

# **KINSHIP AS COSMOLOGY : POTATOES AS OFFSPRING AMONG THE AYMARA OF HIGHAND BOLIVIA**

DENISE ARNOLD,  
Department of Anthropology,  
University College,  
University of London,  
110 Mercers Road,  
London, England, N19 4PU,  
United Kingdom

## **ABSTRACT/RESUME**

It has been proposed that kinship itself constructs social systems according to cultural rules. Different kinship systems may transform notions of personhood, gender, the transmission of ancestral substance to offspring, metaphysics and cosmology. Matrilineal and patrilineal forms of kinship may be the extreme limits of these notions. Among the Aymara of highland Bolivia, these two forms of kinship exist together, but the ideology of one may be elaborated in certain contexts to make muted the other. This paper relates potato productions among the Aymara to Aymara notions of kinship and descent and the reproduction of a matrilineal cosmos.

On a suggéré que la parenté elle-même construit des systèmes sociaux suivant des règles culturelles. Des systèmes de parenté différents peuvent transformer les notions de la personne, le genre, la transmission de la substance ancestrale aux descendants, la métaphysique et la cosmologie. Les formes matriarcales et patriarcales de la parenté peuvent constituer les limites extrêmes de ces notions. Parmi les Aymara de la région montagneuse de Bolivie ces deux formes de parenté coexistent, mais dans certains contextes l'idéologie de l'une peut se présenter de manière à l'emporter sur l'autre. Cet article rattache la production des pommes de terre chez les Aymara aux notions de parenté et de généalogie et à la reproduction d'un cosmos matriarcal.

## Introduction

In this paper I would like to explore the idea of an Andean cosmology as being conceptualized as a gigantic hydraulic system with a vertical axis and horizontal nodes which act as points of transition. Seen as a vertical model, the mountain becomes analogous to the tree of life in other cultures. This idea has been explored by Earls and Silverblatt (1976), Urton (1981) and Bastien (1985) amongst others. Here the lower waters ascend from the underworld of the ocean up through the vertical core of the mountain with its internal lakes and passages where it eventually emerges in the mountain springs and pools and is converted to rainclouds to fall again later as rain.

Seen as a horizontal system, Cusco, the centre of the Inka empire and navel of the world with its system of ceques and irrigation channels, has been one focus in the study of Inka cosmology in the work of Zuidema (1964, 1978a) and Sherbondy (1982). Here the waters eventually went underground under the desert of Nazca and flowed into the Pacific Ocean. One focus of Aymara cosmology has been with Lake Titicaca as the centre, with the River Desaguadero seen as a huge drainage channel permanently emptying the waters into Lake Poopo which eventually drains down through the deserts of Chile and into the Pacific Ocean, and has been described by Bousse-Cassagne (1980), and others. The underground passages of water in both cases were thought to form an underworld labyrinth.

In the case of the mountains, the labyrinth also contains precious metals which are thought to grow continuously like "potatoes" in the underground mines, if the correct offerings are made to their guardians, the *Tiyu* (from the Spanish *tío* meaning uncle) and the *Tiya*, his consort. There is an etymological connection between the world for gold, *chuqi* and for potato *ch'uqi*. The traditional name for La Paz, *Chuqiyaw*, is said to mean either a potato field or the city of gold. The mines, caves and mountain springs and pools are perceived in Aymara thought as such points of transition between the world of above, the spirits of the air and the mountain peaks, and the world of below, the spirits of the mines. The image of eyes and mirrors for these points of transition conveys the sense of complementarity and opposition between these two worlds.

Here I would like to elaborate the idea of the hydraulic system to include two other systems of thought which seem to be organized according to the same logical principles. One is the notion of human reproduction and fertility, based on conceptions of the human body as a transformatory and hydraulic system, and the other is of potato production, reproduction and fertility, based on conceptions of the potato plant as a tree of life.

In the ethnographic discussion which follows, I will emphasize the way

in which a matrilineal ideology structures and transforms the way in which notions of metaphysics and the transmission of ancestral substance to offspring is perceived, and reproduced, and how even the real productive-base of potato cultivation is also structured according to the same matrilineal rules. Although Aymara kinship, like the Inka system, has aspects of both matrilineal and patrilineal descent, in the context described here, the matrilineal system is dominant and the patrilineal system made muted. This has been underplayed in the ethnographic literature until now, although, from my experience in the field, it is the dominant theme of vernacular discourse.

