Jaqin Uraqpachat Amuyupa

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Photography by John Amato

"K'utarapxiw quqanakasxa, ukatxa phichantapxarakiw, quqa tunu lawanaks jik'irapxi, ukatsi janipuniw jik'supkit qhuya tunu saphanakasxa."

"One should take pride in one's land and culture. There is a popular saying in Aymara, 'They cut our branches, they burn our leaves, they pull out our trunks… but never could they overtake our roots.' This was addressed to the Spaniards."

- Aymara agriculturist of Chile

Introduction

Jaqin Uraqpachat Amuyupa is the Aymara cosmological vision - Aymara people's thinking about the world (Justino Llanque-Chana, personal communication, 26 April 2002). The Aymara, who for centuries have lived in one of the most extraordinary landscapes on earth, amid glaciated peaks and active volcanoes, have developed and continue to sustain a relationship of mutual respect and exchange with the earth and one another. The Aymara cultural landscape is alive with vitalizing energy and infused with powerful spiritual beings whose presence the people must acknowledge in all their activities. The Aymara are socially enmeshed in their environment and share a perpetual dialogue with the supernatural beings that govern the forces of nature. The Aymara cosmological vision is one in which humans, environment, and the entire cosmos work together simultaneously and cooperatively within a network of reciprocal relations. The spiritual dimension in Aymara culture penetrates every sphere of life (Kolata 2004:98; Albo 1996:119–126; Ruiz-Tagle 1989:6).

Aymara Traditional Knowledge

Aymara people respect and maintain the knowledge and way of life of their ancestors, which is a continuum of their social responsibility, solidarity, and reciprocity. Vicenta Mamani stated, "The sacred permeates Aymara culture. We manifest our religiosity through ceremonies" (1993:391). In the Andes, Aymara rituals are grounded in the daily and seasonal activities and realities of life—living on the land, planting, irrigating, weeding, and harvesting—hence the people's very existence involves ritual (Kolata 1996:8; Castro-Lucic 2002:190). Aymara ceremonial activities are strongly associated with social and economic phenomena (Mamani M. 1989:106). The Aymara give *wax'ta* (offerings), *wilancha* (llama sacrifices), and *ch'alla* (libations of alcohol) to the earth for the *achachilanaka* (protective spirits of the family and community) and *Pachamama* (Mother Universe, *Madre Cosmo*, or *Madre Tierra*) (Silva Araya 1998:71).

Pachamama is the spirit of the uncultivated earth, who occupies a very privileged place in Aymara culture because she is the intermediary for production and the generative source of life (Mamani 1993:393). The achachilanaka are the grandfathers; ancestor spirits that reside in preeminent places and outstanding objects and exercise a constant influence over people (Figure 1). The mountain peaks are *wak'anaka*—places of spiritual power; shrines to the personified forces of nature that influence human destiny (La Barre 1948:165). The

Figure 1. Taapaca, mountain achachila overlooking and protecting Puxtiri. Photograph by John Amato

ancestors help the Aymara orient themselves within their holy land. They are masters of the clouds, water, snow, and hail. If they are not fed and feted, they will bring disaster to fields, canals, pastures, and animals (Albo 1996:126, 132; Kolata 1996:9, 20). The achachilanaka control meteorological phenomena by sending rain, hail, or frost, but winds are sent by spirits that inhabit volcanoes. Every extraordinary element in nature contains a spiritual essence that plays an active role in the existence of all that surrounds it, including people (Metraux 1934:79; Tschopik 1946:559).

Aymara *yatirinaka* are wise ones (Yapita 1994:177), leaders in ritual and wisdom (Mamani M. 1989:115). They know intimately each of nature's features within their sacred landscape and recount the unique history that is inscribed there in great depth. The yatirinaka feel the life forces that perfuse the physical world (Kolata 1996:243), and they are the cultural guardians of the people. They determine what belongs to Aymara culture and what is intrusive (Quispe Fernandez and Huanca Laura 1994:155). Yatirinaka make offerings to the achachilanaka asking for their blessing and protection in times of struggle (Albo 1996:146). Recognized as mediators between the supernatural and human beings, they intercede with the invisible forces of nature. In trance, they look into the numinous world of spirits (Kolata 1996:177).

Yatirinaka and the Sacred Leaf

Yatirinaka use *kuka* (coca) leaves (Erythroxylum coca Lam.), an oracle of the earth, in

Figure 2. Fiesta de San Andres - Pachama and coca leaves

divination (Bastien 1978:55). This sacred leaf is a cornerstone of Andean culture and serves as medicine and as a way of communicating with the supernatural (Healy 1996:245). Coca is used at all fiestas and ritual occasions to promote goodwill (**Figure 2).** At these ceremonial events, people beg one another's pardon, as ill feelings are believed to destroy the efficacy of the rite. Kuka is invariably part of every ceremonial offering (Tschopik 1946:556, 561), and *ak"ulli* (Yapita 1994:140) is the ceremonial sharing of coca leaf (Silva Araya 1998:74). By chewing coca collectively, one calls for unity and communication within the community, and one's body is united spiritually with the earth (Bastien 1978:56). Currently, coca leaf is being condemned, threatened, eradicated, and persecuted because of drug trafficking. However, for the Aymara, kuka is the symbol of life and hope (Mamani 1993:393).

