

Chapter 13

Past, Present, and Future of Secoya Ethnoprimateology in the Ecuadorian Amazonia



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13.1 The Past

Nonhuman primates have been the focus of our attention since our origins as a species. Their notable similarities with us, humans, in their behaviors and morphology have been widely represented and interpreted in many different ways. As a result, nonhuman primates have been an important component of the myths and religions of many human cultures around the world in past and present times (Estrada et al. 2017). The importance of nonhuman primates in human cultures is evidenced by a large variety of archeological work that includes several types of artistic representations of nonhuman primates. The Nazca figures in Perú (200 BC–900 AD) and the ceramics of the Machalilla culture in Ecuador (1800–1500 BC) are two examples of this old and strong relationship between our species and the nonhuman primates (Zardini 1991; Meggers and Evans 1962).

Before the European colonization, the myths and traditions of the native cultures in the Neotropics represented nonhuman primates as the result of failed attempts to create humans or as humans that were transformed after confronting their gods (Gutiérrez 2007). Monkey representations in ceramics of this period have been also related to reproduction and fertility since primates were considered

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a link between the material and the spiritual worlds (Uribe 2016). In the Neotropics, Amazonian cultures, such as the Secoya, may well have been the ones that had the most direct and strong relationship with nonhuman primates. The diverse primate community of Amazonian ecosystems (de la Torre 2000; Peres 1997) and the diurnal and conspicuous behavior of these animals very likely attracted the attention of these first people since they occupied these habitats. We present a temporal analysis of the knowledge and perceptions of the Secoya about nonhuman primates. The results of this analysis point to the need of preserving their deep traditional knowledge as a means to conserve nonhuman primates, Amazonian forests, and the Secoya culture.

13.1.1 *The Secoya*

The Secoya people are members of the western Tukano group that occupied large areas in the upper Amazon basin, from the Putumayo to the Amazonas rivers in Colombia, Ecuador, and Peru (Vickers 1989). In present times, the Secoya people are an ethnic minority of about 600 people living in some areas of the Aguarico River in Ecuador (Fig. 13.1). A similar number of Secoya people lives in Peru, in the upper Napo Basin (Yépez et al. 2010). These Amazonian ecosystems are the environment where the Secoya culture originated and evolved. Their survival, success, and persistence as a culture depended on the profound knowledge they had about the different elements of these complex ecosystems (Cerón et al. 2011; Vickers 1989).

13.1.2 *Secoya Ethnoprimateology*

For the Secoya, nonhuman primates were allies, partly responsible of their success as a culture. They were considered as forest guides that taught humans what could and could not be eaten. They were also seen as forest guardians, alerting humans about the presence of predators. Monkeys were also kept as pets and, very importantly, were a valuable source of protein (Cipolletti and Payaguaje 2008). Some species of nonhuman primates, especially the larger ones, such as the woolly monkeys (*Lagothrix lagotricha*), have been a highly valued hunting prey in past and present times. Evidently, this close relationship was based on a considerable knowledge of all nonhuman primate species occurring in their territory, identifying each by morphological and behavioral characteristics (Vickers 1989) (Table 13.1).

This intimate relationship between the Secoya people and the Amazonian primates, that began several hundred years ago, is expressed in the Secoya beliefs about the ability of monkeys to move between the material world, the forest, and the spiritual world. This theory was stated by one of their elders: “Since the beginning of life, monkeys have helped our god, *Ñañe-Paina*, to create people and other monkeys.

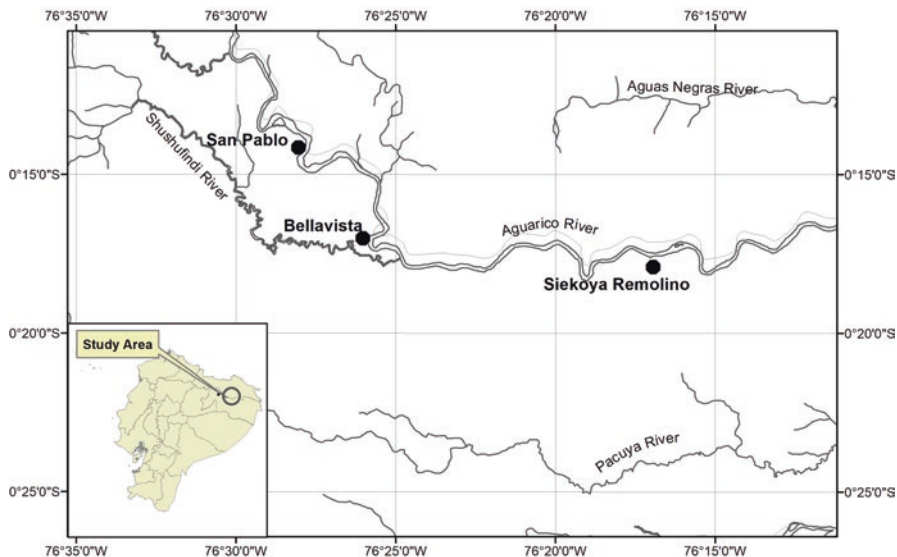


Fig. 13.1 Secoya communities in Ecuador, San Pablo de Catesiaya, Bellavista, and Siekoya Remolino

