

Frank Salomon

**AT THE MOUNTAINS' ALTAR:
ANTHROPOLOGY OF RELIGION IN AN ANDEAN COMMUNITY**

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Chapter I

A Single Nest

(And Some Theories about Cognitive-Evolutionary Foundations of Religiosity)

"Rapaz – it's where the condor put on his scarf." Thus neighboring villagers jest about the high, cold, rugged village, which stands on a triangular ledge at 4,040 m (13,255 feet)¹ over sea level (see Fig. 1.1). Indeed daily at lunch time a condor glided over our lab, close enough to flash its "scarf" of snowy neck feathers. As it sailed out over the abyss of the Checras River canyon, the condor made me remember Wallace Stevens' lines:

The pensive man ...He sees that eagle float
For which the intricate Alps are a single nest.
(Stevens 1954 [1942]:216)

Seen from Rapaz, subsidiary ranges of the Andean cordillera unfold westward as intricate as crumpled paper. Foaming melt-off from the snowcaps rolls down the Checras River, a silver thread at the bottom of a chasm. Two miles vertically down – perhaps fifty miles on the road's zigzagging descent -- the water is still glacier-cold. It flows past bright green asparagus fields, crosses a ruin-strewn coastal desert, and dives down into the Pacific depths.



FIGURE 1.1 HERE Rapaz village seen from Cerro Calvario. Photo: Víctor Falcón Huayta.

This chapter concerns how one population made of the soaring, plunging Andean landscape a “single nest,” and whom they feel themselves to be as its inhabitants. Making a home involves both physical adaptive work, and cultural work to guide and motivate labor.

We emphasize the cultural more than the physical infrastructure. We seek to highlight an Andean view of geographic features as person-like presences, with whom humans reckon through ritual and negotiation. In perceiving the world as full of person-like superhuman agents, Andean people resemble much of humanity. But why should this be so?

In a first round of theorizing, this chapter will take note of recently proliferating theories that answer, “evolution.” In one branch of evolutionary theorizing about religiosity, the disposition to perceive mysterious agents is explained as an almost random side-effect of cognitive faculties that evolved by serving other functions. A rival group of theorists agrees that religiosity has preconditions in brain evolution, but denies its randomness. Rather, they see in it adaptive value: “prosocial” neural dispositions that enhance ability to live in groups. A third tendency suggests that evolutionary selection does indeed underlie religiosity, but the selection involved is not brain evolution. Instead, they suggest, what has been selected is groups themselves. Which groups? Groups that that have invented (consciously or otherwise) a uniquely durable device for establishing loyalty, namely, sacred symbols.

Llacuces, the ‘Children of Lightning’

Historically, Rapaz typifies the high end of an apparently unique Andean adaptive system, famously called “verticality”². This term refers to a politically coordinated society built of

stacked “islands” on the land, so that political societies of varied scale “sampled” the resources of high and low landscape. The articulation of high with low involved military pressure and conquest. Societies from irrigable coastal valleys fought upward to control water sources, and societies native to the inland heights fought downward to acquire cultivable land. Early legend sometimes figures the relationship as multiethnic interdependence, exemplified as the marriage of high with low and of water with earth.

Like most mountain dwellers, Rapacinos (who numbered 711 in the 2007 census) move around the landscape. They live part of the time in their high-lying village, partly because that is where the government provides compulsory school for their children. The nuclear village remains the place for reunions and festivities. But apart from holidays, on any given day under half of the Rapacinos are in town. Many roam up on the high slopes (*puna*) with animals: llamas, alpacas, cows, sheep, and a few horses and donkeys. As one follows them to the highest pastures, grass gives way to cliff-growing lichens that look like gaudy petroglyphs, then to bare rock and snow. Puna life is life at the very end of the biosphere. At night, shivering under millions of stars, one feels the chill of interstellar space disturbingly close.



FIGURE 1.2 HERE On the puna. Corral and herders' house at Pampas, over Rapaz. Photo by Víctor Falcón Huayta.



FIGURE 1.3 HERE puna and cordillera over Rapaz in wet season, with a herders' corral and house in distance. Photo by author.

Yet Rapacinos don't experience the heights as inhospitable. When I asked which they like better, their herding life up on the high pastures (*puna, janka*) or their life as village-based farmers, almost everyone said "I'd rather be on the puna, that's a beautiful life." Tawny grass waving in the wind, brawny bulls and graceful alpacas, meals of sizzling meat, brilliant sunlight and starlit nights, cozy sleep in thatched stone igloos – these are images of well-being, and not at all the freezing privation that lowlanders imagine (see figs. 1.2, 1.3). Using solar electric panels, people on the remote slopes even enjoy media appliances. Animals bred on rough puna grasses are loved and bragged about. From adolescence, people prove their valor by fighting anything that hurts the herds: condors, foxes, and pumas, and also rustlers. They devote offerings and invocations to their mighty neighbors, the living mountains who "own" rain and thereby give or withhold this kind of well-being.

This condor's-eye view of society historically takes a form often called the Huari-Llacuaz model. It is most clearly expressed in 17th century testimonies. One reason for anthropologists to be interested in it is that, unlike so many occidental models, this Andean notion does not posit an antithesis between nature and culture. It divides the world otherwise. Another is that it does not see society as unification (as in "United States"). Rather it imagines society as a field of interaction between antagonistically interdependent poles. In "dual society" (a concept invented to characterize Amazonian and Andean America), difference itself is the source of society.

"The West" met the Huari-Llacuaz formation over 400 years ago. It became prominent in literate discussion not during the Spanish conquest era, 1532-1569, but at a later time when Catholic churchmen realized that a half-century of indoctrination had failed to inculcate

Catholic orthodoxy. Rather, a hybrid and innovative Andean ritualism had taken shape. From about 1608 through the 1670's and again in the 1720's, Spanish clergy invented a kind of missionary ethnography for researching the non-Christian beliefs of Andean "Indians," the better to uproot what clerics (especially but not only Jesuits) saw as Satan's fraud on gullible neophytes. Rapaz forms part of the region where these extirpators of idolatry hit hardest and most repeatedly³. Trial records of "idolaters," together with the unique Quechua book of Huarochiri⁴, vividly show how the ancestors of Rapacinos (and many other highlanders) thought about heights and valleys, herding and farming, mountains and lowlands.

Pierre Duviols, a pathbreaking researcher on colonial Peruvian religion, noticed that in many communities along the western range of the Central-Peruvian Andes, the extirpators heard people talk about the nature of society in manner different from European suppositions (1971).

The Andean model perceived no boundary between nature and culture (or environment and society). Rather, in Andean eyes, nature and culture together were formed upon the opposing poles of montane or celestial altitude, and riverine or oceanic depth. Human society, seen as one aspect of the "vertical" world, lives suspended between the poles, that is, between the ice and rock of the cordillera crest, and the green oases near sea level. Life was, and in some respects still is, a conversation, a fight, a wedding, between contrasting kinds of people: people of the heights called *Llacuaz* (*llakwash* in a modern Quechua transcription), and valley people called *Huari* (*wari*).

In his 1973 article "Huari y Llacuaz" Duviols limelights a 1621 passage from the extirpator Arriaga:

...in a town in the sierra, the Indian should be asked if he is a *llacuaz* or a *huari*, for they call a huari or *llactayoc*⁵ anyone native to the town of his ancestors and who have no recollection of having come from outside. All those whose fathers and ancestors were born elsewhere they call llacuazes, even if they themselves were born in the town. ...

The llacuazes, like persons newly arrived from somewhere else, have fewer *huacas* [shrines, superhuman beings]. Instead, they often fervently worship and venerate their *malquis*, which...are the mummies of their ancestors. They also worship huaris, that is, the founders of the earth or the persons to whom it first belonged and who were its first populators. These [huaris] have many huacas and they tell fables about them...there are generally divisions and enmities between the clans and factions and they inform on each other.⁶

This is a pregnant paragraph. It asks us to imagine a society (of several thousand people) that sees itself as a banding-together of multiple corporate lineages called *ayllus*, something like clans.

Each ayllu thought its founders emerged separately out of the earth at a unique “dawning place” or *pacarina*. Huari ayllus were felt to descend from ancient dwellers in the western valleys. Huari descent was associated with antiquity, with agriculture, with stability, with plant fertility and with wealth. Huaris had many shrines which were themselves parts of the earth: monoliths, cliffs, springs, caves, etc. They were sometimes called *llactayoc*, ‘possessors of the village,’ with implication of possessing its very divinities. Huari groups were often considered to belong ethnically to the now-extinct coastal or Yunka peoples, and as of 1657 one such group was still said to conduct worship in the ancestral coastal tongue (Duviols 1973:182). In “biethnic” villages where Huari and Llacuaz lineages coexisted, Huari sacred beings were often female, embodying the depth and fecundity of the earth.

