavior with a different ontological basis. Considering dietary restrictions as management practices is as inappropriate as regarding indigenous peoples inherent conservationists (Nadasdy 2005), that is, conceptually placing them in an ontology in which they do not belong. Another point of contention is the broader notion of the forest as an entity that is perpetually growing and, in a utilitarian sense, always provides for people's needs – a "giving environment" as indicated in Chapter 8. This fact suggests that there is no conception of a limited pool of resources over which people need to negotiate and create institutions to equitably and sustainably harvest them. This aspect is particularly pertinent to current conflicts over the use and conservation of the forest, as I discuss below.

It is important to acknowledge Ostrom's motivation and intention for developing her institutional approach. It is precisely because she recognized the variability of strategies in diverse contexts (e.g., diverse types of social group, types of resource, institutions developed and applied) that have been successfully employed to manage the use of resources that inspired her to propose these flexible frameworks as a rebuttal of overarching "panaceas" or

one-size-fits-all management practices. However, my critique is that Ostrom shares the perspective of other academics and policy makers who do not realize that they contribute to the hegemonic position of science to validate truth (Foucault 1994 [1976]), and in that manner, they fail to recognize the fact that they are exercising their own ontology without acknowledging it. In this regard, we must recognize that Ostrom surpassed many of her colleagues (especially in the field of economics) by developing a sensible approach to building theory, considering local sets of rules and examining the historical processes that gave rise to local management regimes. Ostrom surrounded herself with an interdisciplinary group of scholars, including anthropologists, in order to approach the issue of resource management and conservation in a holistic manner. However, critiques leveled by proponents of the ontological approach apparently never reached the development of her work. This is also the responsibility of anthropologists, especially ontologists, who, at the time that Ostrom was awarded the Nobel prize (2009), were already proposing the turn to ontology and questioning the ontological hegemony of science (e.g., Henare, Holbraad, and Wastell 2007; Holbraad 2009). However, their criticism did not transcend their own fields of study, and they remained theorizing and writing primarily for their own consumption. Despite the fact that this dissertation by no means represents a finished and conclusive interpretation of Matsigenka ontologies, my aim is that, in the future, the results of my research can contribute to "ontologically" inclusive theories of environmental decision-making.

Final Remarks

Can we speak of incommensurable worlds after this (rather preliminary) account of Matsigenka ontologies, and moreover, after the awareness that ontologies are neither homogeneous nor static? I have suggested that ontologies can be incommensurable to an extent, considering, for instance, that it may be impossible to translate them into a single

generic conceptual framework, as resource management theories often attempt to do (Chapter 2). Yet, given this heterogeneity of *factishes* and the shared history of societies in contact, is it possible to speak of "partial connections" between ontologies belonging to distinct groups? Drawing from the figure of the "cyborg", Strathern explains partial connections as relations that transcend the limits of historically linked societies, and that are "neither singular nor plural, neither one nor many, a circuit of connections that joins parts that cannot be compared insofar as they are not insomorphic [sic] with one another." Alluding to the partial connections that exist among societies that are part of the Papua New Guinea Highlands, the author further asserts that "[t]hese societies exist in the first place as a result of people's communications, and in their communications people are always expanding and contracting the ideas they already hold, substituting new for old" (Strathern 2004a:54).

Indeed, as I have attempted to demonstrate in the case of the Matsigenka, ontologies comprise a distribution of notions that are constantly produced and reproduced, and occasionally replaced. I also contend that acquired conceptions do not necessarily replace old ones, and the process may be more chaotic. Conflicting ideas may coexist if they are salient in different contexts, developing, in this way, into new ontological configurations. This is the case for the alternative conceptions of Tasorintsi that I elicited from Micaela (page 156). Micaela seemed not to have reconciled both versions into a single narrative (until I asked for both of them in the same conversation), because she did not have the necessity to do so. My question may have been the first time that Micaela saw the inconsistency (from my perspective) between the two narratives, and it is possible that Micaela now holds a, perhaps ephemeral, new ontology of the existence of two alternative Tasorintsi. As this example indicates, individual and collective (emergent) ontologies are dynamic, and may be created and recreated as new information is acquired and challenged. Note also that there is no reason to consider this phenomenon as exclusive to Matsigenka ontologies. Therefore, animistic and

naturalistic ideas may be part of Westerners' (in particular, conservationists') emergent ontologies as well, although, likely, in different manners.