Table 13.1 Secoya taxonomy of nonhuman primates

Secoya name	Scientific name	Common name (English)	Meaning of the Secoya name
<i>Nunkwa sisi</i>	<i>Cebuella pygmaea</i>	Pygmy marmoset	Little monkey of the <i>Astrocaryum</i> palm
<i>Nea sisi</i>	<i>Leontocebus nigricollis</i>	Black-mantled tamarin	Black little monkey
<i>Bo sisi</i>	<i>Saimiri cassiquiarensis</i>	Squirrel monkey	White little monkey
<i>Bo take</i>	<i>Cebus yuracus</i>	White capuchin monkey	White capuchin monkey
<i>Ma wa'o</i>	<i>Plecturocebus discolor</i>	Dusky titi monkey	Red hairy monkey
<i>Nea wa'o</i>	<i>Cheracebus lucifer</i>	Yellow-handed titi monkey	Black hairy monkey
<i>Wa'o su'tu</i>	<i>Pithecia milleri</i>	Saki monkey	Grey hairy monkey
<i>Yami naso</i>	<i>Aotus vociferans</i>	Owl monkey	Night woolly monkey
<i>Emu</i>	<i>Alouatta seniculus</i>	Red howler monkey	Howler monkey
<i>Yuwi naso</i>	<i>Lagothrix lagothricha lagothricha</i>	Common woolly monkey	Ashy woolly monkey
<i>Ma naso</i>	<i>L. l. poeppigii</i>	Poeppigii's woolly monkey	Red woolly monkey
<i>Pai take</i>	<i>Ateles belzebuth</i>	Spider monkey	Humanlike monkey

Modified from Vickers (1989)

All the listed taxa occur in the Secoya territory in Ecuador, with the exception of *Ateles belzebuth*. Primate taxonomy follows Mittermeier et al. (2013)

Fig. 13.2 *Inga acuminata* Benth., called *sisi pene* in Secoya language (credits: P. Yépez)



They have helped our god several times, when other animals of the forests were trying to kill him...” (D. Payaguaje, Secoya shaman, pers. comm.).

By carefully observing and recording the plant species used by monkeys as food sources, the Secoya people were able to identify some of their potential foods. They also used monkeys as references to name culturally important plant species:

- *Inga acuminata* Benth. is called *sisi pene*, meaning “squirrel monkey’s fruit” (*sisi* is squirrel monkey and *pene* refers to a legume fruit) (Fig. 13.2).
- *Matisia obliquifolia* Standl. is called *take apasi*, meaning “capuchin monkey’s fruit” (*take* is capuchin monkey (Fig. 13.3) and *apasi* refers to a drupe fruit).
- *Plukenetia polyadenia* Müll. Arg., is called *take tsima*, meaning “capuchin monkey’s curare” (*tsima* means “venom/curare”).
- *Theobroma subincanum* Mart. is called *take pona*, meaning “capuchin monkey’s cocoa (*pona* is cocoa).
- *Pouteria glomerata* (Miq.) Radlk. is called *naso toa*, meaning “woolly monkey’s fruit” (*naso* is woolly monkey and “*toa*” refers to a drupe fruit) (Cerón et al. 2011).

Other plant species have been named because they share some features with monkeys. *Inga velutina* Willd. is called *emu pene*, meaning “red howler monkey’s fruit” (“*emu*” is howler monkey and *pene* is a legume fruit). This fruit has a red and hairy cover that looks similar to the fur of this monkey. Other fruits have some similarity to Secoya cooking tools so they were named as tools for the monkeys. *Eschweilera* spp. is called *take cua’co* (Fig. 13.4), meaning “capuchin monkey’s



Fig. 13.3 *Cebus yuracus*, called *Bo take* in Secoya language (white capuchin monkey) (credits: P. Yépez)



Fig. 13.4 *Eschweilera* spp. *take cua'co* in Secoya language (credits: P. Yépez)

pot” (“*take*” is capuchin monkey and *cua'co* is pot) conveying that they used them (Cerón et al. 2011). These examples are not only evidence of the Secoya knowledge on the feeding behavior of monkeys, as in the case of the fruits that are eaten by the monkeys, but also of their belief that monkeys are so similar to humans that they even use venoms and pots.