I wish to draw out two distinct themes, when each element is perceived as a microcosm of the universe and the metaphysical domain. One is the concept of substance or liquid which flows and the other is the concept of static substance. In weaving terms this would be comparable to the act of weaving a continuous thread, *wich'una* or *seguido* (Sp. meaning continuous), as opposed to knotting a thread of *chinuntana*. Here, the flow of spiritual and ancestral substance meets such a point of transition in the knot, where it is transformed and interacts with the material world of physical flesh, growth and form.

In terms of human reproduction among the Aymara, ancestral substance as blood is said to pass only through women, and in Aymara matrilineal metaphysics, the oppositions noted above seem to describe in the first instance the flow of ancestral substance as blood vertically from mother to offspring, in a descent logic from above to below in the popular meaning of the term. In Qaqachaka, where I carried out fieldwork, this flow of blood, and its periodic re-enactment in ritual, is seen to connect the *wila kasta* or blood-line of matrilineal ties of kinship across the landscape like a web. The human body in this descent context is perceived as a hollow vessel through which the flow of blood takes place. It is morphologically like the weaving-shuttle itself, also called *wich'una* and formed from the hind leg-bone of a llama with its soft marrow-centre. It is an important heirloom and is passed down from mother to daughter within the *wila kasta* or descent group and from a sister to her brother's wife at marriage, from one *wila kasta* to another, to weave a web of kinship ties across space.

This view contrasts with the generation of offspring perceived as the cessation of the flow of blood and the formation of static or congealed blood in a knot. The offspring is considered in this case to be the result of an incestuous union and has jiminal and magical qualities. The view of reproduction in both cases is asexual and has a predominantly female gendering as opposed to sexual reproduction, with its male/female polarity.

These knots or points of transition, and the manner of interacting with them through ritual, is described in various guises, for instance in the language of dance in spiraling and turning-movements called *muytana or jira*, always said to be associated with the mountains. It is also evident in the category of *wak'a*, which can be translated as the wide waist-band or girdle worn by women. *Wak'a* is an important concept in the Andean world, usually applied to sacred sites which are perceived as places of power and transition points between the two worlds. Here, I shall emphasize its important relationship to the *puraka* or belly of women and the human placenta inside, seen as something always moist and associated with blood. It is in the *wak'a* as one such point of transition that ancestral substance as blood is transformed through the labyrinthine path of the uterine passages into the human world of lineage.

Similarly with potato production and reproduction, the plant stem is seen as the vehicle of the vertical axis and flow of energy, while the more horizontal axis of the transition points is evident in the language of plant growth - in descriptions of the growing points or eyes of the potato plant. The horizontal mode is also evident in descriptions of the germination of potato seeds surrounded by fertilizing manure viewed as a "baby surrounded by its placenta". It is also evident in the descriptions of the potato sowing as the placing of a baby into the waist-band or *wak'a* of the earth which grasps and receives it so that it may suckle there. It is grasped in the placenta of blood, the manure given by harnessed animals, such as donkeys and mules, which are also perceived to wear a waist-band. The new potato tubers below in the earth are conceptualized, too, as static substance and perceived as eaten blood, the result of an incestuous union between mother and daughter, conceived in the girdle or *k'inch'u* of the earth.

The following ethnographic discussion is divided into three sections. Firstly I will explore the lunar cosmology which sets the temporal rhythm for the reproduction of a matrilineal cosmos and the flow of blood. The damp and watery nether-world of matrilineal substance is distinctly under the control of the moon, and is part of a lunar cosmology which embraces the mountain spirits, human, animal and plant life and the growth of minerals in the ground. The two major nodes of this lunar rhythm are the new moon *orjiwa* and the full moon or *urt'a*, at which the intersection between the vertical flow and the horizontal transition points is most evident, and in which the transition between the two worlds is most possible. Secondly I shall explore another Aymara concept called *ch'iwu* also associated with this lunar rhythm but viewed in this case as the polarity between shadow and light, once again related to Aymara metaphysical beliefs and to potato production and the flow of rain. Thirdly I shall describe the related discourse around

potato production itself.