Llacuaz ayllus by contrast thought themselves descended from the llama-alpaca herders of the high punas. Llacuaces were said to have entered society as invaders, or guests, or sometimes vagrants. The word Llacuaz connoted alien origin and rude customs as well as pastoralism. Lacking local origin shrines, Llacuaces remembered and worshiped their mummified progenitors in faraway places of origin. The protectors of the ancient Llacuaces were the powers of sky and altitude: the storm and the snowcapped peaks called *jirka* in Central Peruvian Quechua (Hijar Soto 1984) or *apu* in the Inka heartlands. Llacuaz ayllus revered “destructive hail, frightening thunder, and gloomy clouds, but also the rain that makes the wild pasture sprout and turn green” (Duviols 1973:171). They called themselves “the children of lightning.” Llacuaz people identified with llamas, guanacos, and deer of the high puna. They propitiated the high lakes out of which these fleet, cold-loving animals mythically emerged – especially the giant highland lake Chinchaycocha or Lake Junín. When the Llacuaz wak’as coexisted with Huaris of seaward-facing valleys, there was a tendency to give Llacuaz male gender valence.

Does the Huari-Llacuaz worldview reflect a historic sequence? The archaeologist Augusto Cardich thinks the people called Llacuaces had in fact arrived as invaders (1985). Their ancestors seem to have originated on the inland high plains of Junín and Pasco Departments, at 12,000-plus feet over sea level, just as their myths affirmed. Duviols thinks it was about 1350 C.E. that Llacuaz forces surged over the mountain crests and spread downward, conquering warmer, more fertile lands, and a newer archaeological inquiry (Chase 2015) suggests even later dates. Their original homeland, the “plain of Junín” was (and still is) a rich land for camelids but a miserable one for agriculture. For that reason, they became aggressive and migratory⁷.

Like armed pastoralists in many parts of the world (inner Eurasia and East Africa especially), Peru’s alpaca and llama drivers proved efficient aggressors. They apparently pushed their way westward and downward into old, settled agricultural areas at lower and warmer altitudes. Recent scholars see fortified remains of the Late Intermediate Period (i.e. immediately pre-Inka times) as reflecting an age of widespread local warfare in which even small settlements had to

defend themselves and their crops against other small polities – circumstances typical of a period without imperial peace.

On the western slope from about 11,000 feet (3500 m.) downward, people during most of the colonial era saw their world as the result of confrontations between these two ancient lifeways. The outcomes varied. In mixed villages Llacuaz lineages – we can almost say clans -- saw themselves as victors but also as parvenus in need of deeper legitimation. Members attended the mummy cults of Huari ancestors, not unlike *nouveaux riches* of our times who try to work their families into the high society descended from “founding fathers.” A situation like this was expressed, in the idiom of myth, by the Quechua narrators whose legacy is the great Manuscript of Huarochirí (Salomon and Urioste 1991).

In other places, stable arrangements of economic exchange established a pattern of Llacuaz dominance in animal economy (wool, meat, yarn, clothing) balanced with Huari dominance in agriculture: corn, squash, greens, and the luscious fruit of the lower valleys. Coca leaf (*Erythroxylon coca*) was the vital vehicle for ritual maintenance of high-low sociability, so arrangements around coca-producing lands in the “middle yunka” or irrigable subtropical altitudes tended to become the hinge issue in Llacuaz-Huari politics. In one valley not so far from Rapaz scuffling about coca lands continued not only throughout Inka times, but on into the first three decades of the Spanish colony.⁸

Llacuaz derives from the word *llakwa*, meaning vicuña (*Lama vicugna*). An eloquent word! Nothing could be more emblematic of high mountain life than this elfin camelid, so skinny, skittish and wild, but at the same time so robust and valuable. The prehispanically-rooted vicuña surround hunt is the very symbol of Llacuaz prowess. With nets and poles, shears and drums, Rapacinos hiked en masse up the freezing ridges to encircle, shear, and then release vicuñas. Vicuña wool is worth more per weight than gold. It occasionally sufficed to pay for major improvements like the community bus. But by 2016 poachers had killed all Rapaz’s vicuñas.

Llakwas in Quechua and ‘*avicuñado*’ in Spanish mean a volatile, unreliable person: “*Llakwas llakwanunmi*” a Rapacino said to me, meaning, ‘The unstable man took off like a vicuña.’ Inhabitants of nearby Junín say *llakwash* to mean “people without manners, people of the puna.”⁹ To Huánuco Quechua speakers, *lagwas* means a person who relishes meat,¹⁰ meat-rich diets being the privilege of herdspeople. In Ancash *llakwash* means the sap of the giant bromeliad *Puya Raimondi*¹¹, a high-altitude plant so memorably strange it has become an emblem of the puna lifeway. In Huarochirí the word denotes llama caravaneers who troop down from the highest pastures to trade their animal wealth (wool, leather, tallow, knitted clothes) for crops. Comic dancers called *llacuacos* in the nearby Chancay watershed prance in woolen rags to represent half-wild, Quechua-monolingual herders from the heights.¹²

Rapaz seems to have stood out as a Llacuz outlier derived from higher-dwelling Llacuz groups around Lake Junín. We can infer this because history has left us an extraordinary source about the ethnic group of which it formed part. In 1614 an unknown parish priest gave the Jesuit extirpator Fabián de Ayala a beautifully composed memo that the priest had written eleven years earlier. Its title is “Errors, Rituals, Superstitions and Ceremonies of the Indians of Chinchaycocha and Others of Peru.” Chinchaycocha, or Junín Lake, was the very sanctuary of Llacuz origins, and it is close to Rapaz – straight up and over the crest of the western cordillera, within a hard day’s walking distance from the village nucleus.

This manuscript emphasizes an isolated, double-peaked snowcap named Raco (*raku* ‘robust, thick’), near Rapaz’s uppermost boundary. From it two brother-deities emerged: Raco, the lord of food according to Chinchaycocha belief, and Yanayacolca, who “went to another province near that one, called Andajes.”¹³ Andajes was the colonial name for the province in which Rapaz lies. So the person-mountain avatar Yanayacolca may be the name of the expansive lineage of which Rapaz formed part. Rapaz ceramic, both archaeological and recent, seems to confirm connections in Cerro de Pasco, the basin of Chinchaycocha or Lake Junín (Falcón Huayta 2007:19, 30-34).

Llacuz is a relative concept. In recent times, Rapacinos maintained ritualized trading partnerships with herders from still farther up in the Junín basin, and these seemed to them Llacuz in relation to Rapaz people. Irene Luya said,

They were animal raisers, you see, because they lived way up on the heights. No kind of agriculture can grow up there. Not potatoes, nothing. So they’d come down here in harvest season and take things back. And up there they used to work toward that [trip], they used to make their pots, they’d make wool capes, they’d make ropes, all that. With that they’d come and perform barter here. That’s how we lived. [They brought] *chalwa* [fish from high lakes], *kushuru* [edible algae], even clay for washing, because they had clay soil. There was no detergent then, we washed laundry with clay. They’d bring meat, all those products from the heights, from animal raising. They weren’t Rapacinos, no, no! They were from other settlements far away! It took them a whole day or two days to arrive here.

Glacial lords: The nature and rules of rainfall-based pasturing

The quest for water is the urgent, worrying concern of agropastoralists in semiarid western Peru, and it is the central theme of their technology as well as their mythology. Water, considered as a superhuman force, is the unifying part of the world. Water circulating up out of the ocean into the celestial river – that is, the Milky Way – yields life-giving but also

destructive rain, which then courses down the mountains and rivers to return to the Pacific. Rain regenerates life by giving grass for herds and irrigation for crops, but it destroys life when it descends in the form of flash floods and avalanches. The Checras Valley is scarred with barren cone-shaped slopes where earthslides have instantly buried whole agropastoral neighborhoods.