Apachita

For the Aymara, the most holy places are the high mountains, where the earth shrines are fed. Apachita are cairns, or mounds of stones (Yapita 1994:142), on a mountain pass or the highest point of a trail, which are venerated by hikers, truck drivers, and all who travel that way. The spirits that reside in these places are the special patrons of traders and travelers (Tschopik 1951:194). When Aymara people go on a long trip, they must pass by the apachita, and as they do, they show great respect by removing their hats and kneeling down in prayer. With this offering, they can continue on their journey with confidence that they can overcome any difficulties that might obstruct their path (Mamani 1993: 392). Everyone gives salutation and supplication to the spirit of the place for a good journey. People rub their bodies with a stone in order to transfer their weariness to the stone and renew their strength, and then they place the stone on the mound (La

Barre 1948:166). Travelers rest at these sites, leave their quid of coca, and pray, "With this quid of kuka may my tiredness leave me and strength return. Be gone pain, hunger, and tiredness. Mother Earth, give us health, food, and strength" (Bastien 1978:211; 1987:9). Refreshed, they depart one world and enter the new one that is before them (Albo 1996:131).

Upon arriving at the summit of a steep hill or mountain, those who travel with llamas place a stone on the apachita as a token of thanksgiving for having arrived so far with their animals without being weakened by fatigue. Some Aymara offer feathers and plucked hairs from their eyebrows or eyelashes at these ceremonial places. Apachitanaka were considered remnants of pagan worship by evangelists and extirpators of idolatry, who pronounced against, and destroyed them. Some investigators thought they were originally instituted to mark the line of a road (Forbes 1870:237–238; Bastien 1978:60).

In northern Chile, near the Precordilleran village of Puxtiri (Putre), apachitanaka were destroyed by road construction. An Aymara resident of Puxtiri lamented, "It is difficult to recover the ceremonial places and return them to their original condition…The apachita are places where the people pass during their travels. They make offerings and leave signs of their presence while climbing, desiring to encounter good fortune on their journey and in life. These places were destroyed because the new roads were planned, designed and traced in accordance with the ceremonial places. This caused the loss of these places for the people. Losing these places and the uses of the apachita thus signifies our traditions being diminished." If people did not leave a stone and some coca on the apachita, they would become fatigued and might die (Tschopik 1951:194). The Aymara word apachita is the substantive of the verb *apachiway*, which means "remove this burden from me."

Evangelization and Exploitation

With the opening of new roads into the Andes, a proliferation of evangelical denominations and their exogenous beliefs continues to promote confusion and division within Aymara communities of the interior. Amid this avalanche of religions, among some missionaries is a lack of respect for the Aymara belief system. Aymara people expressed that such internal strife created a war within each Aymara person: "It is a sin that crusaders come in without knowledge of, or being acquainted with our reality, without the ability to speak our language. It is a continual invasion that we Aymara suffer" (Albo 1996:153–154).

Vicenta Mamani (1993:397–399) articulated that the theological colonialism of western Christianity has served as an ideological and political instrument with which to destroy Aymara cultural identity, customs, and our communal way of life. Ethnocide and genocide were committed through the so-called evangelization of the American continent. Protestant proselytization announced an escapist, individualistic, and conservative message that lacked concern about social, political, and cultural issues, leading to the condemnation of the great Andean tradition and belief system. Branded as pagan and anti-Christian, the Aymara religion is still practiced underground and has resisted more than 500 years of invasion and exploitation. It is a reflection of the interdependence and reciprocity between human beings and supernatural forces (Castro et al. 1984:215; Buechler and Buechler 1971:90).

The Aymara term *q'ara* refers to those who exploit Indian people. Q'ara means bare or bald, referring to one who does not fulfill his or her responsibility of reciprocal work and has no reciprocal relations. The Aymara are confronting their oppressors in order to

defend their resources, and traditionally, these struggles have had strong religious references (Albo 1996:144). Vicenta Mamani (1993:400) explained, "We ask the governments to recognize us as a 'people' with all that this term implies, and that they listen to us. We condemn the persecution that our leaders are being subjected to; we defend our right to freedom of expression; we want them to give us more opportunities to speak out about ourselves, and not have others speak in our name . . . The fundamental thing is that all people have access to life in equality of conditions, based on mutual respect and an acceptance of the diversity of cultures."

Plants, People and Pachamama

In Aymara society, solidarity, reciprocity, and reconciliation are practiced between people and the entire cosmos of beings. The Aymara try to keep themselves in harmony with the supernaturals and are careful not to offend them. They invoke these forces for health and assistance (Dobyns et al. 1964:126) and communicate with their external world in a profoundly intimate manner. The supernatural world, people, and the natural sphere are strongly intertwined (Buechler and Buechler 1971:98), and there is a constant dialogue between them (Poma 1995:445; Ruiz-Tagle 1989:4; Kolata 2004:98).

There is an intrinsic connection between people and plants. The Aymara believe that if plants and people are to mature and reach their full potential, they must be assisted by fiestas and rituals concerned with the maturation and fertility of crops. Traditionally, pregnant women work in the field to ensure its fertility as well as their own. The human life cycle and agricultural cycle merge, underscoring the mutual necessity of people and crops in each other's development (Bourque 1995:75–86). Progression from one stage of development to the next requires the support of human beings and supernatural powers. Rites of passage in human lives are analogous to those of the agricultural cycle (Albo 1996:163).