### Lunar cosmology

Both human reproduction and potato production among the Aymara are closely linked with the periodicity of the moon. The most common name for the moon in Aymara is *isp"axsi*, meaning both moon and month. There is no doubt that the moon is female in Aymara astronomical symbolism and that her periodicities are closely tied to the periodicities of the female human body, particularly with the female menstrual cycle. The word for menstrual blood in Aymara is *p"axsi wila*, meaning moon blood.

In Aymara astronomy, the phases of the moon are important for timing various activities, and predicting weather conditions. The new moon crescent is called *wawa p"axsi* or baby moon. The first quarter is called *ch'iqa p"axsi* or half moon and the increasing waxing moon is called *p"axsip"uq"a* or moon becoming full. The full moon is called *urt'a*. The waning moon again reaches a *ch'iqa p"axsi* or half moon, and then a small crescent called both *awil p"axsi* and *achach p"axsi*, meaning old moon and grandmother or grandfather moon. Here, there is a suggestion that the sequence of moon phases is likened to the stages of a human life-cycle. The dark of the moon is called *jiwa* or dead in Qaqachaka. In other parts it is called *jayri*, *orjayri* *ch'amaka* as is also a lunar eclipse. Another name for the first glimpse of the new moon is *p"axsi wila*, or moon blood, the menstrual blood of women.

Although each lunar phase, its angle in the sky, its colour and cloud-cover is carefully observed, it is the nights *ofjiwa* and *urt'a*, the dark moon and full moon respectively, which are most closely noted,

### Jiwa and Urt'a

Both *jiwa* and *urt'a* are days of *warta*, from the Spanish *guarda* meaning observance.<sup>1</sup> There is a general taboo that you should not walk alone at night outside the house for fear of bumping into something ugly, or *piru*, from the Spanish *feo*, and these days are considered dangerous and nasty or *naxu*. You may not weave or spin on these particular days. The most important taboo, however, is that against cultivation, whether it is sowing or harvesting products, but most importantly sowing.

On both days it is said that no plants grow, or flower, and that if there are seeds in the ground that these will retreat back into the soil. If seeds are planted on these days, such as potatoes, then the seeds will *become* blinded and lose their eyes. When the potatoes are harvested at a later date they are hollow - *t'uxiu t'uxiu* - without eyes, like a skull. This is particularly the case when the seed sowing has taken place at *urt'a*. The ritual name of

potatoes is *tunka layrani*, meaning ten-eyed one, an indication of the importance given to the many growing points, or eyes, of this crop. When these eyes become blinded, then there is no potato production. When the plants are *already* growing and more cultivation takes place on these special days, then the green leaves turn dry and yellow, and the roots shrink back into the earth. They say that the products are lost, using the ritual and generic name of all products - *lla//awa* - more specifically that the moon has lost them.

However, besides being a time of danger and possible damage to the growing crops, the nights of *jiwa* and *urt'a* are also considered to be the most propitious for the reproduction of animals, and the increase of production. On these particular nights, special offerings are made to the mountains and to the *wirjina* or virgins. It is said that the reproductive force of the *illas* (stone amulets of the animals) on the mountains, also called *samiris* (which means literally that which *breathes* or blows) is so powerful at this time, that by their force of breath alone, they may engender female animals to have offspring. *Atjiwa* and *urt'a*, *illas* are said to appear and to sparkle brilliantly in the night. There are many accounts of people finding *illas* identical to animals and their offspring on these particular nights. For this reason, offerings are *made* on the nights of the dark and full moon, and afterwards the animals reproduce by themselves in this manner alone, without the necessity for physical sexual intercourse.

The offerings which are made at *jiwa* and *urt'a* are made especially to the *Tiyu* (from the Spanish *Tio* or Uncle), the god of the underworld and the mines, and the *Tiya* (or Aunt), his consort, and to the *anchanchu* and *tunari*, other names for the *Tiyu*. A *ch'alla* is made to *surti* (Sp. *suerte*) or good luck, and *q'uwa* (a pungent herb) is offered in a *q'uwacha*, a burnt offering. Everything in these special days must be given or offered to the *Tiyu* and *Tiya*.