Based on careful observations of monkeys and of the flowering and fruiting times in the Amazonian forests, the Secoya associated the period of high fruit production to an increase in weight of monkeys. The Secoya called the month of high fruit productivity as *naso huiyape ñañe* which means “fat woolly monkeys’ month.” They focused their hunting efforts on woolly monkeys in this month, that corresponds to April, a rainy season month in northern Ecuadorian Amazonia where the Secoya people live.

The traditional knowledge that the Secoya had about nonhuman primates and their acknowledgement of the complexity and similarity of their behaviors with that of humans was the basis of myths about the power of nonhuman primates and their importance to gods and people. The myth of the birth of *Ñañe*, the god of the Secoya, evidences this, stated in the following: “It is said that *Ñañe* was born from a stone that was kept by the daughters of the *potoo*, a nocturnal bird. When *Ñañe* was a child, he cried like a small bird, so the girls put him in a bowl to protect him. When *Ñañe* was young, he visited the people of these old places and transformed them into peccaries and other animals. This is how *Ñañe* created all the diversity of animals of the Amazon. When *Ñañe* was adult, there were people that lived in the underground. They cooked and ate red clay that they called peach palm. One day, a wise man came from the underground to look for firewood to cook the clay. *Ñañe* was hidden in the forest watching the man. He stepped on the wood and asked “What are you doing?” The man answered “I am going to cook this peach palm.” *Ñañe* laughed at him and said “I am going to give you the real peach palm!” He gave the man a pack of maize leaves with a fermented mass of real peach palm inside and told the man how to do *cono*, a fermented drink. The wise man went back to the underground and made *cono*. After drinking the *cono*, people began to emerge to the surface through a tunnel in a creek. These people had tails. *Ñañe* cut the tail of all of them as they emerged. With the tail of white people, he created the white capuchin monkeys. There were different people coming out from the underground, black people, yellow people, red people, and so on. With the tails of these people, *Ñañe* created all the monkey species. There was one group of underground people with colorful dresses, *Ñañe* called them *Siecopai*. He cut the tails of these people and with these tails he created the woolly monkeys. *Ñañe* named the creek where all this took place *Siecoya*; this is the place where we, the *Siecopai*, originated” (H. Payaguaje, pers. comm. – the myth was narrated in Spanish with some Secoya words that were maintained in this translation).

13.2 The Present

The close relationship that the Secoya had with nonhuman primates allowed them to even recognize the spiritual leader of a monkey troop and to reduce or stop their hunting when this troop leader asked them to do so. In current days, this close relationship has been lost. The use of firearms, instead of blowguns or traps, increased their effectiveness as hunters and, apparently, ended this relation of respect for

nonhuman primates and other animal preys. “Monkeys are like people. One day, we found a troop of woolly monkeys feeding on *airo toa*, a forest fruit, and we stayed under the tree. One monkey cried from far away and all the others ran to see him. On a branch of a large tree, this monkey became a person. He was huge. He was the leader of the woolly monkeys, a *iowáíëjaë*. He had a white tunic. One of us wanted to shoot the monkeys with the blowgun; but when he saw the leader, he was scared and could not blow. In all monkey troops there was a leader *iowáíëjaë*. Now the Secoya don’t use blowguns, we shoot the monkeys with firearms and scared them with the noise. This is why the *iowáíëjaë* are no longer in the troops” (Cipolletti and Payaguaje 2008).

In most of the Secoya territory, intense and uncontrolled hunting in addition of high deforestation rates in the past 40 years (Josse 2001) has caused the local extinctions of some monkey species, such as the woolly monkey (de la Torre pers. obs.) (Fig. 13.5). Most Secoya people today are no longer living in direct contact with nonhuman primates. “Most Secoya children have never seen a woolly monkey. The morning choruses of howler and titi monkeys in the gallery forest of the Aguarico

Fig. 13.5 *Lagothrix lagothericha*, called *naso* in Secoya language (woolly monkey), juvenile kept as pet in San Pablo de Catesiaya, 2005 (credits: P. Yépez)



River are only in the memory of older people. Their calls have been replaced by the noise of motor boats, chainsaws, TVs and loudspeakers. Now, the Secoya children imitate the sounds of cocks, pigs, horses, and dogs but are not able to imitate the sounds of the monkeys” (H. Payaguaje, pers. comm.).