Sukullu, the Aymara childhood rite of passage, is performed at the moment of the potato harvest. The calendar of this vital agricultural plant punctuates the flow of time. On the day of the sukullu fiesta, highland children are marked with the blood of the *wari* (vicuña), a wild camelid of the cold land above the limits of agricultural cultivation. The Aymara say that the wari "only weeps when the time of the bitterest frosts approaches." Sukullu represents the child's passage into the state of social being and signifies her integration into the Aymara civilized world of plant domestication and the art of weaving (Bouysse-Cassagne 1986:213–214).

Religion, ritual, and agriculture are closely linked. An important feature of Aymara agriculture is the care lavished upon the earth. Libations and propitiatory practices ensure the earth's fertility and serve to protect the soil. Animal blood and *k'usa* (maize beer) are spilled to stimulate the reproduction of crops and herd animals. Neglecting to perform rituals according to custom has had nefarious consequences on Andean agropastoral existence and community production (Murra 1984:120; Castro-Lucic 2002:189).

The Aymara always ask permission of Pachamama before working the soil or planting a seed (Kolata 1996:43). As the principal Aymara deity, with the achachilanaka, Pachamama is the guardian and caretaker of Andean people. She is an elderly mother who protects the Aymara and provides them with all that is necessary for life (Mamani 1993:397). Pachamama is the mother of Aymara culture because existence itself is made possible through this inexhaustible source of life. With Pachamama are all the generative

Figure 3. Water is the creation place of Aymara camelids. Photograph by John Amato

spirits connected with the animals and crops (Albo 1996:133). Mamani (1993:393–394) elaborated: "We believe the land is for all people—that it is meant to be shared and not used only for the benefit of a few. Land is life, because it produces all that we need to live… Water emanates from the land as if from the veins of the human body. There is also the natural wealth of minerals, and pastures grow from it to feed the animals…Pachamama is sacred . . . she is like a mother who nourishes us with the milk we need. She is not meant to be exploited, or to be converted into merchandise. She is there to be cared for . . . Respect for Pachamama is respect for ourselves, after all she is life."

The Aymara and Their Camelids

The Aymara dearly love their llamas and alpacas as a grant from the mighty. *Qarwa* (llama) is at the heart of Aymara culture. It is an avatar of the supernatural, a divine creature that represents the vital life force of all animals. Andean people recognize the llama as a constellation in the evening sky (Kolata 1996:84). According to Andean tradition, the llama is a prophetic animal that can speak to humans and warn them about great events beforehand. Llama saves humans by coming from the place of creation, the *uma pacha*, shedding his blood for all the parts and returning to the mountain. Llamas originate in the highland waters (Bastien 1973:203–204), and springs give life and strength to animals (Mamani M. 1989:74) **(Figure 3).** Remarkably, the magnificent form of a huge, richly detailed llama is clearly visible and well defined in the architectonics of some Aymara terraced fields and irrigation channels (Castro-Lucic 2007:147–148).

The Aymara are loath to sacrifice their llamas except for an extremely serious purpose (La Barre 1948:185). Llama sacrifices mark critical events and the passage of time in the human life cycle. When a llama is sacrificed, the head of the beloved creature is extended to

Figure 4. Puxtiri Aymara pastoralist with newborn animals

face toward the rising sun in order to facilitate reincarnation within the herd. The llama's body is positioned toward the place of origin and return. The blood from the Aymara's most cherished animal flows to all parts of their holy land, vitalizing and empowering it to produce more life (Bastien 1973:210; 1978:77). The lungs and entrails are scrutinized for omens, and seed potatoes are immersed in llama blood before planting (Murra 1965:186). *Qarwa sullu*, the llama fetus, is used in sacrificial offerings to Pachamama. *Illa*, the unseen spirit of Andean domestic animals, is petitioned annually for abundance in the herds (Quispe Fernandez and Huanca Laura 1994:155; La Barre 1951:173; Albo 1996: 133).

Aymara camelids are honored in elaborate rituals concerned with water, fertility, agriculture (Castro-Lucic 2007:147), healing, divination, and weavings created from their wool. Mamani M. (1989:76) shared that every animal species is dignified, valued, and symbolized through music and dance specific to that creature, each with its own song or a song dedicated to it, characterized by melodies and words that allude to the animal and honor its reason for being (**Figure 4**). Aymara songs for animals are from remote times and have been transmitted orally from generation to generation. Rituals integrate animals, herders, pastoral ecosystems, and the pantheon of supernatural powers of the highlands, where herds are closely adapted to a highly specialized ecological niche.

The Bofedales, Place of Creation and Ceremony

Glacial runoff and seepage, rich cushion bogs, and specific microclimates sustain the bofedal plant communities upon which alpacas depend for optimum health and reproduction. Herding in the Andean *Puna*, the high, cold arid plateau, centers around the bofedal, an area with an elevated water table, dominated by cushion plants. This pastureland, which is the natural habitat and creation place of llamas and alpacas, is essential for all herbivores of the Puna because of its high-quality forage (Kuznar 1991:371–372) (Figure 5). Efficient mastication, fine fleece, and disease resistance are attributed to wetland pasture composed of *qhach'u paqu* (Distichia muscoides Nees & Meyen) (Castro et al. 1982:177; Spotorno and Veloso 1990:23), which forms thick mats, and the rosetted Plantago barbata G. Forst. (Castellaro et al. 1998:195). Qhach'u paqu grows in tough, dense cushions close to the ground in

Figure 5. Juq"u -Bofedales with Aymara camelids on the high plateau. Photograph by John Amato

a peaty substrate that conserves water like a sponge. Bofedales are peat bogs, which often form layers of vegetation that are several feet thick (Wright 1963:190). This unique habitat occupies about 5 percent of the total land area of highland Parinacota (Bernhardson 1985:173).