There is a taboo during this time on sexual activity when a woman has her menstrual period or *wila p'axsi*, or moon blood. It is said emphatically that when the moon dies, a woman's blood flows and care must be taken not to have sexual intercourse. The specific danger is that a woman is considered most fertile during her menstrual period, and therefore more likely to conceive a baby. Bastien has suggested that it is the mixing of the two body fluids - semen and menstrual blood - which is believed to be so potent and fertile, possibly from the observation of animal reproduction (Bastien 1985: 609n3). The baby conceived at this time is not considered to be a child of normal marital relations, however. Rather it is called a natural child (in Spanish *criatura natura/*) or in Aymara, *waxcha*, the magical child.

I would like to call the set of reproductive beliefs surrounding *jiwa* and *urt'a*, incestuous or virgin reproduction as opposed to either *saxra*, in the

sense of life-negating, or more normal sexual and affinal reproductive activities. Virgin in this sense, I think, would be understood to mean a sacred time and space, set apart from normal time, and activities when there is considered to be a flow of relationships and ancestral substance from the spirit world and the world of the mountain spirits, the *Tiyu* and the *Tiya*, to the human world, and vice versa, on both a vertical and a horizontal axis. The medium for this exchange is both the menstrual blood of women which flows *at jiwa* and *urt'a* and the *samiri* or breath, which is the reproductive power of the *turumaya*, understood as either horned animals or the *ilia* stones and amulets, both associated with the mountains. It is an asexual form of reproduction as opposed to a sexual one, and I suggest that it describes in symbolic terms the autonomous reproduction of the matrilineal kinship group, together with all its stock, from within so to speak, rather than describing the relations between two or more groups linked in a wider system of affinal exchanges. It necessarily encompasses the entire cosmos from the level of animal and plant life to the mountain setting and the oceans beyond. The periodicity of *jiwa* and *urt'a* beat the temporal rhythm for this flow of ancestral substance and the reproduction of a matrilineal cosmos.

### Ch'iwu

There is another problematic set of beliefs which also cross-cuts both the realm of *saxra* and *ofjiwa* and *urt'a*, and that is the concept of *ch'iwu*. *Ch'iwu* has many meanings, which seem at first to be contradictory and unrelated. It is variously translated as shadow, cloud cover, and the flesh of animals. It is the ritual name given to meat served at feasts. *Ch'iwachi* is the name for the human placenta, also associated with the notion of shadow. It is also a mountain herb used in rituals, such as the offerings to the mountain spirits, and has an association with the pastures for the animals. *Ch'iwu* is also the name given to the musicians dressed in goatskins called *tapakayu*, who play *pinkillus* or moist wooden flutes and *pututu* which are animal horns at Carnival. It is also the name for their counterparts in the spirit world, the *ch'iwu orjira mayku*, who are said to come from the mountains and the springs of water there, and are associated with the *sirena* (sp.) or sirens the source of music and song, and with the world of the dead.

*Ch'iwu* is also a term for one of the three souls in Aymara metaphysical beliefs, and here it is most clearly linked to the phases of the moon and the days *ofjiwa* and *urt'a*. While *urt'a* or full moon is seen to pass in only a moment, like an hour's cooking time, *jiwa* takes up to three days to pass. During these three days, the moon is described as dead, and people must rest and cease all productive activity.

This suggests an allusion to the metaphysical concepts relating to the soul and the dead among these Aymara. In general terms, a person is said

to have three different aspects: a name or *suti*, a spirit or *animu*, from the Spanish *animo*, and a soul *orjanayu*. There is another aspect called *ch'iwu* or shadow, and its relationship to the other three is not entirely clear.<sup>2</sup> It is this *ch'iwu* or shadow, however, that is directly related to the three days of the dark of the moon. It is said that when the moon disappears at night, so the shadow of the person disappears. It disappears with the dark of the moon and reappears three days later with the appearance of the new moon. Afterwards the moon is said to revive, and it is possible to see the shadow or *ch'iwu* again. The three aspects are said to be reunited once more.

There is certainly some sense in which the *ch'iwu* spirits of the dead in Qaqachaka are associated with the coming of the rainy season, most particularly in the meaning of *ch'iwu* as the shadow of rainclouds which appear during these months. The rainy season could perhaps be viewed here as a structural condensation in the overall year of the three days of the dark of the moon.