The waters of the heights – storms, glaciers, and glacial lakes -- are imagined as harsh and wild, generally with a male valence. Llacuaz people of old saw themselves as children and intimates of these powers. The ultimate “owners” of water are the 6,000-meter monster peaks of the Cordillera Waywash and the Cordillera Blanca, including Yerupajá and Huascarán. But most ritual practice addresses smaller, closer mountains whose bodies govern the local flows of water down to individuals pastures and fields. Mountains have personalities and social relationships, feelings and moods. They are often described as if they were a political community. When addressing the mountain range as a whole one speaks to the “*cabildo* (town council) of hills.” It has an internal hierarchy, which expresses approximately the hydrographic flow chart.

Rapaz’s temple has the mission of propitiating but also making demands of mountains. People and terrain are related through a system of rights and duties more like a constitution than a theology. It is explained in Chapter 2.



FIGURE 1.4 HERE A herder’s house on an *estancia*. Photo: Víctor Falcón Huayta

When a young Rapacino signs up to become a *comunero*, he gains the right to use a *jirka* or *estancia* (usually his parents’) up on the 34,000 hectares of common range.¹⁴ An *estancia* consists of an oval-shaped, thatched house with a stone-walled corral (see fig. 1.4). It is a base

for pasturing on open range. He also acquires a right to pasture a quota of private animals (up to 150 sheep, 20 cattle, 20 alpacas, and five horses, donkeys, or mules).¹⁵ Although the *puna* or dry grassland of the high slopes looks endless, wild and lonely, it is in reality completely measured and socialized; every spot on it has a name as well as use rules, a history of disputes, and specific symbolic associations. The most local capillaries of the mountain-propitiating system are small stone-lined chambers or boxes installed inside high corrals. There herders deposit gifts to a local mountain, including the ear-clippings left from earmarking, to “pay for” the animals’ health.

Each comunero also acquires duties to serve at least one turn as a community herdsman, caring for cows, sheep, and camelids that belongs to the *Empresa Comunal*. These herds live on a reserved portion of the commons, the slopes of the pyramid-shaped black mountain Chururu. Adult Rapacinos are skilled in birthing animals, in shearing and in washing wool. Most resident women and some men can spin and hand-weave. Wives make beautifully knitted or crocheted clothes for their families and increasingly for sale, via the new textile cooperative. A person skilled with animals also knows how to account for the herd. Controlling the increase and commerce of communal herds is one of the main agenda in village assemblies.

Life with animals, as many ethnographers¹⁶ have shown, is a matter of conviviality – conviviality in a Llacuaz-like tradition. Herding ritual has two climaxes, one in “carnival,” that is, the rainy month of February, and another in the dry season, usually July, which is also the mating season. Herdspeople corral their animals for branding (*señalakuy, marcación*), medicine, updating of records, and magical fecundation. Ritual transitorily creates a joint human-animal society, far from the disciplines of village and church. We will revisit animal rituals in Chapter 4.

Motherwoman: The nature and rules of irrigation

In the Checras watershed as in many parts of South America (and some other parts of the world), female sacred beings dwell in spring-fed grottos. Hidden or spontaneously upwelling water tends to have female valence. Some cave-springs are Catholic pilgrimage shrines re-founded around a vision of the Virgin. Less Catholicized spring shrines are homes of old aquatic females today called “sirens” or “mermaids:” seductive spirit-women.

The town at the mouth of the Checras River, Churín, lives by Lima-based tourist traffic to its hot, mineral-rich springs. Mamahuarmi, ‘Motherwoman,’ is the name of the most scenic and beloved spring: a turquoise grotto pool surrounded by greenery and flowerbeds.

Mamahuarmi today looks urbanized and touristic. But an almost forgotten and beautifully written student report brings us close to the older, rural sense of female water. In 1968 Earl Morris, Leslie Brownrigg, Susan Bourque, and Henry Dobyns were working on a doctoral

training project in the Checras canyon (about a thousand meters lower than Rapaz, at the hamlet of Mayobamba). There, they saw Motherwoman, "the water principle," guiding irrigation agriculture:

Before work begins, all pay ritual homage to the water principle. Mama Huarmi, in her home in Poq Mountain. [Its name is an onomatopoeia for burbling water.] Mayobamba's feminine principle of fertility is named "Mother Woman" but she seems more akin to a Teutonic Ondine or a Danish water sprite than to the heavy "earth mother" of early Near Eastern religions.

The Mama Huarmi is invisible, and has no tangible idolic [sic] representation, but she is conceived as being a beautiful, young goddess with long flowing black hair, dressed in the bright colors of mountain finery, yellow, orange, and red, that villagers favour. She lives near the spring Poq where during the rainy season a waterfall miraculously appears spouting out of the earth. She is friendly, playful, bounteous and dependable in her gift of water to the town. Children, who often play in the broad pampa of Nauticocha, the community pasture which lies north of Poq, will sometimes go up to the spring to call to her, and to invent songs for her to hear.

The Mama Huarmi is officially addressed by the community only in the irrigation canal cleaning in the spring. The feline doll and all the workers who clean the ditches present themselves at Poq to explain their task, and to implore that Mama Huarmi will continue to send water rushing down the canals as she has in the past.

Neighboring villagers too have or have had a Mama Huarmi. This deity is specific to the place and brings water and fertility to the land. Canín and Puñún, neighboring villages where soil exhaustion, poor irrigation systems and over-population tax agricultural resources, explain their crisis by saying that people from Jucul have stolen their Mama Huarmi. The accounts differ on the nature of what was stolen. Those of Canin say their Mama Huarmi was sitting above a landmark rock on the trail to Mayobamba, Puc'ratururumi (red¹⁷ bull rock) dressed in red, her hair long, sunning herself, combing her hair. Two men from Jucul saw her, sneaked up behind and spirited her away. She wept despondently for her Canin, and often tried to escape, but her Jucul guards always overtook her on Mayobamba soil. She is now locked in a strong prison.

Those of Puñún describe their Mama Huarmi as a less-than life size doll which was being given an airing by her keeper when people from Jucul stole her. Told of the Puñún interpretation, a mountain Mayobamba villager voiced assurance that Mayobamba's Mama Huarmi is a spirit, an idea only, and has never been represented. The idea of a

Mama Huarmi idol struck her as quaint and backward. A Mama Huarmi is invisible, an idea like that of the Holy Ghost or the auquin [animate mountain being; see. Ch.2].

The Mama Huarmi abstraction reinforces the mythological ethnocentrism of the patron saint complex in each village. A Mama Huarmi is the genius of the town, the personification of its physical resources, its special guardian and benefactor. In like manner, a patron saint is a personification and mystical leader of the people. As each Mama Huarmi has a unique character, so does a patron saint, and this character affects the whole town” (Morris et al. 1968: 249-250).

Rapaz has a spring-fed irrigation system resembling the ones Morris and his fellow students saw. Indeed Rapacinos consider themselves fortunate to have a relatively ample water supply. As in many Andean places, including Cuzco (Sherbondy 1986), water flow and water governance became the matrix of ritual and a model of social organization. Of late, the installation of PVC pipe (which excludes algae and mud) has rendered most of the traditional works and rites obsolete, so the treatment of water ritual in these pages includes a lot of “memory ethnography.”

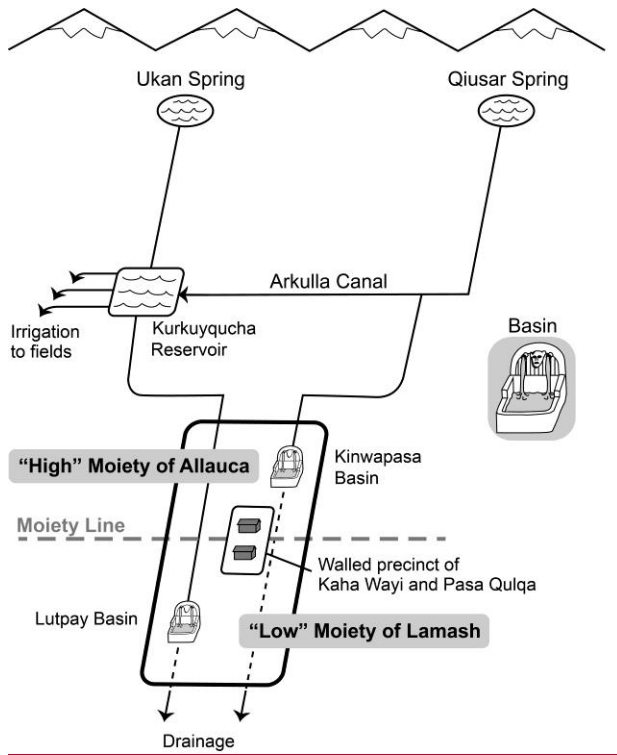


FIGURE 1.5 HERE Main canals of Rapaz according to comunero Juan de Dios Evangelista.