Alpacas require the soft, moist cushion bogs of the bofedales wetlands on the Altiplano. These places are considered ritually pure and sanctified (Webster 1973:120). Bofedales plant communities in this semiarid region are precariously tied to supplies of emergent water. Unless there is flowing water, bogland vegetation is unable to develop. Relatively small changes in the hydrology of any part of the ecosystem can lead to degeneration of vast areas of bofedales—places of creation and ceremony, centers of nourishment for flocks of camelids, and the mainstay of the pastoral livelihood. The Aymara have devised finely tuned resource management techniques that have kept the bofedales in good health for centuries. They create shallow channels that draw water from the parent spring to the peripheral parts of the bofedales where cushion plants may be languishing (**Figure 6**). These channels reduce saturation around the springs and prevent the formation of ice sheets over the bofedal at night. The Aymara practice sustainable pastoralism, which includes careful attention to grazing management and herd movement (Wright 1963:190–191) employing the Andean system of complementarity in herding (Mamani M. 1989:96).

The Aymara maintain and expand the bofedales through their irrigation channels, which are fed by springs and snowmelt. Their

Figure 6. Juq"u - Bofedales wetlands with Aymara water channel system. Photograph by John Amato

ingenious water distribution system improves the bofedales by encouraging the colonization of bogland species. The extensive network of water channels along the margins of the bofedales attempts to ensure a dependable water supply for the winter. The rainy season in the highlands is usually from December through March. Pastoralists depend on the summer rains to revitalize the bofedales that have declined during the long, dry, cold winter (Bernhardson 1985:173). These floristically diverse wetlands of aquatic and semiaquatic plants must be inundated with water plentifully and permanently. If water is diverted or reduced, the bofedal will decline dramatically from insufficient moisture, as high evapotranspiration rates will deprive the native vegetation of the water it requires. Without adequate water, the sun will burn the vegetation to the roots (Binford and Kolata 1996:46–47), causing irreparable damage to this specialized ecosystem and creation place. The growth and development of cushion bog plants depends directly on the availability of spring water. Water diversion and cycles of drought can cause the bofedales to dry up (Wright 1963:191).

Uma—Water

"Water is everything, for us it is as important as the earth. " – Aymara pastoralist

"We are defending the watersheds – the source of life, from its birth in the Andes to its mouth in the sea." – Coordinadora Aymara de Defensa de los Recursos Naturales, Region Arica y Parinacota.

Aymara agropastoralists regard water as

the most precious of the natural resources on which they depend for survival. Highland springs specifically define village membership and are central in the Andean system of reciprocity (Mamani M. 1989:106). Springs are where the llama is born (Castro-Lucic 2007:147) and where his image, illa, is reflected. Illas are the watery images giving rise to llamas. From reflections within the spring emerge all living creatures. The water's reflections are animals and people returning from inside the earth (Bastien 1978:47). Springs and mountains are associated with raising animals. Mountains are the source of irrigation waters for parched fields and pastures, to which the mountain spirits are connected in a most intimate way. This network expresses the unity of communities with the supernatural (Kolata 1996:22; Mamani M. 1989:107; Castro-Lucic 2007:145; 2002:189–190).

Physiographical spirits govern the water supply and carry away burned offerings that are made on numerous ritual occasions (Tschopik 1951:196). Andean origin stories emphasize water as places where creation occurred (Rivera 1991:4). *Tici Wiraqucha Pachayachachic,* creator of the world, rose from the deep, cold waters of the inland sea, high in the Andes. He commanded the various tribes to emerge from the sacred landscape of springs, rivers, valleys, caves, trees, rocks, and hills. Andean identity is inextricably bound to sacred places and names, and a story is connected with almost every toponym. An Aymara elder reflected, "The name of many places; the places here have names as persons" (Bastien 1973:299).

Humanity emerged from the living rock and water of the natural world (Kolata 1996:65–67; La Barre 1948:208). Aymara stories explain that after the river flows down the mountain it circles underground to return to the uma pacha, its source; the place of origin for llamas and people. According to the teachings, the uma pacha is in the Andean Cordillera. People originate from the highland lakes, then walk down the mountain during their life, and after death return along the underground aquatic routes to the highland lakes, where they are born again. This journey is the passage from birth to death, and the return from death to life, which is embodied in the Aymara cosmology (Bastien 1987:42).

Springs, as the source of animal life, are considered the center of equilibrium of the Aymara community (Mamani M. 1989:92). Aymara ritual performances that are associated with water are absolutely necessary to attract all the bounties of nature and to ensure their entitlement to resources (Castro-Lucic 2002:190). In the story of *Wallaqiri P"uju*, the Roiling Spring, when people do not fulfill their reciprocal relationship with the spring through ceremony and ritual offerings, the spring gathers its animals. All of the animals disappear into the spring. Petrification of humans and animals arises from the disarticulation of the natural balance and principles of Andean reciprocity. When members of the earth distort these laws, such distortions can have disastrous consequences. Aymara teachings recount that those who misrepresent such norms are punished. Unity and the multiplicity of elements of the cosmos vitalize nature, and through this unification, the ideals of Aymara society and community are manifested. Coexistence in the reciprocal system is a value in which humans, nature, and all entities are nurtured and their reason for being is strengthened. The Aymara cannot abandon these principles or separate, divide, or minimize their true meaning by transforming them into mere objects lacking mutual relationship as active entities of the cosmos (Mamani M. 1996:235; 1989:122).