There is another moment in the year, however, in which clouds are most carefully observed, and in which a three-day period is more clearly a symbolic condensation of the course of the whole year ahead. These are the first three days of August, when the weather conditions, star positions and cloudcover are all carefully scrutinized, and the weather for the coming year is divined and predicted. According to these predictions, the sowing of seeds, such as potatoes, is made earlier or later in the year. August has also been called the moon month of the year, as the moon is highest in the zenith of the sky and considered to be most powerful during this month.

August, is also seen as a condensed point in the year when the forces of the *illas*, *anchanchus* and *samiris* of the mountains are most powerful. Many libations are made to them, so that they may engender new offspring. In the month of August, the mountains are said to be open, and there is thought to be vertical flow of elements connecting the world of above and below. At this time the Andean spatial cosmology conceived as a vertical hydraulic system is most emphasized. In Qaqachaka, the whole world is said to be immersed upon a base of water. Clouds or *ch'iwu*, although they are seen above in the sky, are said in reality to come from below, in particular from the mountains, and from the permanent ponds with blackwaters which never dry up even in a drought, called *kalis mayku*, which can be found there. It is tempting to see here the source of the waters as *lamara*, the open sea in the lower depths of the mountains, leading to a vertical core inside the mountains with the openings of permanent water holes on the mountain sides, where the rainclouds or *ch'iwu* form, and later fall to the earth again as rain, like a gigantic Andean tree of life.

As the association of clouds and their shadows are seen to bring the rains, so there is a connection between *ch'iwu* as shadow and the fresh

green pasture or *pastu* (Sp. *pasto*), which appears after the rainfall. When the animals eat this, and grow well-fed and have red meaty flesh so they, too, are called *ch'iwu*, more specifically *jach'a ch'iwu*, or large *ch'iwu*.

In libations or *ch'allas* at fiestas to the meat or *aycha*, served to the guests, the ritual term *ch'iwu* is used. *Ch'iwu urputaki* is said at the *ch'alla* for food, for the shadow and the mist. As they eat they say, *ch'iwutak muytayamay* - turn a circle for the *ch'iwu* - once again indicating the horizontal mode of the world of *ch'iwus*, whether in the spiral dance of the *jira mayku* or in the notion of turning expressed here. The connection between *ch'iwu*, rainfall and green vegetation is made again in libations to the pasture of the animals, whose ritual names are *paqura orpaqulla*.

## Paqulla

*Paqura* or *paqulla* is a more puzzling term for the green pastures. It is also used in the first libation of the year to the green stems of beans and flowering stems of potatoes which takes place at Carnival. *Paco*, (ph. *paqu*) according to Bertonio (1612) means "*las yervas que se comen assi crudas*", literally raw herbs, herbs in the sense of green vegetables such as lettuces. *Paco paco*, (ph. *paqu paqu*) however, means reddish brown, in modern usage *paqu* means red, reddish-brown or dark brown. Green and red are two dominant and contrasting colours, and in Aymara this sharp contrast is called *allqa*, a term explored by Cereceda (1978). At everyday level, it doesn't seem possible to confuse these two very different colours.

In the ritual language and spirit world of Qaqachaka, though, these colours evoke powerful images in the natural world. These are the colours worn by the *palachus* or beautiful young girl members of the troops *ofjira mayku*, or *ch'iwus*, the dancers associated with water-holes and the mountains, who appear *atjiwa* and *urt'a*. They wear *paqu awayu*, or red mantas or shawls around their shoulders, and *ch'unq'a pullira*, or green skirts below.

This exploration of Aymara lunar cosmology and the notion of *ch'iwu* draws together the threads of this complex metaphysics so that we may begin to unravel its knot of meanings. The lunar rhythm with its periodicity *ofjiwa* and *urt'a* marks the temporal rhythm for the flow of women's blood, *wila* or redness and its periodic re-enactment in ritual. The notion of *ch'iwu* as shadow connects the body metaphors of bloody placenta and *wak'a* or girdle to the flow of rain and the greening of the earth. Together they set the temporal rhythm and spatial metaphors for the flow of ancestral substance as blood and breath on a vertical and a horizontal axis, and describe in ritual language the vertical descent of spirit into physical flesh and form. In the ritual language of potato production there are the same implicit metaphors.