Ukan Spring and Qiusar Spring bubble forth from opposite sides of a dome-shaped hill overlooking Rapaz. Each has been separately channeled, so as to form two separate hydraulic systems serving the two village halves or moieties (see Fig. 1.5). Above the village, an artificial canal and reservoir system connects the two canals, so that flow into the village and down to the fields can be adjusted between them.

Like innumerable Andean societies Rapaz defines itself as the union of two rival halves or moieties, named Allauca and Lamash, or K'ollana and Huaylapamba¹⁸. The halves have separate hydraulic systems of approximately equal length, each with its own canal through the village. Each canal as it passes through its respective half of the village had (and Lamash still has) an elaborate tap and basin or *pileta*. Celebrants welcome their share of water at their respective basins. Like most Andean dual structures, halves are seen as symmetrical in form, complementary in function, and unequal in rank. (Rank refers to ritual precedence, not political superiority.)

Dual organization predating the recent conversion from open canals to pipes was specific to hydraulic matters, not general governance.¹⁹ Ritual rivalry between halves organized the work of canal maintenance. Lamash families and Allauca families formed two teams facing each other in rivalry (*tinkunakuy, gananakuy*). Each paraded in pomp up to its spring. Then each cleaned downward, shoveling algae and mud out of the watercourse, racing to finish first. Along the way they danced *wanka* to the sound of a special flute (*shuqush*). When the two teams met, they fought in token of their rivalry. The half whose water first reached its drinking tap was the winner, and it got to lead in the celebrations.

The first water from each side as brought to Kaha Wayi to be magically invoked, and to be saved for a whole year, as a protective essence. Water was collected from each household and added to share in the blessing. This series of acts was called *yaku sariykuy* 'grasping water,' and it was believed to help the household's water supply suffice for the year.

As one elder lady remembered,

"At 12:00 exactly, the water was supposed to arrive at the Rapaz water fountain. There we grabbed our water. At midnight it arrived, down the cleaned canals. And the *espensera* (female chief of community), all beautifully dressed in regalia, with her mantle and that big *ponchera* bowl, with that bowl she'd receive the first water there. We carried that water and took it to Kaha Wayi and in Kaha Wayi we performed a *mesa* (offering) for it." The *kamatsikuq* (male chief of community) would award the winning moiety a sheep."

As water flows from its path through the village down toward the belt of *chacras* or planted fields, it comes under the routine governance of the Community's Water Judge to make sure irrigation turns are distributed as customary law requires²⁰. Rapaz's small-scale irrigated cultivation lies toward the bottom of the village's space and along the Checra riverbank. Some of the water is used to maintain six irrigated paddocks or feedlots on the riverbank.

Chacras: The nature and rules of high altitude farming

Herding is Rapaz's mainstay, and agriculture supports herding. Only about 10% to 20% of Rapaz is cultivable, and even this consists of tiny fields wedged into steep mountainsides. In Rapaz and neighboring villages, swaths of steep mountainside were terraced in prehispanic antiquity; some of the terraces still in use are prehispanic. Everybody demands an allotment. But in the 2010s some villagers practice less agriculture, leaving some allotments unproductive.

Products include potatoes, of course – this is the very land where potatoes were first domesticated -- and potatoes' relatives: the delicious sweet-smoky *oca* (*Oxalis tuberosum*) and the earthy-crisp *ullucu* (*Ullucus tuberosus*). The protein-rich grain quinoa (*Chenopodium quinoa*) used to be important, but most families have abandoned home-grown quinoa in favor of more prestigious noodles and white rice. For the rest, the green belt just below the village (see fig. 1.6) produces broadbeans, barley, and some onions or carrots. Rapaz produces too little of any one crop to support commercial agriculture. Farming serves rather to hold down food expenses and thereby subsidize herding. Small as it is, farming has a most elaborate sacred mystique. It will play a great part in understanding Kaha Wayi's regimen in Chapter 3.

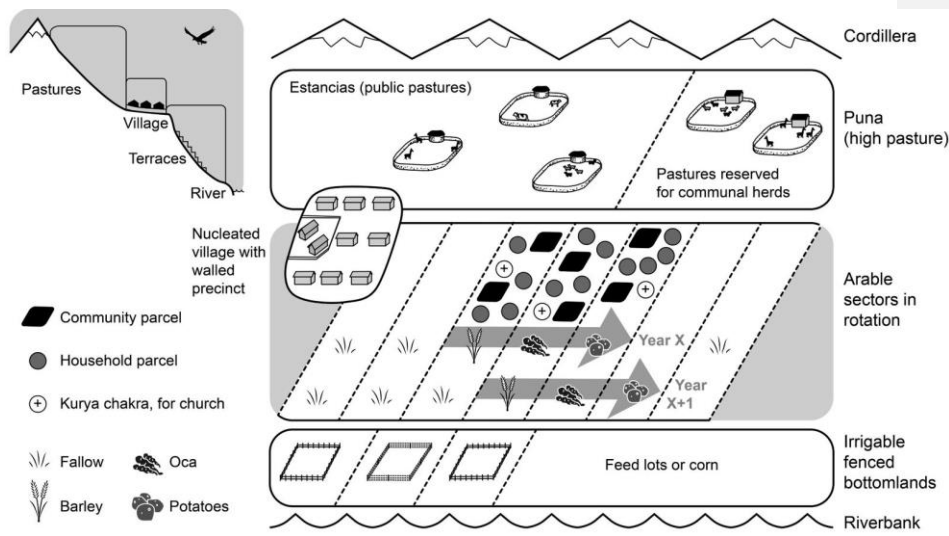


FIGURE 1.6 HERE System of Rapaz communal land use

Comuneros have land use rights only at the community's pleasure. The *balternos* (staffholding officers) enforce strict sectorial following, sometimes called *raymi* in Andean literature. This control is necessary because rainfall agriculture (*saki chakra*) at high altitude only works when it respects environmental constraints: thin, easily eroded soil, slow biomass accumulation, and biochemical depletion. Arable land is divided into seven named cultivation zones (*anqi*), of which only three are in use at any given time. (After agrarian reform the system became eight and three.)

Each zone successively comes into use for a three-year term (*benio* or *ratay*²¹). Each is opened as a potato zone, then continues during the following year as a zone for oca, finishes as a barley zone, and finally is declared closed. At any given time, therefore, Rapaz operates a zone in each

of the three crop groups, and four (later five) resting zones (*moya*). When each comunero has his full complement of fields, about 300 plots are in use in each of the three active zones. Obviously this creates enough complexity to make constant patrolling for correct use a big task, and it is the officers of Kaha Wayi who perform it.



FIGURE I.7 HERE Path from Rapaz village down to terraces presently used as comuneros' parcels in Sector Pueblo



FIGURE 1.8 HERE Harvesting potatoes in Sector Pueblo

Chakras or planted plots (see fig. 1.7) live at the mercy of fluky microclimatic and epidemic effects. To spread risk, villagers receive their land in the form of multiple small parcels within each zone (see fig. 1.8). In a given year each household is working two or three small potato plots, and similar numbers of oca and barley plots. Semiretired members receive one plot less in each sector. With herding work taken into account, the amount of hiking involved is huge – yet agronomists have never persuaded people to give up scattered land use. Caring for fields involves frequent ritual work, such as rites to trap evil winds, forestall killing frosts, and chase plant pests, and these favors too depend on the good will of mountains.

A traditional inner cabinet rules herding, farming, and ritual

Rapaz has the usual institutions of a state-recognized town, including small municipality, a justice of the peace, and a *Comunidad Campesina* or legally recognized peasant corporation of the commons. The *Comunidad Campesina* San Cristóbal de Rapaz is what we translate as the Community. It has its buildings and offices, ledgers, minutes, and computer, where elected members do the paperwork of taxes, voting rolls, and collaboration with NGO's as well as managing finance – all on normal modern lines, in a big new building with three floors.

But what gives the Community gravity and character is an old, more uniquely Andean authority that dwells within this structure. This is the corps of traditional authorities often called *varayos* in Peruvian literature (from *varayuq*, 'possessor of a staff of office') or "civil-religious hierarchy". These men, and, increasingly, women, form an inner cabinet at the core of ritual and customary agropastoral life. Male members wear the long brown poncho, flowered hat, and decorated coca bag which, as formal regalia, make visible the august force of "custom." (In Andean usage, *costumbre* means unwritten law, not optional traditional practice.) Balternos hold sacred authority as well as delegated managerial power.