These observations also apply to the question of how environmental conflicts arise. If we can ultimately delineate common objectives in the partial ontological connections, as previously pointed out, is it accurate to conceive of conflict as purely ontological? I have previously indicated that Ostrom and other environmental policy theoreticians fail to consider alternative conceptualizations regarding human-environmental interactions, not only at the specific level of the direct exploitation of species, but also of the forest as a domain. In the case of the Matsigenka and the non-Matsigenka administrators and associates of Manu National Park (MNP), as discussed in Chapter 1, differing notions of the role and effect of human beings in the forest seems to explain, at least partially, the conflict between these different actors. Despite the fact that MNP workers consider humans to be part of "natural" environments, such as the MNP forest – that differs from the extreme view of some conservationists that humans are invaders of "nature" -, they still seem to conceive of humans and their activities as potentially damaging for the environment. One of them mentions the necessity of using "resources" in a "sustainable" manner (page 24). This contrasts directly with the notion of the forest as a "giving environment," that most Matsigenka seem to hold, and also with some ideas regarding a no-waste manner of conducting themselves in relation with other beings (Chapter 8). This misunderstanding, and the prevalence of hegemonic Western notions, is also apparent in the political ontological conflicts described by Blaser (2009; 2010).

Still, this is not the only aspect that contributes to the existence of the tense relationship between the Matsigenka and park. There is a constant fight about what is considered to be proper behavior with regard to the forest. In this respect, it is possible that conflict is rooted in the parameters that define different ontologies, and on the different goals

of the actors involved, rather than on their content. Thus, Matsigenka interact with the forest in the manner that they do in order to survive and "live well." For the MNP administration, the purpose of establishing the protected area, and the manner in which the Matsigenka should conduct themselves within it, is related to the ultimate goal of preserving its biodiversity. They recognize that the Matsigenka need to use the forest for their survival, however there is an essentialist conception of these people and how they should behave. Despite the fact that many MNP staff affirm that humans are part of such an environment, and they seem to believe in the stereotype of the ecological noble savage, such that indigenous peoples live in "harmony" with nature, their actions toward the Matsigenka are motivated by a desire to mitigate the supposed damaging effect of their behavior on the forest. The fact that they represent the Peruvian Government gives them, in their view, the authority to impose constraints on the manner in which the Matsigenka conduct their lives. This is accompanied by a discriminatory neglect of Matsigenka people and their conceptions, as was shown at the beginning of this dissertation, when I discussed the practice of food taboos with MNP staffers and other conservationist stakeholders. For the Matsigenka, it seems that part of the origin of the conflict with the park entails not being taken seriously: The park's lack of concern with regard to understanding Matsigenka prerogatives for their own livelihoods, and particularly, the dismissive attitude of the MNP administration towards their concerns and aspirations, expressed in the lack of interest in maintaining regular communication with them. While the attitudes of MNP administrators in recent years has improved their relationship with the Matsigenka, there is still considerable work to be done on their part, and on that of their conservationist affiliates, in order to value Matsigenka people and their conceptions at the same level as they value those of the West.

The history of conflict between the MNP administration and their conservationist allies on one hand, and the Matsigenka of Manu on the other, is a reflection of the historical

conflict between the majority-culture Peruvian state and indigenous peoples, and, more generally, the intertwined history of the powerful and the dispossessed, entailing the neglect and subordination of the latter by the former. In Manu, fundamental socio-political issues, some of them entailing ontological misunderstandings, remain to be resolved, and, in my opinion, any such resolution must begin precisely with respect for Matsigenka goals, aspirations, and conceptualizations in their own right, without prejudging and essentializing them, and a recognition that they are as valid as those of Western societies. The task is certainly not easy. While this dissertation provides merely preliminary interpretations of the richness, complexity, and dynamism of Matsigenka ontologies, and may serve in making it more accessible to other actors, it is also the beginning of a long-term research effort focused on investigation of environmental conceptions and conflicts. It is my hope that these efforts may foster mutual understanding, and allow us to work together toward common goals from our different, though "partially connected", points of view.

APPENDICES

APPENDIX A: Matsigenka, Spanish, English and Scientific Names of the Species Mentioned