## Potato production and reproduction

The ritual language used to describe the ripening of the potato plant, also suggests that its greening stem is metaphorically seen as the green skirt of *Tira Wirjina*, the Virgin Earth, and refers to her red rebozo, manta, or shawl above, so that she won't be dishonoured or left naked:

*Wirjin Mamal aver ch'unq"a pullirtaspan, riwus riwustaspan...*

Potatoes as tubers in the earth are said to be under the control of the moon. They are sown when the moon is waxing so that the maximum sap is below in the earth. The potato plant, like the hydraulic mountain, is seen to have a vertical flow of sap in its stem which gives it energy or force, *fuertz* in Spanish. The offering of *untu* or llama fat placed in the ground at the sowing and at the harvest is said to generate *parpa* which means marrow in the case of animals, or sap in the case of the potato plant:

*untun chaspan parpan chaspan sataw...*

The offering of coca leaves, on the other hand, is said to suggest the green covering of leaves to the stem, conceptualized as a green skirt. Here the potato plant, too, is conceived as a tree of life. The roots descend into the earth from the many growing points or eyes which can be closed-up if menstrual taboos are broken. The sap which gives energy to the plant ascends through the stem to the growing points above. Even the moment when the potato bud first nuzzles its way through the hard earth pushing aside the small pieces of earth is vividly named and described.

A libation or *ch'alla* is also made to the fertilizing power of animals who place their manure or *wanu* (Sp. *guano*) on the earth. In ritual language this is called *jira*, literally a turning around. At the sowing of potatoes the llamas are brought down from the hillsides to place *theirjira* or droppings on the earth. *Jira* is the same name as the animals corral, where it turns around before lying down to sleep for the night. It is also a plentiful source of ready manure. Harnessed animals which wear a *karuna* (Sp. *caruna* meaning saddle), also give manure to the ground, and are called in ritual language *wila mamala* or red mamala. *Jira* is said to give energy to the placenta, or *ch'iwachi*, here called *jaka~a*, of *tira wirjina*, also associated with blood:

*jakanatakis umt'anani jakatiarupinipi tira wirjinas katji, wanun-ti jakatnataki wilataki ukarusti wanu ukat umt'anani aver...*

The libation goes on to refer to the *k'inch"u* or waist belt worn in front

of women, asking that the planted potato-seeds may be taken inside, so that they may suckle, *nutnt'asisitnani*. People in general are said to suckle from the earth all their lives, when they nourish themselves with products grown from the earth:

*k'inch"u, quri k'inch"u chuqi k'inch"u k'inch'xarjtita, aver tira wirjin mamala, ukatraki nunt'asisitnani...*

*K'inch'jarxiw* - meaning it is gripped inside the waistband is said as the seed potato enters the earth, then *katusinapaw utji*, as if there has been a moment of sexual contact. Here, the category of *wak'a* or *k'inch"u* as the female waist-band, is the knot or horizontal node which grasps the baby like the placenta. When I asked what was the male element in this sexual encounter, I was told that there was none, not even the plough entering the earth was conceived of as metaphorically representing a man's role in insemination.

### Tirnira

Instead, when the earth is being cultivated, the term *Mama Tirnira* is used, and it is said of the earth - *tirnirtasxi* - meaning she becomes pregnant. They say that it is as if a woman is conceiving a child. When the seed potatoes are placed in the ground, there is a series of *ch'allas* to the *Tira Wirjina*, asking her to take and wrap up the *wawa* or baby in her folds. *K'iruritaki*, they say, "for her who wraps up the baby". She is begged to produce many more *wawas* later in the year. The harvest is viewed as the actual giving of birth, and the food products grown are called *wawa*, or baby in this ritual language. As the harvest is being gathered the word *wawachasxiw* is used, meaning making a *wawa*.

*Imill ch'uqi* is a favourite seed potato for sowing as it has several eyes. Although this makes it more difficult to peel, it is said to be much more fertile than *sayjaqi ch'uqi*, which has only three, four or five eyes at the most. *Imill ch'uqi* is referred to as the daughter or *imill wawa* which must be wrapped up well. The ritual name for potatoes of *tunka layrani*, ten-eyed one as well as expressing the fertility of the many growing points, is also related to the ten lunar-months which is the period of human gestation in the womb.