Their authority is much older than the jural Community (recognized in 1939). The state-recognized Community has not replaced the *varayuq* corps but rather created a utilitarian outer shell around it. Translating "custom" into bureaucratic terms, the Community calls its inner cabinet the *Comité Agropastoral* ('Agropastoral Committee').

The Community's vice-president heads the inner cabinet according to a longstanding Andean division of labor. While the President represents the Community in all its exterior relations, the "vice" rules its internal life, and he is the one responsible for correct, fruitful relations with the owners of rain. The vice-president inherits the early colonial (or perhaps Inka) title of *kamatsikuq* or *kamasikuq*, 'the one who creates order.'²² His insignia is a silver-clad wooden staff adorned with carnations (see Fig. 1.9). He is elected in odd-numbered years.



FIGURE 1.9 HERE Procession of balternos, members of an inner traditional government today called the Agropastoral Committee

The remaining members of the inner cabinet are the six *balternos* ('subalterns'), elected yearly.²³ The *balternos* perform the public parts of their jobs at assemblies of the community and do their paperwork at the state-recognized community offices.²⁴ They also gather by night in Kaha Wayi for more private ritual-cum-administrative meetings. This fire-lit, coca-taking meeting is called *rimanakuy* 'the conversation.' In it a ritualist leads devotions to the mountains in the form of long invocation chants accompanied by drinks and massive amounts of coca leaf both as stimulant and as offering (See Ch.2).

Confidentiality is an important attribute of the *rimanakuy*. It is remembered that during the long era when authorities were litigating against latifundists and then in the early 1960s they secretly planned the invasion of Hacienda Algolán in Kaha Wayi. As a past ritualist said, "no gossip could leak out of there." The same man recalled that as a child he asked, "Why does my dad visit Kaha Wayi?" and was told "It's the house of the Inkas. People talk there so nobody will hear."

Communal endowments and their rites

From panoramic overlooks, older Rapacinos can point out along the sculptured mountainside a few terraces much larger than the rest. These were until the 1980s *kumun chakra*, fields reserved by the Community as its endowment. There were at least two large common fields in each rotation, up to about 120m on each side. The work and festivities that took place when comuneros convened to plant, cultivate and store common harvests underpinned Kaha Wayi and its storehouse Pasa Qulqa.

Common-field tenure had ended before I reached Rapaz.²⁵ But other ethnographers observed the mountain-oriented festivities of communal fields in nearby villages. Medina Susano (1989:55), saw women at a corn harvest in the middle Checras

...gather at the center of the field, lay out blankets on the ground to throw the seed [potatoes] down, and begin to drink liquor and chicha. They conduct divinations by coca, the put flowers in their hats, and finally they sing *yaraví* songs to their mountain protectors... Men sit around the edges.

Earl Morris also saw corn planting festivities (1968:119-122) where women brought and planted garlanded staffs of authority capped with bird images (which are relevant to the Raywan or Food Divinity complex described in Chapters 2 and 3).

The men and women adorn one another with flowers (*humanripa*, carnations, and chamomile) and the women paint the man's faces white, red, blue, and or green. Some families also paste coca leaves on men's and women's foreheads and cheeks. ...the staves (*varas*) function as a kind of digging stick to prepare the actual holes into which the seed is placed after the ground is prepared by the men's garlanded hoes, shovels, and picks.

In the upland or pasturing tier, on the other hand, the common sector has expanded. Due to the reconquest of lands formerly claimed by large estates and corporations as mentioned. Land reform reopened a great swath of high puna to Community animals. So it is not surprising that the ritual celebration of animals and their deity-resembling prototypes is an important gathering on the llacuaz side of culture. We will encounter the animal powers and their songs in Chapter 4.

Gods in mountains, gods everywhere, gods in the brain: Is religiosity an inborn cognitive bias?

At Kaha Wayi, in fields, and on the pastures the mountain beings are invoked in roster by their names: Yara Wayna, Qumpir Wayna, Chuqichuqu, Chururu, San Antonio and San Camilo. Nearby Qisunki, Saqsar Wanka, and Pichilay also receive Rapaz's homage. All these are

considered males. Lakes, which likewise receive ritual homage, are sometimes considered female: Cochaquillo, Chaupi Cocha, Churamachay, Chalcó, Anqarayuy, Suerococha Grande and Suerococha Chico, Huytuqucha, Hanka Kuta, Qinwayuy, Wasaqucha, Morococha, Lutacocha, Hawi, Brava Machay, Taho Verde, Uchkumachay, Chiuwriq, and Llaqucha. Nearby Punrún Lake, though belonging to another community, also receive's Rapaz' cultic support.

All these beings count as individuals in society and hierarchy. They are referred to with the Quechua third-person pronouns proper to persons – “he/she,” not “it.”

Mountains and lakes don't seem to resemble people. Yet in certain contexts Rapacinos treat them as being persons – persons of a special kind, who have powers that humans lack, and who therefore deserve special propitiation. The traditional structure of authority requires everyone to interact with them in ways which are strictly programmed and different from ordinary communications – in other words, by ritual.

One currently powerful area of theorizing about religion is cognitive and/or evolutionary theory of religiosity. Its adherents would see Rapaz as nothing special. Rather than becoming beguiled with the subtleties of Andean thinking and ritual, they would have us note that the mountain cult is an average example of an allegedly pan-human tendency: the tendency to see nonhuman but humanlike personal agents (“gods”) behind the impersonal events of life.

Apparently, say some biologists, evolution instilled in humans a disposition to take the evidence of the senses as *incomplete*. Our evolutionary ancestors found advantage in supposing any sound in the grass might indicate animals, or people out of view, or something unfamiliar. They were disposed to receive sense data as signs with multiple possible referents. It is our specialization to live in a world taken as a world of such signs, and to elaborate interpretive signs on signs until we construct in our heads – or better put, among our heads – parallel universes. The shared cognized universe is made of representations that organize inherently ambiguous phenomena into coherent systems.

Cognitive theories of religion, then, have in common the notion that religiosity is a cultural receptacle in which groups hold, share and elaborate their sense of *something more*. Perception doesn't yield unambiguous results. The sensation that there's *something more* is an unsleeping goad to consciousness. It stimulates curiosity, anxiety, and reasoning. Saqsar Wayna is a mountain, and yet... that leaves so much open.

One version of such theory holds that religion elaborates the feeling – perhaps everyone has it intuitively – that when a raincloud rains or a mountain trembles, it does so because somebody or something is *making* it rain.

It's easy to see that the old Andean habit of thought extends society as a web of personal causation outward to include all parts of the world. But it is hard to see why people are so inclined to extend it indiscriminately. Why is impersonal (scientific) causation a hard idea to have, while anthropomorphic causation is an easy one? What is stopping people from simply saying that clouds are rain, instead of introducing an imponderable third party as the author of rain? Why do most societies most of the time systematically steer us into this cognitive detour -- and then build up domineering institutions, like Kaha Wayi, that reinforce it?

Could it be that some property of the human cognitive system constrains us to look for humanlike but sensorially elusive agents? Might religious commonalities among far-flung cultures reflect a common inborn constraint that makes religious ideas easy to generate (Lawson and McCauley 1990)? Psychological explanations of religiosity and evolutionary theories about why they exist became hot foci of research in the last two decades. The arguments summarized below are offered by their authors with a profusion of mostly lab-based experience, but some have gathered ethnographic evidence purporting to show how built-in human cognitive dispositions shape and align the creative power of culture.

Starting in 1980 Stewart Guthrie identified the constraint as a human tendency to see "faces in the clouds" (1993). Universally, humans interpret ambiguous phenomena anthropomorphically. Caught in a terrifying thunderstorm, we have no intuitive understanding of why atmospheric moisture causes thunder and lightning, or why the storm is endangering us (and not somebody else). But we do have an irresistible intuition: being caught in a storm feels a lot like being the brunt of somebody's rage. And we can easily agree to talk about the storm as that angry "somebody" – Zeus, or Huracán of the Aztecs, or in ancient Peru the lightning-hurling mountain Pariacaca.

Guthrie thinks people easily accept such intuitions as valid simply because anthropomorphism poses a "Pascal's wager:" If a person-like power is endangering us, it would be foolish not to get on his right side by gifts and deference. And if not, little is lost; after all, being wrong about storm-persons needn't stop us from building a strong roof. So for Guthrie, religiosity is a pragmatic default.