Chungara

Aymara tradition relates that in ancient times, the Altiplano sector of Chungara had its time of grandeur. With vast social and economic growth, a rich and significant bofedal existed. The inhabitants were dedicated to raising camelids in the excellent pastureland and the area was endowed with vast mineral wealth. Old Chungara was populated by bearded men in fine attire, but it was the resources of nature that supplied their wealth. Chungara was part of a complex system of ecological complementarity within a network of communication among the life zones of the region. One day this great district and bofedal were suddenly destroyed by an earthquake and devoured by fire, transforming the bofedal into a lake. The destruction was caused by a being sent by the divine protectors of the summits, to examine the behavior of the denizens of the highland districts. Current residents of Chungara say that it was a rich man's caprice, vanity, and lack of human feeling for the people of the community, much less for elders, that the messenger of the sky was sent to punish. Aymara society acknowledges that human behavior may cause serious disasters and violent destruction. Aymara stories enable the people to feel the continuum of the past with the present, making possible their continuity in time and space (Mamani M. 1994:121–123).

Mountain/Body

Bastien (1987:67–85; 1978:25–56) discussed telluric symbolism in the Andes, the Aymara people's reciprocal relationship with the earth. The Aymara reflect the mountains, waters and land for understanding their being, and perceive their cultural landscape as a body with distinct parts. Their toponyms correspond to different levels and segments of a mountain/body form, with which they identify. The Aymara explain that Pachamama and people have fluids that circulate in a hydraulic cycle of centripetal and centrifugal movement. Fluids of the body are governed by dynamics as those in nature and flow between the body and the mountain.

The top of the mountain is the *uma pacha*—the head, the place of origin and return for animals and humans. Highland lakes are the eyes where reflected images of creation emerge, and rivers are the body's vessels. The anatomical mountain/body paradigm personifies the complex kindred qualities between Andean people and their environment. The Aymara are one with the hydrographic homologies that reflect their bodies, surroundings, and social organization. Their homeland is holistic with their physiology and entire being, derived from an historical and reflective relationship between the Aymara, the earth and water, which reflect each other and are interconnected within a reciprocal system.

The community and mountain are inextricably united with the Aymara person, and disturbance in one is associated with disorder in the other. Illness is often linked with social dissonance or a land dispute, whereas the well-being and life energy of the ayllus are fluid. Rivers define the body of Aymara communities and are associated with boundaries that have been invaded. Bodily illnesses mark disorders between a person and the land, and is also associated with the river, which washes away existence and returns it. The river corresponds with places, time and history, communities and land loss. The mountain/body has enabled the Aymara *Marka* (Nation) to maintain cultural unity amid destructive external forces (Bastien 1973:162, 227–251). The Chilean government's political and economic manipulation of Aymara land and water without regard for, or understanding of the vital, culturally well-defined reciprocal relations, practices and the inherent homeostasis in their way of life has

caused tremendous hardships for the Aymara people (Castro-Lucic 2002:190).

Desecration of a Sanctified Ceremonial Place

In northern Chile, within *Parque Nacional Lauca*, the UNESCO International Biosphere Reserve, diversion and canalization of the highland waters of the international Río Lauca for hydroelectricity and irrigation on the arid coast have severely undermined the subsistence livelihood of Aymara agropastoralists whose lands the reserve occupies (Choque Blanco 2004:292–294; Santos Huanca 2004:387–388). Ecological damage caused by diverting the waters that feed the bofedales has contributed to the economic marginality of the Aymara people, who have suffered the lamentable consequences of this development without compensation or benefit (Bernhardson 1986:317). There have been strong economic and political pressures to reevaluate park boundaries to permit further drilling of wells and the mining of groundwater, a nonrenewable natural resource with a very limited recharge rate, within the park. This unsound plan has the potential to cause significant social and ecological impact (Rundel and Palma 2000:268). Diversion of the Río Lauca and dewatering on the Altiplano signify the desecration of ceremonial places of creation, return, and ritual for the Aymara Marka.

Land is the very breath of life for the Aymara, who perceive misfortune, illness, and loss of land as the dissolution of their sacred territory and corporeal body. Geographically, adversity is associated with disequilibrium in body, land, and communities. Harm to the geographical body is associated with dissolution in the physical body and disruption of the social and ecological order. By their activities, humans can restore the body, land, and society to equilibrium. Andean corporeal life depends on environmental life (Bastien 1973:235–250;

Figure 7. Diminishing water resources on the Altiplano. Photograph by John Amato

1978:129).