Most Secoya still have a preference for monkey meat, but in current times, very few of them do hunt monkeys. In a study about hunting patterns that we carried out from April through December 2006 in the Secoya communities of San Pablo, Bellavista, and Siekoya Remolino, few monkeys of only three species were hunted, red howler monkeys (four individuals hunted in San Pablo and one in Siekoya Remolino), white fronted capuchins (one individual hunted in Bellavista and six in Siekoya Remolino), and saki monkeys (one individual hunted in San Pablo) (Table 13.2). No woolly monkeys were hunted. Woolly monkeys were the most hunted primate species and one of the most hunted mammals by the Secoya in the early 1970s. Woolly monkey meat is still considered a delicacy, the best among all monkeys (Vickers 1989, D. Payaguaje, pers. comm.). The absence of woolly monkeys as hunting prey and the overall low hunting rate of other primate species in 2006 seems to be related to the fact that primates are now rare or absent in the forests close to the Secoya settlements. In this same year (2006), we carried out biweekly censuses to estimate mammal diversity in different forest types in the Secoya territory. We complemented the data from the censuses with records from camera traps. During that year, we recorded 9 of the 11 primate taxa that could be found in the Secoya territory (Table 13.3), but the frequency of recordings was low for all species (mode: 0–1 record per month). We did not record any of the two subspecies of woolly monkeys. Given the low densities or absence of primates in the areas close to Secoya,

Table 13.2 Species and number of individuals for the mammals hunted between April and December 2006 in the Secoya communities of San Pablo de Catesiaya (SP), Bellavista (BE), and Siekoya Remolino (SR)

Family	Species	Common name (English)	SP	BE	SR
Cervidae	<i>Mazama</i> spp.	Brocket deer	2	0	1
Tayassuidae	<i>Pecari tajacu</i>	Collared peccary	4	7	5
	<i>Tayassu pecari</i>	White-lipped peccary	1	4	0
Felidae	<i>Panthera onca</i>	Jaguar	0	1	0
Procyonidae	<i>Nasua nasua</i>	Coati	0	9	0
Dasypodidae	<i>Dasypus novemcinctus</i>	Nine-banded armadillo	1	14	0
Myrmecophagidae	<i>Tamandua tetradactyla</i>	Ant eater	0	3	1
Tapiridae	<i>Tapirus terrestris</i>	Tapir	0	0	1
Atelidae	<i>Alouatta seniculus</i>	Red howler monkey	4	0	1
Cebidae	<i>Cebus yuracus</i>	White capuchin monkey	0	1	6
Pitheciidae	<i>Pithecia milleri</i>	Saki monkey	1	0	0
Agoutidae	<i>Agouti paca</i>	Paca	12	7	5
Dasyproctidae	<i>Dasyprocta fuliginosa</i>	Agouti	16	31	4
Dasyproctidae	<i>Myoprocta acouchi</i>		1	0	2

Modified from de la Torre et al. (2007)

Table 13.3 Mammal species recorded in biweekly censuses and camera traps in *terra firme* and *várzea* forests, between April and December 2006 in the Secoya community of Siekoya Remolino