Starting from this simple (perhaps overly simple) insight Guthrie became an early anthropological contributor to Cognitive Science of Religion ("CSR"), a movement connecting psychology's cognitive research to cultural phenomena. He began at a favorable time, because experimental neurologists and psychologists were then starting to build a powerful new model of cognition. Instead of seeing the mind-in-brain as a single vast all-purpose computing engine, they came to see it as a cluster of different, inborn functional systems ("faculties," or "mental organs" in older language), each pre-evolved to neurally represent different domains of experience.

In the 1990s the idea of mental “faculties” was reborn in the form of “modular” theories about brain adaptation (Tooby and Cosmides 1992). Multiple, separately evolved neural “organs” entered broad discussion through an unforgettable simile: “The brain is like a Swiss Army Knife.” From handling objects infants develop an “intuitive physics” even if taught none. They register animals as if developing a rough-and-ready zoology. They grasp quantity without prompting. They have a capacity for organizing speech rules even before they begin to master any particular language. They have an untaught “other minds” faculty for estimating dispositions of nearby beings. And these developments emerge in similar ways and similar sequences among all healthy infants, regardless of culture. Because they are working not blindly but with pre-installed principles, young humans can swiftly acquire and organize vast amounts of knowledge.

But are these principles just temporary learning props? For cognitive-minded anthropologists like Pascal Boyer (2001), such “modular” parts of mind do not cease to underlie thought as the adult mind emerges. Rather they dictate our feeling that experience is full of radically different sorts of “things” – what cognitive science calls “ontological domains” (person, animal, plant, artifact, inanimate object). The sorting of experience into domains that are processed differently makes ideas easy or hard to have, easy or hard to remember, and easy or hard to share. So cultures do not operate on a blank human slate. Rather they mold human invention onto a bumpy underlying terrain of mental predispositions.

And where does religion fit? In Boyer’s view, “Religion is based on cognitive processes in which the boundaries between these ontological domains are violated,” or to put it more positively, when multiple mental “modules” simultaneously process a phenomenon but in different ways. If a mountain is apprehended by “intuitive physics” as an inanimate object yet *also* is apprehended by the interpersonal faculty as an interacting being (by getting “angry” and rumbling, by endangering life while also giving resources), then the impulse to understand it as both object and person simultaneously is the mental process Boyer sees at the root of religiosity. Religious experience is “a violator of ontological domains” (Jensen 2009:129).

That does not mean every odd mental twitch is a religious idea. Religious notions are usually representations similar to ordinary cognition, but with some twist of strangeness that makes them “minimally counterintuitive.” An ancestor mummy is a human woman – except that she is immortal. A mountain is a familiar type of earthly matter – except that it (he?) is moody and violent. This category of *partly* abnormal perception is crucial. Routine cognitive moments when things *fully* match their type are forgotten because they bring no new information. At the other end of the spectrum, extreme counterintuitive perceptions are simply discarded as mistakes. But *minimally* counterintuitive cases are memorable and interesting. They form a captivating intermediate zone. To call a mountain a god, a lord (*apu*), etc., is to manifest “a probable but by

no means inevitable by-product of the normal operation of human cognition” (Boyer cited in Jensen 2009: 130,152).

This variety of cognitivism does not posit any inborn organ or module for religiosity. Nor is it party to the chase for a “God gene.” Boyer says that religion is, rather, a “by-product” of routine cognition. Yet he recognizes such fluky cognitions as extremely viable products of the mind. Mental representations which span and merge models from two parts of the mind have impactful *specialness*. Like a joke or a catchy tune, they “catch” awareness by making an unexpected yet compelling connection. Since this disposition results from pan-human neural traits, “minimally counterintuitive ideas” (MCI’s) are both recurrent and contagious. And if such an idea as the mountain-person is easily shared, it can easily become a vehicle for social practice (Boyer and Bergstrom 2008:122-124) – eventually, for institutions like Kaha Wayi.

Gods everywhere, for adaptive evolutionary reasons: Religiosity as authenticator of “prosocial” commitments

How could such a small fact as minimally counterintuitive perception come to be a core process of social organization? How could a mere subjective anomaly generate such intense loyalty that people will kill and die upholding it?

One starting point is to pick up on Gould and Lewontin’s famous (1979) “spandrel” analogy in evolutionary theory. In the original architectural sense of the term, a spandrel is simply the triangular space that emerges between two diverging arches. Spandrels began as by-products of structure, not design elements. But in the gothic style spandrels became functional spaces for adornment, and eventually, decorated spandrels became indispensable parts of the design ensemble. Likewise, many biological traits, having emerged as random consequences of adaptive process, turn out *ex post* to provide selective advantage in some situations. Such a trait is not “adapted,” but in the event it turns out “adaptive.”

Some evolutionary cognitive theories put religiosity into that category. Whether or not it originated as a random side-effect of modular thinking, MCI-thinking turned out to have selective advantages because its attention-grabbing character makes it very communicable, and eventually “prosocial.” (By “prosocial,” theorists mean useful in fostering solidarity and cooperation.) Theorists heading in this direction think a disposition toward ritualism and the other traits of religiosity makes humans more able to live in strong groups.

Recently Léon Turner judged such MCI-based analysis the dominant idea among evolutionary cognitive researchers on religion (2014:6). But merely invoking the term “prosocial” can hardly be the end of the argument. Since we always find people in social groups in the first place, it is too easy to simply label anything human as a function of society.

Obviously not every MCI has religious potential. Most are memorable but trivial: we won't forget a truck shaped like a hot dog, but we won't feel reverent toward it either. Common sense suggests that a domain-violating idea has religious potential only if it is powerfully suggestive of something strongly felt or preoccupying. Unlike the Oscar Mayer hot dog truck, the human-like mountain resonates with powerful experiences of vital importance. Saqsar Wayna seems a solemn presence because it-or-he embodies our precarious life situation, our love and hate of our place on earth, and our deep, costly local allegiances.

Scott Atran, an anthropologist who does fieldwork among people with extreme belief commitments, goes beyond such common sense. He theorizes in cognitive evolutionary terms routes by which mere MCIs, which after all begin as mere glitches in individuals' "modular" functioning, can become the nuclei of powerfully adaptive, prosocial complexes called religions (Atran and Henrich 2010). Atran's work is a synthesis that unites several explanatory components. It fuses the theory of accidental, non-adaptive MCI perception with attempts to theorize religion as a set of dispositions adaptively selected for their value in promoting social commitment.

Those familiar with biological evolutionary theory will notice that this idea is relatively vague on the important matter of "level of selection:" on what does selection operate? On individuals? On populations? While Atran apparently leaves room to consider religiosity as a factor affecting individual reproductive success, his synthesis partakes of the recent trend toward multilevel models of natural selection by admitting the "prosocial" as a cause of group selection.

Minimally counterintuitive entities function well – crucially, Atran thinks – as bits of received culture that betoken common identity. Peculiar and memorable as they are, they function as unlosable I.D. cards. Simply sharing them with others who recognize them opens space for social trust. When a Rapacino speaks of Mount Saqsar Wayna as his irascible neighbor, his interlocutor supposes he belongs on Rapaz's land and understands it, even if one speaker does not know the other.

Here is a Rapaz example:

One foggy morning in December 2005, Cecilio Encarnación said, "Tomorrow I'm going up the mountain to kill those compadres." Compadres means 'co-godparents' or close friends.

"What compadres?" I asked.

“The foxes that kill lambs and baby llamas.” Cecilio calls the foxes *compadres* because as wild creatures they are the mountain’s ritual kin.

“But how can you aim your gun with the fog covering everything?” I asked.

He smiled. “There’s a solution for that. You need to round up some earthworms, about half a kilo. Also lime, or *ichku* as we say, another half kilo. And you need some glowing embers, *shanla*. You set all those things together and put something on top” (meaning, you say an invocation over them). “Everything will be left burned up. After that there’ll be beautiful spring weather for a day or two.”

“But,” I said, “what do the worms have to do with it?”

“The mountain mourns the death of his children the worms. He resents it, so he withdraws his gift, the raincloud. But since they are very tiny children, he only withdraws it for a short time.”