Now that the earth has become *Tirnira*, people await dreams of pregnant women to know that the cultivation is going well. *Tirnira* is the second or middle of the Pachamana's three aspects, the *taypi*, and is described as a force which descends from above, generating all food products and making women pregnant, by lifting their bellies, *purak aptasi*. As the food products are called *wawa* or baby so the spiral or labyrinthine pathway

through which the baby comes is called *Jira mayku*. It is said to be the middle pathway between the pathways of gold and silver, an allusion to the growth of potatoes in the ground being like the growth of minerals in the mines. *Wawa* is also the ritual name given to food in the offerings to the *Tiyu* and *Tiya* for *surti* or good-luck.

The energy which actually generates the birth process is linked to the notion of *Ispiritu* (Sp. *Espiritu* or Pentecost), a holy breath related to the appearance at Pentecost of the Pleiades on the horizon. This syncretic image taken from the Christian world is linked to the Aymara notion of the spirits of the air, in this case the white dove. As the Pleiades touches the horizon, it fuses together for a moment the worlds of above and below and generates life in each realm. For this reason it is called the mother of the stars and the mother of the seeds.

*Mama Timira* is the name for this force which engenders as well as the recipient of this force as the pregnant earth herself. She is also linked to the powerful symbolism of menstrual blood. It is said that as a woman has her blood, so the *Tira Wirjina* has hers. It is this blood which 'grasps' the *wawa* as the seed is placed in the earth. It is only the fact that people have blood, which makes the conception of children possible, they say.

For this reason, they add, we must offer libations or *ch'a//as* and make the earth grasp our offering of *q'uwa*, *untu* and coca. It has been said by other writers<sup>3</sup> that coca in some sense represents the greening of the pastures which the animals live on, and the greening of the *chacra* with its planted food products. Coca is therefore closely linked to the concept of *Mama Timira*, and it is interesting that the redness of menstrual blood and the greenness of the pastures and *chacras* are linked conceptually in many of the words used in ritual language. There may also be an etymological link between another ritual word for green pasture, *chinku*, which also has connotations of the watery underworld from which animals appear *atjiwa* and *urt'a* and *chinki* which means a blood sister, and more specifically with *chinqi* which is a word for the vagina itself.

The turned earth at the opening of the ground at the first sowing is also likened to blood, and a libation is made to *awara*, which means a source of water, from the Spanish *aguada*, but also, by association, the rains and womens blood. When the rainwater later washes the earth and makes it turn red, again the image of womens blood is invoked.

The description of the earth's covering during the course of the year are full of metaphors of colour and clothes and personification. When the earth is resting like a person during the dry season, she is said to be white as the parched earth and dust is white. Afterwards her time is said to come, *tim-pupawpurini*, and she is forcefully requested to dress herself in red, and al-

lusion to the process of first ploughing or *barbecho* (Sp.), when the turned earth is red in colour:

*Tira wirjina janiw maysipani ma panti awayt'asin munkiti,  
awayt'aspanaysapxi*

It will be recorded that the rainy season, too, is called *timpu marani*, the time of the year. it is her time of blood, and she is called *p'aqu tayka*, literally the red mother. When the harvest is gathered she is thanked for producing so much, and told to rest until her time comes again.

Potatoes are also symbolically linked to toads, which are the virgin par excellence. Both are also said to be under the influence of the moon. Toads are called *wirjina* or virgin in ritual language, but at the same time men are teased that toads are their wives. When a toad appears in a field at a potato sowing or harvest it is said that the *Tira Wirjina* is pleased, and there will be a good crop of potatoes. There is always a *ch'alla* or libation made to the *Tira Wirjina*. Toads are also associated with *surti* or good-luck and with money, called ritually *p"axsima* or moon mama, and with the growth of minerals in the ground.

There are said to be three types of toad: white toads, green toads and black toads. If a white toad appears, they say that the rains will pass and it represents the white clouds of *qinaya* of the dry season. A green toad, on the other hand, is associated with the rainy season and with the rains, *jallu mara*, and presumably with the green pasture. A black toad is associated with the rainy season too, but explicitly with the *ch'iwu* or dark shadows under the rain-clouds. White toads are said to become transformed into black toads in the rainy season. The reason put forward for this is that they have eaten blood and become pregnant. Black toads are also most closely associated with potatoes under the ground, and with *ch'iyarimilla*, a black-skinned potato called black girl as opposed to white toads which are associated with *withjanq'u imilla* or white girl potatoes. It seems then that black toads in particular may link together the notions of *ch'iwu*, or shadow with *jiwa*, the dark of the moon and with the placenta or *ch'iwachi*, both linked in turn to ancestral substance as women's blood, but this time blood congealed or eaten and contained within a skin to become a potato or *imill wawa*, a girl offspring.