Highland Aymara people indicate that the once-rich and diverse avifauna of the wetlands greatly diminished because of the manipulation of water levels in the bofedal ecosystem and the deterioration of wild avifauna habitat (**Figure 7**). Mamani M. (1989: 34–37, 74–75) noted that the *chullumpi*, an aquatic bird that inhabits the area around springs and rivers, is highly venerated during the *Uywa K'illpaña* ceremony, the ritual of animal marking, and specifically in the *Samayaña* ceremony, meaning "to cause to breathe." The chullumpi represents the spring deity, *Samiri*. This wetland bird is about the size of a small gull, and when people are present, it submerges rapidly into a spring or river, resurfacing a considerable

distance away. In the Aymara cosmovision, the chullumpi is associated with the procreation of animals. Uywa K'illpaña is a most important ceremony in the highlands of northern Chile with all its ancestral power because it represents the principal beliefs of the Aymara world about nature surrounding animals. The earth and the aquatic realm are concerned with the raising of animals. Through the ritual, equilibrium is established between humans and the powerful places of the earth that control animal life cycles.

Empresa Nacional de Electricidad (ENDESA), the national electric company of Chile, and the *Dirección de Riego* (Department of Irrigation), shortcut the natural flow of the Río Lauca on the high plateau. Water diversion to the arid coast for irrigation and hydroelectricity has threatened the natural and cultural hydrologic regimes of the bofedales. As a result, pastoralists have had to reduce their flocks of camelids because the springs dried up (Bernhardson 1986:315–317). Smaller herds mean fewer animals are celebrated and honored in the Uywa K'illpaña ceremony, which used to last for two or three days. A pastoralist explained, "When there are many animals, they bring a lot of young, then those young are marked . . . They no longer hold the ceremony as before. It is being lost" (Mamani M. 1989:149).

Calling the Rain

Rain is the source of all life for the Aymara and is associated with lakes, rivers, mountain peaks and animals. Rain and mountains are indissolubly linked. Various rain and water rituals are performed in the Andes. The Aymara of Chile know each and every source of water within their territory, and all are used for religious or practical purposes (Castro-Lucic 2002:191). Before sacrificing for the rains, the yatiri voices a long litany recalling the names of the ancestor spirits. The Aymara beseech the achachilanaka to bring the rains. Spring waters are very special and yatirinaka use them in ritual offerings for calling the rains. Sometimes waters from springs, streams and marshes are joined together as in a wedding. Stream water from marshes and mountains are merged and poured over the newly planted crops to bring rain (Kolata 1996:36).

Rosing (1995:73–85) discussed the scarcity ritual for rain, which is performed far from the village in a remote and holy place. Rain lake rituals require sacrifices for springs and mountains and against wind, lightning, and other numinous powers in times of endangering drought. Yatirinaka offer incense and kuka to the water, imploring the lake spirit to send rain, and sacrifices are submerged deep within the lake. Waters are honored and are carried with aquatic plants to the center of the village and springs. In rain lake rituals, the lake must be provoked so that black clouds will rise from it and release rain. Rain lake ritual performances exemplify reciprocity between deities and humans, and reciprocity of giving is an essential value in Aymara life.

Kolata (1996:95) recorded that in some Aymara rain rituals, there are wailing, hungry black llamas; thirsty, rainmaking frogs and toads crying for rain; and weeping children crying out with all their hearts for water from the skies. Toads are a sign of fertility and the rainy season, and they travel between the spirit world in the heart of the earth and the visible world of humans; hence they are mediators between people and spirit. Toads are associated with great pools in the Altiplano pasturelands where the generative power of water is analogous with fecundity.

In the Andes, *pinkillu* flutes, which are duct or recorder-like wind instruments, are played at the start of the growing season and throughout the rainy season to call the rain and to help the crops grow. If not tended properly, plants

weep like young children. Pinkillu are said to have their own voice, which is like the mating sounds of llamas and the wailing of llamas crying for rain. Pinkillu music is vividly associated with the reproduction of llamas. The passage of water between the inner sea and the human world is strongly linked with powerful and enchanted sound, which results in rainfall and renewal. Water rises from the inner sea to form clouds, and rain from the clouds travels to the inner sea during the rainy season. Regenerative waters flow from the perpetually verdant land of the ancestors into the world of the living. In the land of the souls, there is continuous singing and dancing to the music of the pinkillu, and in the season of rains, the souls help the crops grow (Stobart 1996:471–475; Kolata 2004:111; Mamani M. 1989:74).

Aymara and Supernatural Beings

For Aymara people, music, song, and dance in a ritual context are important elements in the relationship and communication between humans, plants, animals, and the supernatural. Music is intimately connected with Aymara religion. The Aymara faithfully maintain the musical heritage of their ancestors as a continuance of the relationship between past and present (Mamani M. 1989:67–68). The Aymara, and all of us who live on *aka pacha*, the earth, are continually exposed to *manqha pacha*, the ancestral world that is below and within, and *alax pacha*, the world above whose forces are controlled by what has gone before. We must learn to live in a respectful manner with both worlds. Enduring social ties between the living and the departed are demonstrated through ceremonies. The dead, if attended properly, become protective beings for the living and have everything to do with the growing season. They are the seeds of the future for Andean society because they engender new life (Albo 1996:148–149; Kolata 1996:11–12). The living feed the dead, who push the crops out of the ground and feed the living, and the living inherit the land from the dead. If souls do not push up the plants from the soil, and there is not ample rain and sun, human work is in vain. For supernatural beings to provide assistance, they require input from humans (Bourque 1995:79–84; Kolata 2004:111).