When a Rapacino talks in this vein to his neighbors, he implies that both know what sort of person the mountain is: jealous of his “children” (i.e. wild animals). The exchange makes both feel like fellow-insiders. They share Llacuaz know-how about how to influence mountains. Such feelings increase the likelihood that the two will trust and help each other. Their mutuality gives a selective advantage to them, and to their group, in winning competition among land users (villages, estates). Conflict rewards groups that are rich in such “prosocial” cultural practices.

But, as anthropologists have long recognized, talk is cheap. Using such low-cost cultural tokens as conversation about MCI’s as keys to solidarity is a weak adaptive move, because it is open to deceit. When the tokens are cheap, consisting of words or simple gestures, or even an easy ritual like burning worms, they are easy to fake. A man who speaks knowingly of the mountain might not really intend to come through on the help that one Rapaz comunero owes another. We are still far short of explaining the social intensity of religion.

Atran (following the prescient Melanesianist Roy Rappaport; 1999) thinks this is the reason norms involving nonhuman actors like Saqsar Wayna or God demand costly “hard-to-fake” signs of commitment. The person a Rapacino can trust as a more-than-opportunistic user of Saqsar Wayna’s land is not the one who merely bandies local words. He is the one who stays up all night fasting and freezing at the ritual altar, the one who donates animals to rituals, the one who has taken the trouble to learn long invocations. For similar reasons, many committed members of churches despise “God talk” but respect consistent ritual practice, however plodding.

Sacred cultures therefore tend to ratchet ritual demands upward. They select or invent paradoxical ideas, not easy ones. They elaborate them challengingly, to inculcate strange, hard-to-credit definitions of reality. As one of its minimum demands Christianity long ago demanded interaction with a wafer that is at the same time sacred human/divine flesh. Kaha Wayi demands affirmation of sparkling embers that are the speech of a mountain. Innumerable societies require “costly communications” of loyalty such as self-flagellation, cutting off bits of the body, making exhausting pilgrimages, abstaining from sex, embracing poverty, giving expensive donations and other seemingly irrational mortifications. Kaha Wayi demands of its adepts intervals of celibacy, abstention from salt and tasty food, and austere seclusion in ritual. In some sacred cultures such as Mahayana Buddhism, ascetic Hinduism, or monastic Catholicism, the highest degree of solidarity with the religious community is expressed by wholesale sacrifice of normal social options.

This theory also claims to explain the characteristic intensity of religious communication. Gatherings in which people intensify their allegiances by undergoing severe bodily disciplines together, as the herdsmen of Rapaz do in their cattle-honoring all-nighter (Chapter 4), are another near-universal. Here too it seems selection has encouraged societies to recruit inborn neurological dispositions. Rituals everywhere latch onto a psychobiological, kinetic phenomenon: when people dance together, or sing together, or recite together, or mass their bodies, or do many other synchronized activities, they feel closer. They become excited, fascinated, and desirous of unity. Rhythm creates a compelling sense of shared selfhood and even of ecstatic merging.

But this argument cannot pretend to apply everywhere. Solidarity-generating devices that don't depend on the submerging of self-interest or on renouncing lucid deliberation are also extremely common. Rules for ritual may be very mental, even cerebral, as in the strict unison of litany or in studious text-based prayer, in legal-theological disputation, and in preaching. Ritual may be tedious or obscure. “Faith in otherwise inscrutable content is deepened and validated by communion” (Atran and Henrich 2010:6), even when communion amounts to self-denying discipline. In many religious cultures, competence requires time-consuming study of laws, special language, action routines and authoritative texts – another way to raise the price of credible participation. Kaha Wayi too demands quite a lot of unexciting know-how.

Ritual practices, evolutionary-cognitive thinkers hold, function to forge strong feelings of “we.” They commit members to an imagined, overarching, permanent virtual entity such as “Rapaz Community,” “the Jewish People,” “the *Ummah* of Islam,” “the Elect of God,” or “the Bear Clan.” (In chapter 5, we will encounter a related notion under the term of “the transcendent social.”) Commitments to the collective virtual entity are intensely prosocial, in both positive and negative ways. They increase members' willingness to trust and help each other, even if the members are not acquainted or related.

The negative counterpart is that the same religious process which makes people experience themselves as parts of an imagined, transcendent, brotherly whole, also heightens the distinction between “us” and “them.” If a ritually reinforced “we” feel our vital interests threatened, nothing works better than the combination of induced social intensity with rigid doctrinal framing to generate extreme behavior. It’s not accidental that Atran’s field studies include many interviews with religiously motivated terrorists.

Reductionism and the retired engineer’s parable

Cognitive and evolutionary theorists of religiosity are proud “reductionists.” That is, their theories set about to “reduce” religiosity by showing that it amounts to a particular manifestation of more general, basic and simpler human traits and processes. Most of them reduce religiosity to a specific combination of human neurological predispositions which, under evolutionary pressure of selection favoring the “prosocial,” yields the cluster of ideas and behaviors called religion.

In natural science, reduction is the normal strategy for extracting general laws from the infinity of phenomena. Most anthropologists on “the science end” of our un-consensual discipline favor one or another reductionist way of explaining cultural facts, because that strategy puts study of sociocultural facts on the same footing as study of things to which science does not attribute mind or culture – things like genomes or climates. Reductionism is science’s path toward what Edward O. Wilson calls consilience, meaning convergence among systems of knowledge. “Social scientists proper” (e.g. methodologically strict sociologists or macroeconomists) also propose characteristic reductions, although the lawfulness they seek concerns properties of society as such and not properties of the mind. Other reductionisms saturate such theoretical traditions as Marxism and structuralism, not all of them discussed in this book.

By contrast many social and cultural anthropologists, and most specialists in Religious Studies, dislike the evolutionary-cognitive approach to religion. One major objection, now largely outdated but still afloat, has been the charge of “methodological individualism.” The simplest possible methodological individualism was Margaret Thatcher’s, when she said in 1987 that “There is no such thing as society.” For her, a society is simply the additive total of individuals and their actions – not an overall entity with properties of its own. She would have us take no account of the society’s scale or mode of organization as causal forces in their own right. Guthrie’s “faces in clouds” explanation as initially proposed similarly tended to jump directly from properties of individual minds to vast collective facts, without taking much account of the variant social setups within which minimally counterintuitive ideas move. Critics object: surely MCI effects must vary depending on differing social circumstances, for example in a hunter-

gatherer band or in a postindustrial state. Otherwise we have little hope explaining why religions are not all the same!

Another more fundamental objection voiced among cultural anthropologists is that the evolutionary-cognitive tendency drives us away from a core value of ethnography, “the native’s point of view.” The cognitive framework that people like Atran or Boyer start out with is presented as cosmopolitan scientific knowledge, exterior to religiosity. Its premises include the idea that the local religious insider (or anyone) is governed by biases which a certain kind of outsider (the scientist) can recognize. So insider statements hardly count as knowledge at all. They are interesting as examples of evolved bias and group selection, but not as mental-cultural constructions in their own right. Why, then, study details of Rapaz mountain cult – or any religion at all? More traditional ethnographers think that purely evolutionary-cognitive arguments throw the baby out with the bath.

Many people sympathetic to Religious Studies (Comparative Religion, History of Religions etc.) object more broadly to *any* way of reducing religion to non-religious causes, not just the psychological one. In their eyes social science has been influenced ever since its origins in Renaissance humanism and the Enlightenment by antireligious doctrines. Most scientific explanations, they allege, are set up against the possibility that religion might be an important phenomenon in its own right. In repudiating revelation as a source of truth, social science’s founders illogically closed the door on the possibility that religion might matter in its own right for non-supernatural reasons. The venture of explaining social facts through reduction to underlying nonreligious factors (e.g. cognition geography, class structure, race, depth psychology) marginalizes religiosity as a curious secondary oddity. Such critics think social science explains religiosity away (as false consciousness, neurosis, or cognitive bias), rather than explaining what it is. For thinkers committed to autonomous religiosity, *any* reductionistic approach tosses the baby out with the bathwater. Mircea Eliade, a South Asianist and still-popular inventor of “*homo religiosus*” (man as bearer of an irreducibly religious inclination), warned that reductionisms eliminate at the start any chance of taking seriously the subject we set out to understand.

The unfortunate thing is that such critiques are usually offered in a rhetoric of resentment. Antireductionism oddly unites extremes: on the one hand it pleases those who are most deferential to religion (theologians, Eliade’s descendants, Jungians, humanistic historians, and some political or philosophical conservatives). On the other hand, anti-reductionism is also congenial to those “cultural constructionists” generally on the “cultural left.” Strong cultural constructionism perceives culture as the activity by which societies become sovereign creators of their own “worlds” (see Chs. 4, 6). Suggestions that this work is constrained by inborn, infra-cultural factors are not welcome. It’s a safe bet that some reviewer from one tendency or the other will spank this book for even admitting cognitive evolutionism to the discussion.