| Matsigenka Name | Spanish Name | English Name | Scientific Name | |
|-----------------|------------------------|---|--|--|
| Ampei | Algodón | Cotton | Gossypium sp. | |
| Atawa | Gallina | Chicken | Gallus gallus | |
| Castaña | Castaña | Brazil nut tree | Bertholletia excelsa | |
| Chambira | Chambira, machete | Biara | Raphiodon vulpinus | |
| Charagua | Charagua | (catfish) | Pseudoplatystoma sp. | |
| Chogotaro | (tortuga) | Geoffroy's side-necked turtle | Phrynops geoffroanus | |
| Chompita | Cucaracha | American cockroach | Periplaneta americana | |
| Etini | Armadillo | Armadillo | Priodontes maximus | |
| Imarapage | Huangana | White-lipped peccary | Tayassu pecari | |
| Iveto | Ronsoco | Capybara | Hydrochaeris hydrochaeris | |
| Ivienkeki | Juncia | Sedge | Cyperus sp. | |
| Jayapa | Todé, floripondio | Datura | Brugmansia sp. | |
| Jeroroni | Búho pequeño | Screech owl | Megascops sp. | |
| Joma | Piraña | Piranha | <i>Serrasalmus</i> sp., <i>pygocentrus</i> sp. | |
| Kamana | Catahua | Sandbox tree | Hura crepitans | |
| Kamarampi | Ayahuasca | Ayahuasca | Banisteriopsis caapi | |
| Kapieshi | Achuni | Coati | Nasua nasua | |
| Kapiro | Paca, bambú | Bamboo | Guadua sp. | |
| Katsari | Cacique | Yellow-rumped cacique | Cacicus cela | |
| Kemari | Sachavaca, tapir | Tapir | Tapirus terrestris | |
| Kimaro | Guacamayo | Macaw | Ara sp. | |
| Kinteroni | Armadillo gigante | Giant armadillo | Priodontes maximus | |
| Kitoniro | Alacrán | Scorpion | Order scorpiones | |
| Komagiri | Paco | Pacu | Piaractus brachypomus | |
| Komaguinaro | Mono choro | Woolley monkey | Lagothrix lagotricha | |
| Kovieni | Azúcar huayo | (tree) | Hymenaea oblongifolia | |
| Kuimpe | Copaiba | Copaiba | Copaifera reticulata | |
| Kuitapoari | Dorado | Goliath catfish | Brachyplatystoma rousseauxii | |
| Maniro | Venado | Deer Mazama americana, n gouazoubira | | |
| Manke | Lagartija | Lizard | Family teiidae | |
| Mao | Escarabajo rinoceronte | Rhinocerus beetle | Megacerus sp. | |
| Maranke | Culebra | Snake | Suborder serpentes | |
| Matsonsori | Otorongo | Jaguar | Panthera onca | |
| Mavoro | Canero | Blue whale catfish | Cetopsis coecutiens | |

| Muishi | Isula | Bullet ant | Paraponera clavata | |
|----------------|---------------------------|---------------------------------------|---|--|
| Oati | Manco | Tayra | Eira barbara | |
| Oeinti | (pájaro) | Eastern kingbird | Tyrannus tyrannus | |
| Omani | Zúngaro | Gilded catfish | Zungaro zungaro | |
| Osheto | Maquisapa | Spider monkey | Ateles belzebuth | |
| Otsiti | Perro | Dog | Canis familiaris | |
| Paguiri | Suri | South american palm weevil | Rhynchophorus palmarum | |
| Pakitsa | Aguila harpía | Harpy eagle | Harpia harpyja | |
| Parari | Lobo de río | Giant river otter | Pteronura brasiliensis | |
| Pigiro | Suri | (beetle larvae) | Family curculionidae | |
| Pocharki | Chimicua | (tree) | Pseudolmedia laevis | |
| Potogo | Ojé | Fig | Ficus insipida | |
| Potsoti | Achiote | Annatto | Bixa orellana | |
| Samani | Picuro | Lowland paca | Cuniculus paca | |
| Sandari | Cedro | (tree) | Cedrela odorata | |
| Saniri | Caimán | Caiman | Caiman crocodilu, melanosuchus niger | |
| Seri | Tabaco | Tobacco | Nicotiana sp. | |
| Shakami | Trompetero | Pale-winged trumpeter | Psophia leucoptera | |
| Shakiriri | Motelo | Yellow-footed tortoise | Chelonoidis denticulatus | |
| Shiani | Oso hormiguero gigante | Giant ant eater | Myrmecophaga tridactyla | |
| Shima | Boquichico | Black prochilodus | Prochilodus nigricans | |
| Shinteneki | (árbol) | (tree) | Alchornea glandulosa | |
| Shintori | Sajino | White-collared peccari | Pecari tajacu | |
| Shirigari | Lupuna, ceiba | Kapok tree | Ceiba pentandra | |
| Soroni | Perezoso | Sloth | Bradypus variegatus, choloepus hoffmanni | |
| Tonche/tsinaro | Mantis | Mantis | Order mantodea | |
| Toroshoke | Serrucho | Ripsaw catfish | Oxydoras niger | |
| Tsiaro | Oruga | Caterpillar (hairless edible species) | Order lepidoptera | |
| Tsigaro | Shapaja | (palm) | <i>Attalea</i> sp. | |
| Tsiticana | Ají | Chili pepper | Capsicum sp. | |
| Tsomiri | Lombriz | Worm | Phylum annelida | |
| Tsonkiri | Picaflor | Hummingbird | <i>Amazilia</i> sp. | |
| Vuimpuiyo | Pija gritador | Screaming piha | Lipaugus vociferans | |
| Yairi | Abeja corta-pelo | Stingless bee | Trigona sp. | |
| Yaniri | Coto mono | Red howler monkey | Alouatta sara | |
| Gasolina | Gasolina | Gasoline | | |
| Inkani | Lluvia | Rain | | |
| Karieti | Rayo, trueno | Lighning, thunder | | |
| Kashiri | Luna | Moon | | |
| Kipatsi | Tierra | Earth | | |