In the Andes of Arica y Parinacota, elements endowed with supernatural power assist in agropastoral production and control pasturelands and the behavior of humanity. The *uywiri mallku* and *t'alla*—hills, volcanoes, and mountains—are the powerful protectors of livestock and are greatly honored. They are witness and observer of the inhabitants of the region (Mamani M. 1994:118; 1996:222). These spiritual beings can punish the people if they are not given their necessities. As long as they are duly recognized and served, they will protect the Aymara and grant them favors. If they are ignored and not given the affection they deserve, they can react and withdraw their assistance (Albo 1996:128). The awatiri mallku and t'alla are natural elements that are responsible for raising animals. The p*'uju mallku* and t'alla, the powerful spring, is the place of origin of animals represented by Samiri. Samiri, Uywiri, and Awatiri are the deities of the animals who are strongly extolled ceremonially through complex rituals (Mamani M. 1989:90-94).

Supernatural beings are associated with nearby glaciated peaks, volcanoes, hills, and promontories. Place spirits inhabit springs, lakes, rivers, and mountains (Lewellen 1978:90). Prominent and influential are the spirits that inhabit mountains, rivers, springs, lagoons, and lakes (Tschopik 1946:559). Although benevolent by nature, these forces are capable of retribution and malice and are therefore dangerous and must be treated with due respect. They all have great hunger and

must be well cared for (Albo 1996:132). Divination, libations, burned offerings, and presentations are performed to propitiate and enjoin the assistance of beneficent forces. Aymara deities act on the basis of reciprocity; if they receive offerings, they will provide protection, well-being, health, rain, and abundant harvests (Rosing 1995:76).

Jawira - River

Bastien (1973:220–226; 1987:42–44) discussed women diviners who work with the rivers that flow down the mountains. Women and rivers have the power to transform adversity into good fortune. Misfortunes and the misfortune ritual are associated with the river. Women divine and remove misfortune, thereby depositing it in the river, which washes it away and helps the community become whole again. Regenerative forces of life and completion are associated with the highlands, where mountains and rivers are restorative. The river descends through various ecological zones and is continuously restored, originating from and returning to the uma pacha, forming one continuous link. The river connects Aymara communities and traverses the heavens and the netherworld. The Aymara call the Milky Way galaxy "river," which connects the stars across the sky. Rivers are ritual sites where the ancestors and *wak'anaka* (sacred shrines) are fed. Ancestor mummies are associated with the river. Veneration of ancestor mummies was transferred from their gravesites to the river after missionaries burned the mummies and threw their ashes into the water. Misfortune can befall the people if the river is not able to complete its restorative cycle.

Samiri, Breath of Life

According to the Aymara of northern Chile, *p"uju* (springs) are the source from which animals emerged from the innermost part of the earth to the surface. The spring deity is Samiri, breath of life. Samiri encompasses springs, bofedales, lagunas, rivers, small lakes, and streams and is revered as generator of life and strength for animals (Mamani M. 1989:90; 1996:229). Springs are keepers of the aura of animals (Rosing 1995:77). Mamani M. (1994:120) discussed *Wallaqiri P"uju*, the Roiling Spring, which is the place where Samiri creates animals and ritual elements such as gold and silver. In the highlands of Arica y Parinacota, toponyms and their relationship with the surrounding world embrace a range of meanings that are linked with symbolic, mythological, and ecological elements intrinsic to Aymara cosmology. Springs bear names that characterize the murmur of the swirling water and are connected with the reproduction of animals, as in the creation story of Wallaqiri P"uju, the Roiling Spring.

If the people do not perform the offering rites, the p"uju deity, a large woman who lives beneath the spring, can order the gathering of livestock back to the spring. Samiri, as creator of livestock, can call the animals to submerge and remain submerged under the spring. Aymara pastoralists possess a profound knowledge of the spring's power, which is revealed through stories (Mamani M. 1996:224). Springs are associated with *Wiraqucha*, Creator of the Universe, and the underground aquatic route between the Cordillera and the Pacific Ocean (Osborne 1968:87; Bouysse-Cassagne 1986:208).

Springs or lakes surround the world and lie beneath it. Highland springs are considered the center of each community, and the source that encourages the unity of people and supernatural powers within the Aymara reciprocal system. Ancient Andean people understood the subterranean hydrographic relationships and communication between water sources

and developed techniques to utilize these complementary networks. Deities travel along watercourses and rivers and distribute lands and *juq"u* (bofedales) to each family. Deities of the spring are surrounded by gold and silver and are associated with the veins of the mountains (Mamani M. 1989:90–94). Springs are the place of origin of ancestors, humans, and animals; hence a vital life force remains localized there. Samiri are resting places and when the Aymara visit them, they receive a vivifying breath and return with courage. Samiri are the places from which each *ayllu* or clan sprang; thus they are hallowed and revered by members of the clan (Metraux 1934:80–83; Tschopik 1946:571).

Samayaña

The Aymara word *samayaña* has symbolic and mythological meaning derived from the verb *samaña*, which means "to expel air" and "to rest." According to Bertonio (1612:869), samaña is breathing, courage, spirit, and rest. Samayaña is to give rise to the expulsion of air. In the Aymara livestock marking ritual, samayaña signifies "to cause the fertility and fecundity of animals through the medium of air, as a fountain of life and strength of Andean livestock." Aquatic supernatural powers expel animals through deities that supply the source of life and strength of livestock (Mamani M. 1989:80–81; 1996:228). Breathing on offerings is an element of many rites and is used to cure disease (Tschopik 1946:561). Breath is employed in rituals to communicate with air and wind, which are animating principles of the universe. The Aymara conceptualize samay (breath) as a life force that animates them, and as a fluid element that connects them with the vitalizing principles of the environment. Diviners communicate with the earth by blowing on their ritual offerings for the earth. Breathing is the means by which Aymara people become united with their animals, land, and plants. Yatirinaka are the "people possessing breath," who breathe on an offering to bond themselves with the recipient. They commune with hill spirits by breathing deeply, and knowledge and power are received from the spirit. In ritual, breathing out places oneself in the offering for the earth (Bastien 1987:16, 70).