In this observer's judgment, antireductionism has popularized a misunderstanding about how anthropology connects to natural science. The suggestion that reductionism is a Bad Thing derives from unawareness that scientific method works in two directions, not just in the "downward" drive called reductionism. Science shows how complexity emerges from simplicity, as well as how simplicity underlies complexity. In other words, the scientific world-view entertains emergence in two-way relationship with reduction. Emergence means the way interaction of smaller, simpler parts produces new levels of complexity, or new types of patterning not visible at the underlying level. It is legitimate to reduce atoms' properties to particle physics, but that still leaves the scientist to explain behaviors of bonding atoms that are not like those of subatomic phenomena. That is why particle discoveries do not replace the science of chemistry. New complexities emerge at the chemical level, and again at the biochemical level called "life." Why not at the level called culture?

"Emergence," unlike "reduction" is a good-vibe word. But being for emergence and against reduction makes exactly as much sense as being for multiplication and against division.

Once a retired audio engineer enrolled in my Anthropology of Religion course. He gave us a parable about reduction and emergence: "Here are two people who work with music," he said. "One is an audio engineer and the other is a musicologist.

"The engineer says: 'I never take music courses, because I already have a sufficient explanation for my purposes: Music is a class of sounds. Sounds are a class of waves. We can reduce any wave to simple, general physical properties using a model called wave mechanics. I don't need a special theory of music. I can say quite a bit about music simply as patterned combinations of waves. And someday neurologists will explain how these patterns work in the brain too.'

"The musicologist says, 'Thanks for inventing headphones. But what you're doing doesn't say anything about music *as music*. Surely laws of wave physics do constrain music-making, and surely waves' correlates in the brain must have something to do with the construction of musical rules. But when sounds are organized culturally, the resulting patterns aren't prefigured in a way wave physics or neurology predicts, only in one that they permit. What accounts for a given musical culture's properties as a self-contained musical domain? What I want to do is interpret the qualities of music on the level of music.'"

This parable resembles a classic discussion in the study of language, long since widened to anthropology as well. Do we want to be like "pure" linguists and psycholinguists, who reduce particular tongues and discourses to underlying laws of language as such? Or do we want to be like philologists and literary scholars, who acknowledge the achievements of linguistics yet nonetheless want to unfold the properties of particular tongues and discourses, each on its own

plane? Anthropology convinces most when it partakes of the generalizing, explanatory power of reduction and at the same time of the particularizing, enriching power of interpretation. For anthropologists, both options are open, necessary, and hard to combine.

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¹ Instituto Geográfico Nacional [del Perú] 2000: mapa 1549 (22-j).

² So named by the ethnohistorian John V. Murra (1972). Murra's model, based on 16th century evidence, acquired greater ethnographic nuance in modern field studies such as Mayer (2002 [1985]).

³ The foundational studies of extirpation are those of Pierre Duviols: his monograph on 'The Struggle Against Andean Religions' (1971), and his transcriptions of idolatry trials (2003). They concentrate on the colonial Province of Cajatambo, which includes Rapaz. Meritorious studies of extirpation are many. Some English examples include Gose (2008) and Mills (1997). Spanish examples include Gareis (1989), Larco (2008), and Acosta (1987).

⁴ Salomon and Urioste (1991) offer an English translation. A fuller study apparatus is available in Taylor's Spanish version (1999).

⁵ *Llactayoc* means 'possessor of community.' 'Community' is a gloss for the Quechua word that means (as Gerald Taylor clarified) three things taken together: land, a human group, and its *wak'as* or shrines.

⁶ Arriaga 1968 [1621]: 116.

⁷ Augusto Cardich has propounded climate change as the reason frustrated cultivators of the Pasco-Junín high plateau became aggressive in westward and downward migration (Cardich 1985).

⁸ Rostworowski and Marcus 1988.

⁹ Cerrón-Palomino 1976:81.

¹⁰ Weber et al 1998:294.

¹¹ Parker and Chávez 1976:92

¹² Rivera Andia 2012:178.

¹³ Duviols 1974 [Anonymous 1603]:279.

¹⁴ The range is divided into named but unfenced sectors, only for purposes of describing where a herd is, and for organizing sector-by-sector animal censuses that control correct use. The sectors are: Caracancha, Sharín, Jankil, Yaruchinchinchán, Shullpu o Yanatamá, Shushupuín o Antapampa, Shulupampa, Pampa o Cochakillu, y Población.

¹⁵ These limits were imposed in recent times; previous to agrarian reform some households ran many hundreds of head. There are still substantial inequalities in herd ownership. 10% of families lack livestock. A few of these concentrate on agriculture, and some must work as peons.

¹⁶ Flores Ochoa 1977b, Rivera Andia 2005, and many other ethnographers.

¹⁷ There may be a confusion between *puka* 'red' and *pukyu* 'spring.' The word *puc'ra* is not attested.

¹⁸ Allauca, 'right-hand,' suggests the side with ritual precedence, while K'ollana seems a version of a Quechua term meaning 'preeminent' (Encarnación [Rejas and Robles](#) 2011:12).

Huaylapamba appears a version of a phrase meaning 'green flat.'

¹⁹ The two "teams" also supplied the barriers for the annual bullfight festival in alternating years.

²⁰ Details of water governance: Most farming is dry farming, but there is community-run irrigation from the two main springs and also from Manantial Cocana and its reservoir. Each comunero requests and pays for the water he needs at s./50 per day (about USD \$.15 c.2005). Irrigation may be used for crops, ryegrass, dátil, alfalfa, or clover. Water is collected at night and channeled out to 1 or 2 users per day. The Community's water judge sets the rotation. He sells water tickets. Each comunero requests the day he prefers. If that day is taken the water judge will offer a day close to it. Tickets may be sold. This system is very old and has not varied in living memory.

²¹ *Rata*- "Caer, ponerse (el sol) (Adelaar 1982:73) might extend the idea of sunset to the end of a field's fertile time.

²² The Quechua title was the usual one with the lifetime of today's elders, says Agustín Racacha. It is often pronounced in a South-Andean or Quechua II way, "kamachikuq". This, like some other words used in the festival dance Inka Tinkuy, suggests persistence of colonial usages, which were often modeled on "Inka" speech.

²³ First and second among them are the *campo mayor* ('head rural constable,' in charge of the current potato zone), *campo menor* ('lesser rural constable,' in charge of the oca zone), and *kasha campo* (in charge of the barley zone) followed by four to six *regidores* ('counselors') of

equal rank whom the kamatsikuq can appoint to specific tasks. Two additional offices are held by women: the *llavera* or 'keeper of the key,' meaning the person who locks up impounded "damager" animals, and the *rematista* or 'auctioneer,' who sells them off for Community revenue if the owner fails to pay his fine. The "vice" also appoints a juez de agua or 'water judge' to assign irrigation turns, and a *fiscalejo* or town crier, who stands in the bell tower at dawn rallying citizens to community tasks or calling the owners of captured strays to reclaim them at the pound. (At the time of study, Rapaz had no cell phone coverage.) A variable number of *regadores* water the seven communal feeding paddocks, and one household is assigned to tend the hydroelectric power station. Elder statesmen are sometimes also invited to sit with the inner cabinet, because, having finished their careers as officers, they are free to voice politically delicate concerns.

²⁴ For some forty years (c.1970-2010) ethnographers reported steady decline or dissolution of highland "traditional authorities" (Isbell 1971-72). Based on interviews in 2005-2006, La Serna (2012:204-205) writes that in war-plagued Ayacucho Department, younger self-defense combatants marginalized the senior men of the vara. Yet in the last few years, the youngest active generation seems disposed to rebuild the vara offices with their aura of revindicated local legitimacy. In Rapaz the vara offices were never interrupted, not even during the Shining Path war.

²⁵ Toward the end of the 20th century, the agricultural commons worked poorly. "Few went to turn the soil, few to sow it, few to cultivate, few to hill, but all to the harvest," Agustín Racacha remarked. In 1987, the Community gave in to some twenty disgruntled families who had long been waiting for their field assignments. The common fields were split up and assigned in household parcels. Pasa Qulqa became empty.