Family	Terra firme forest species	Várzea forest species
Didelphidae	<i>Caluromys lanatus</i>	
	<i>Didelphis marsupialis</i>	<i>Didelphis marsupialis</i> ^a
Cervidae	<i>Mazama gouazoupira</i>	<i>Mazama gouazoupira</i>
	<i>Mazama americana</i>	<i>Mazama americana</i>
Tayassuidae	<i>Pecari tajacu</i>	<i>Pecari tajacu</i> ^a
	<i>Tayassu pecari</i> ^a	
Canidae	<i>Atelocynus microtis</i>	<i>Atelocynus microtis</i> ^a
	<i>Speothos venaticus</i>	
Felidae	<i>Herpailurus yagouaroundi</i>	
	<i>Leopardus pardalis</i>	<i>Leopardus pardalis</i>
	<i>Panthera onca</i> ^a	<i>Panthera onca</i> ^a <i>Puma concolor</i> ^a
Mustelidae	<i>Eyra barbara</i>	<i>Eyra barbara</i> ^a
	<i>Lontra longicaudis</i> ^a	
Procyonidae	<i>Nasua nasua</i>	<i>Nasua nasua</i>
	<i>Procyon cancrivorus</i>	
Dasypodidae	<i>Cabassous unicinctus</i>	
	<i>Dasypus novemcinctus</i>	<i>Dasypus novemcinctus</i>
	<i>Priodontes maximus</i> ^a	<i>Priodontes maximus</i> ^a
Megalonychidae		<i>Choloepus didactylus</i> ^a
Myrmecophagidae	<i>Myrmecophaga tridactyla</i> ^a	<i>Myrmecophaga tridactyla</i> <i>Tamandua tetradactyla</i> ^a
		<i>Tapirus terrestris</i> ^a
Aotidae ^b	<i>Aotus vociferans</i> ^a	<i>Aotus vociferans</i> ^a
Atelidae ^b	<i>Alouatta seniculus</i> ^a	<i>Alouatta seniculus</i> ^a
Callitrichidae ^b		<i>Cebuella pygmaea</i> ^a
	<i>Leontocebus nigricollis graellsii</i> ^a	<i>Leontocebus nigricollis graellsii</i> ^a
Cebidae ^b	<i>Cebus yuracus</i>	<i>Cebus yuracus</i>
	<i>Saimiri cassiquiarensis</i> ^a	<i>Saimiri cassiquiarensis</i> ^a
Pitheciidae ^b	<i>Plecturocebus discolor</i> ^a	
		<i>Cheracebus lucifer</i> ^a
	<i>Pithecia milleri</i> ^a	<i>Pithecia milleri</i> ^a
Agoutidae	<i>Agouti paca</i>	<i>Agouti paca</i>
Dasyproctidae	<i>Dasyprocta fuliginosa</i>	<i>Dasyprocta fuliginosa</i>
	<i>Myoprocta acouchi</i>	<i>Myoprocta acouchi</i>
Echimyidae		Echimyidae sp.
Hydrochaeridae		<i>Hydrochaeris hydrochaeris</i> ^a
Sciuridae	<i>Microsciurus flaviventer</i> ^a	<i>Microsciurus flaviventer</i> ^a
	<i>Sciurus igniventris</i>	<i>Sciurus igniventris</i>

Modified from de la Torre et al. (2007)

^aSpecies only recorded in censuses; families marked with the ^bsign are primates)

hunters have to travel several kilometers to find some monkey prey. Few people are willing to travel that far and, if they do so, it is only sporadically. Additionally, the price of bullets has increased in past years; hence, not everyone can afford to hunt with firearms. Last, but not least, many young Secoya have jobs in the nearby towns and cities; therefore, they do not have the time or the interest to carry out hunting expeditions.

13.3 The Future

The profound knowledge about nonhuman primates that the Secoya culture gathered over centuries is in the brink of disappearing. This knowledge only remains in the mind of the old Secoya people, the *ñenk'e*, and needs to be preserved for future generations. Several studies have compiled important pieces of traditional knowledge from the Secoya eldest, contributing to its preservation (Vickers 1989; Cipolletti and Payaguaje 2008, Cabodevilla 1990; Yépez et al. 2010; Cerón et al. 2011). In this analysis of the temporal changes of the Secoya ethnoprimateology, we are presenting information not only from these studies but also from interviews of Secoya leaders (*ñenk'e*) and from our previous work (e.g., de la Torre & Yépez 2007, de la Torre et al. 2009).

If the current trend of reduced hunting is maintained within the Secoya territory in the next decades, it may be possible that primate populations would recover. However, this would only occur if the forest is preserved and the resources that monkeys need are maintained. Since the deforestation rate in the area is considerably high (de la Torre et al. 2009), the education system of the Secoya needs to be strengthened to help reduce this rate. An improved education system should include the rescue and valorization of the traditional Secoya knowledge to increase environmental and cultural awareness, especially in the young. It should also allow the Secoya to design and implement alternative productive and economic strategies that are not based on logging. There have been some attempts in that direction (de la Torre et al. 2007, Yépez et al. 2005, 2010); however, more efforts are certainly needed. We hope our study will motivate other researchers to collaborate with the Secoya to work with them in preserving their deep traditional knowledge about nonhuman primates and ecosystems in Ecuadorian Amazon. Their persistence as a culture and the conservation of nonhuman primates and of the Amazonian forests depend on it. Similar efforts should be carried out for other Amazonian cultures, such as the Wao in Ecuador, who appear to suffer from a similar loss of knowledge across generations (Papworth et al. 2013).

Before foreigners came, there were many monkeys. We knew a lot about them. There were so many monkeys that we used monkey names to name several areas of the vast Secoya territory. Monkeys have provided us with food. I liked to see them jumping from tree to tree; sometimes they went to the ground in the salt leaks and fed on clay. They were fast and agile. Some of them still come to my *tsio*, my Secoya garden, but only the small ones. I wish it were now like in the past, but I am old now and I don't think I will see again the Secoya singing happily with the monkeys (C. Piaguaje, Secoya shaman, pers. comm).

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