Mamani M. (1996:229) described Samayaña as one of the most important ceremonies through which the balance of forces of the animate and inanimate are encountered. This rite attempts to find a just equilibrium between people, the natural environment and supernatural forces. Samayaña, with its mythological symbolism, seeks reconciliation for any disequilibrium involving animals, family, or community. Each geographic point is referred to by its toponym or function. Awatiri, supernatural powers manifested as mountains, hills, knolls, and pampas receive honors. *Samiri*, the aquatic realm, which includes springs, bofedales, lagunas, rivers, small lakes and streams, is highly venerated. Samiri is responsible for maintaining and augmenting the herds and is given recognition and praise for the invaluable work they performed during the year. Animal losses may be attributed to predators such as pumas, foxes, and condors or may be considered punishment by the deities for failure to fulfill the corresponding ritual offerings. The ceremony of Samayaña involves a dramatization or simulation of the expulsion of air from Wallaqiri P"uju, the Roiling Spring, over symbolic objects from the ritual bundles and animals. *Wistalla* and *ch'uspa*, woven ritual bags, are raised and passed around to participants in a circle. Each partaker breathes (samaña) into the bags. A profusion of flowers and miniature chullumpi are given to the people, symbolizing animal fertility. Animal fecundity is ascribed to water sources, and springs supply the necessities of Aymara communities. They

are the breath of life. The river network and its *palqanaka* (branches) express the complementarity of the intricate living system of highland springs. A fundamental premise of Andean logic is that social and economic organization comes from water sources (Mamani M. 1996:233; 1989:81–85, 96).

Kuti

In the Aymara cosmovision, the social order of humans is linked with the natural order of the universe. A disturbance in the equilibrium calls for all means to restore the broken balance. Family and community are sacred; thus one's commitments concerning them must be honored. The performance of each member of the community affects the well-being of the whole. Every misdemeanor requires reconciliation to reestablish equipoise. *Kuti* is a return to the point of departure and is used during times of crisis or to call upon a spirit. Kuti is present in many rites in which something is done in reverse. Blood offerings and elaborate sacrifices are required in life crises and life-threatening situations. They serve as a kind of shield. If a llama is sacrificed, it can make kuti and hence strength and spirit can be restored for the entire community. In 1927, an Aymara revolt against an abusive landowner led to his execution and sacrifice on a sacred mountain, which was the border between ayllus that reclaimed the land (Albo 1996:142–145, 161).

For the Aymara, the tightly coiled helical seedpods of *kuti waynitu*, Prosopis strombulifera (Lam.) Benth. (Aronson 1990:80), have a strong association with the concept of time. Kuti means to turn back. Time is perceived as a continual return, an eternal renewal of seasons and cycles. Each time one returns to the beginning, there is hope that the outcome will be better than before—that the harvest may be more bountiful, the weather more favorable. It is all a repetition in the helix of time; thus the future is always turning back into the past as a spiral. Kuti waynitu is used in sacrificial bundles and is carried as an amulet with the hope that the future will reflect the past with greater prosperity (Gifford 1986:3).

Health, productivity, and survival depend on an enduring vision of reciprocal relations among humans, nature, and the supernatural, whose roots reach deeply into the past. As Quispe Fernandez and Huanca Laura (1994:147) maintain, "Our ancestors are still present and alive." The Aymara perceive that their ancients are embodied in the landscape to which they orient themselves; the achachila of the steep and tortuous folds of the mountains remind them that they are part of a living, eternal history (Kolata 1996:8, 12; 2004:111) that holds the seeds of the future. The Aymara celebrate the hope that this present world of imbalance and inequity will turn right side up and a new kuti or *pacha kuti*, that which is presently below and hidden, will soon emerge. The driving force will come from the ancestors (Albo 1996:149–150) and the will and determination of the Aymara people.

Jaqin Uraqpachat Amuyupa and Disequilibrium

An understanding of the Jaqin uraqpachat amuyupa and the cultural significance of Aymara sanctified and ceremonial places are essential for effectively assessing the social and environmental impacts of deleterious, externally imposed development within the Aymara holy land. The Aymara people continue to proactively defend Pachamama and their natural and cultural heritage from further toxic mining, water appropriation, geothermal, and hydroelectric development within their enclave. The destruction of Aymara resources and ceremonial places raises human rights and legal concerns. It violates Chilean constitutional and indigenous laws, international indigenous laws,

and the United Nations Declaration on the Rights of Indigenous Peoples. The dynamics and intricacies of Andean traditional systems are seldom comprehended and respected, making it difficult to realize the consequences of unsustainable development, the gravity of the desecration of Aymara sacred resources, and the disequilibrium of the homeostasis in their way of life. The Aymara define themselves in terms of their cosmological universe and local geography. Their homeland is imbued with cultural significance and the meaning of places, lineages, history, oral tradition, and teachings that permeate their territory. The Jaqin uraqpachat amuyupa serves to keep their world—and beyond—in balance.

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