| Koriki | Dinero | Money |
|-------------|------------------|---------------|
| Mapue | Piedra | Stone |
| Menkori | Nube | Cloud |
| Nia | Agua | Water |
| Nia botella | Agua embotellada | Bottled water |
| Oakue | Río | River |
| Poriatsiri | Sol | Sun |
| Tampia | Viento | Wind |

| Gasolina Inkani | | | | Think | the Past | Taboo |
|--------------------|---|---|---|-------|----------|-------|
| Inkani | × | × | Х | Х | | |
| IIIKaIII | × | × | × | × | × | |
| Karieti | × | × | × | × | × | |
| Kashiri | × | × | × | × | × | |
| Kipatsi | × | × | × | × | × | |
| Koriki | × | × | × | × | | |
| Mapue | × | × | × | × | × | |
| Menkori | × | × | × | × | × | |
| Nia | × | × | × | × | × | |
| Nia botella | × | × | × | × | | |
| Oakue | × | × | × | × | × | |
| Poriatsiri | × | × | × | × | × | |
| Tampia | × | × | X | × | × | |
| Ampei | | | × | × | × | |
| Amuihuaca | | | Х | × | × | |
| Chompita | | | × | × | × | |
| Ivienkeki | | | X | × | × | |
| Jayapa | | | × | × | × | |
| Kamana | | | × | × | × | |
| Kamarampi | | | × | × | × | |
| Kitoniro | | | X | × | × | |
| Kogapakori | | | Х | × | × | |
| Kuimpe | | | Х | × | × | |
| Mashco | | | X | × | × | |
| Matsigenka | | | Х | × | | |
| Muishi | | | Х | × | × | |
| Otsiti | | | Х | × | × | |
| Potsoti | | | Х | × | × | |
| Santari | | | Х | X | × | |
| Seri | | | Х | × | × | |
| Shirigari | | | X | Х | × | |
| Tonche/tsinaro | | | × | × | × | |
| Tsomiri | | | X | Х | × | |
| Tsonkiri | | | × | X | × | |
| Yairi | | | X | Х | × | |
| Atawa | | | × | × | × | × |
| Chambira | | | × | X | × | × |
| Charagua | | | × | X | × | × |
| Chogotaro | | | × | X | × | × |
| Etini | | | × | × | × | × |
| Imarapague | | | × | × | × | × |
| Iveto | | | × | × | × | × |
| Jeroroni | | | × | × | × | × |

APPENDIX B: Items used for Formally Exploring Animic Characteristics (Task 2 in Methods Chapter)

| Joma | × | × | × | × |
|-------------|---|---|---|---|
| Kapieshi | × | × | × | × |
| Kapiro | × | × | | × |
| Katsari | × | × | × | × |
| Kemari | × | × | × | × |
| Kimaro | × | × | × | × |
| Kinteroni | × | × | × | × |
| Komaguinaro | × | × | × | × |
| Komaguiri | × | × | × | × |
| Kovieni | × | × | × | × |
| Kuitapoari | × | × | × | × |
| Maniro | × | × | × | × |
| Mao | × | × | × | × |
| Manke | × | × | × | × |
| Maranke | × | × | × | × |
| Matsonsori | × | × | × | × |
| Mavoro | × | × | × | × |
| Oati | × | × | × | × |
| Oeinti | × | × | × | × |
| Omani | × | × | × | × |
| Osheto | × | × | × | × |
| Pakitsa | × | × | × | × |
| Paguiri | × | × | × | × |
| Parari | × | × | × | × |
| Pigiro | × | × | × | × |
| Potogo | × | × | × | × |
| Vuimpuiyo | × | × | × | × |
| Samani | × | × | × | × |
| Saniri | × | × | × | × |
| Soroni | × | × | × | × |
| Shakami | × | × | × | × |
| Shakiriri | × | × | × | × |
| Shiani | × | × | × | × |
| Shintori | × | × | × | × |
| Toroshoke | × | × | × | × |
| Tsiaro | × | × | × | × |
| Tsigaro | × | × | × | × |
| Tsiticana | × | × | × | × |
| Yaniri | × | X | × | × |

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