It is important to note, however, that the seed potato or *wawa*, placed in the earth's care, is not a Homunculus, merely nourished passively in the womb of Mother Earth, as patriarchal myths would have it. The seed of potato is a girl-child, or *imill wawa*, and a marriage is said to take place between the daughter and her mother. In other places on the altiplano, this same idea is celebrated by the placing of white flags in the earth after the

planting ceremony, the same flags as those used in a marriage feast. In some way it may represent the actual reproduction of potatoes by a process of cloning, so that the mother does literally give birth to and marry her daughters. When I asked how it was possible to have a marriage between a mother and her daughter, I was told, however, that it was a matter for *wirjina* or virgins: only they understood.

### NOTES

1. Other important days of *warta* in the year are Santiago on 25th July, San Felipe on 3rd May, and San Gabriel on 29th September.
2. In the La Pez area, for instance, the three aspects are named *ch'iwu*, *ajayu* and *animu*. In this case, the *ch'iwu* or shadow is interchangeable with the *suti* or name aspect. *Ajayu* is a dialectical variation of *ofjanayu*.
3. For instance Tomoeda, 1985.

### REFERENCES

- Bastien, J.W.  
 1985 Qollahuaya-Andean Body Concepts: A Topographical-Hydraulic Model of Physiology. *American Anthropology* 87:595-611.
- Bertonio, L.  
 1612 *Vocabulario de la Lengua Aymara*, ed. fac. 1984, Ediciones CERES Cochabamba, Bolivia.
- Bouysse-Cassagne, T.  
 1980 *Les Hommes d'en Haut: Rapports Sociaux et Structures Spatio-temporales chez les Aymara XV-XVI<sup>e</sup> siècles*, ThOse de Doctorat, Paris.
- Cereceda, V.  
 1978 Semiologie des tissus andins. *Annales* 33(5-6): 1017-1035. Paris.
- deLucca, D.M.  
 1983. *Diccionario Aymara-Castellano, Castellano-Aymara*, CALA, La Paz, Bolivia.
- Earls, J. & I. Silverblatt  
 1976 La realidad física y social en la cosmología andina. *Actas del XLII Congreso Internacional des Américanistes* 42(4):299-327.

Flores Ochoa, J.A.

- 1977 Aspectos Mágicos del pastoreo: Enqa, enqaychu, ilia y khuya rumi, in J.A. Flores Ochoa (Editor): *Pastores de puna: uywamichiq punarunakuna*, IEP, pp. 211-238.

Harris, O.

- 1982 The Dead and the devils among the Bolivian Laymi, in M. Bloch and D.J. Parry: *Death and the regeneration of Life*, Cambridge: Cambridge University Press, pp. 45-73.

Poewe, K.O.

- 1981 *Matrilineal Ideology: Male-Female Dynamics in Luapula, Zambia*. New York: Academic Press.

Sherbondy, J.

- 1982 El regadio, los lagos y los mitos de origen. *Allpanchis* 20:3-32. Cusco.

Tomoeda, H ,

- 1985 The Llama is my chacra: Metaphor of Andean Pastoralists, in S. Masuda, I. Shimada, and C. Morris (Editors): *Andean Ecology and Civilization*. Tokyo: University of Tokyo Press, pp. 277-300.

Urton, G.

- 1981 *At the Crossroads of the Earth and the Sky: An Andean Cosmology*. Austin: University of Texas Press, pp. 219-259.

Zuidema, R.T.

- 1964 *The Ceque System of Cuzco*. Leiden: E.J. Brill.
- 1977a The Inca Calendar, in A.F. Aveni (Editor): *Native American Astronomy*. Austin: University of Texas Press, pp. 219-259.
- 1978a Lieux sacrés et irrigation: Tradition historique, mythes et rituels au Cuzco. *Annales* 33(5-6):1037-1056. Paris.