8. Of *Pircas* and the Limits of Society: Ethnoarchaeology in the Puna, Laguna Blanca, Catamarca, Argentina

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Characterization of Laguna Blanca and its Population

The District of Laguna Blanca is located in the southern Argentine puna, North of the Department of Belén, in the Province of Catamarca. Until the end of the 1970's the population was subject to a notable isolation (Cruz 1967) from the circuits of capitalist commercialization which was demonstrated by food and clothing self-sufficiency according to local use, and practically no reception of outside services, nor massive communication media (Forni et al. 1986). This situation was in part reversed by the construction of Provincial Route 43 in 1979 that crosses the southern part of Laguna Blanca. Almost simultaneously, more than 20 jobs in the public sector were created, thanks to the interest of the government of the Province of Catamarca to establish a wildlife reserve (admitted by UNESCO under the program MAB) which brought more communication with the capital of Catamarca, settlements of families from low valleys (*abajeñas*),[1] plus the constant presence of businesses.

The population of Laguna Blanca is composed of 542 people distributed in 99 domestic units. Their socio-economic situation is complex. Simplifying, one can say that their productive unit is the domestic group. These high altitude pastoralists (Flores Ochoa 1977) live in a dispersed settlement pattern. Usually their residential bases are located between 3,600 masl and 3,200 masl,[2] and involve complementary subsistence horticulture (Horkheimer 1990:22). In the majority of cases they rent productive lands and homesites, and there is a small sector of landowners. Although the raising of animals is the traditional economic activity, the same person usually does activities as diverse as cultivation, commerce, remuniterative jobs, and craft production (principally, textiles). Without doubt, llamas (*Lama glama*) constitute the most representative herd animal, with goats and sheep for meat production, hides and wool. Other animals like donkeys and cows, have a secondary economic importance (although they have a tendency to introduce differences in prestige in the community). These products, with some derived (such as cloth and spun wool), are sold or used for market exchange.

Traditions in Laguna Blanca

If we like to present the inhabitants of Laguna Blanca from their ethnic components, we should appeal to descriptions that consider religious aspects, linguistics, social organizations, etc. I will verify a series of behaviors and ceremonies for the District of Laguna Blanca with prehispanic roots. Many of these experiences are entirely coincident with manifestations from other Andean localities, situations that are sustained in an "Andean Rationality," and forged from a cumulation of common traditions.[3]

Perhaps the cult of *pachamama* (in Quechua, literally Mother Earth, *Madre Tierra*) occupies a central place in the Pan-Andean universe (together with some Catholic referents that have been labeled Andean Catholicism), since this divinity is involved with the majority of prehispanic rituals. On the first of August, the rituals begin in honor of *pachamama*.[4] In the morning, the *lagunistos* (the inhabitants of Laguna Blanca) stand before the rising sun so that *pachamama* will not find them sleeping and eat them (*para que uno no lo pille y lo trague la tierra*: Fidel, G. (42)). Today, women prepare a special yarn, with black and white threads twisted in what they call *zurdo* (twisted to the left, or in an "S"), and they use it to make a simple bracelet around their wrists and ankles.[5] They keep these during the whole year for protection. On the

first morning they prepare a great quantity of the best traditional foods (which can include some baked meat *horneado*), and they also gather a great quantity of alcoholic beverages. In the proximities of the residential base they excavate a pit in which they will "feed the earth", and at midday they make a *corpachada* (this word is derived from the Quechua *korpa* that signifies hospitality or invitation, from the Quechua verb *korpachaj*), an offering to *pachamama* of the best delicacies. We have to remember that while the month of August is the most critical during the year, (when they avoid slaughtering of animals because they are thin, because the pastures have not grown enough), and being a lean month, the men and women are preparing a feast of abundance in order to invite *pachamama*. Some people also go up to the *bocas de cerro* (natural holes from where pachamama eats) to leave their offerings (*corpachar*).

Mother Earth is remembered with prodigious offerings that people make to her because she has the ability to give and to take; for example, when drinking, the first drink is sprinkled on the ground for *pachamama*, sometimes preceding a thanksgiving, or prayer "*pachamama, cusiya, cusiya* (*cusiya*, from the Quechua, happiness)," When traveling, and crossing a mountain pass, generally there is an *apacheta* (a sacred mound of stones). In this place, people offer *acullico* (in Quechua, *aculliku* = a quid of chewed coca leaves), some stones, and if one has it, alcohol and tobacco. And then one invokes *pachamama*, *Santa Tierra*, etc... for a good trip.

We also find *apachetas* in the vicinities of corrals used during the festival known as *La Señalada*. This is a an occasion of propitiation in order to recognize how much the household has grown, and to count the numbers of animals. The corral is the principle scene in which the ceremony takes place. To begin, the head of the domestic group that is hosting excavates a pit approximately in the center of the corral where the *corpachada* will take place. Then he sacrifices the principle offerings, the classic trio of coca leaves, tobacco and alcohol. The participants surround the pit, they pass around a small knitted bag that they call *chuspa*, where they keep their coca leaves. Each person makes their offering to *pachamama* giving her some leaves, asking for more animals. Following, they extend a ritual *pullo* (Quechua term, meaning *manta*, or blanket), where they immobilize the animals to be marked, two at a time. These animals were previously *invita* or honored by being given some coca leaves. The rectangular blanket is placed with the longer side oriented East-West; in that way when the animals come in to the *pullo* ritual, they have to do it through the West, and at the end of the *Señalada* will be leaving for their encounter with the sun (in the East). *La Señalada* of the animals consists of cutting a part of their ears following standard forms (which facilitate their recognition) and sowing buttons made with colorful yarn that they call flowers (*flores*). The yarn used in these flowers is spun to the left. Also, in the back, they tie colorful wool as decorations called *chimpus*. The clipped remains of the ears are kept in *chuspas*. During the *Señalada*, they accumulate some of the earth stuck in the animals' hooves in the *pullo*, and also some coca leaves that fell from the animals mouths when they were honored (*invita*).

At the end of the marking activities, they fold the *pullo* with the earth and coca leaves, and generally an old woman ties it across her back. This woman is the head of a procession followed by two other officials, one playing the *caja* (traditional percussion instrument) while the other brings wine to invite the people who walk behind. And altogether they circumambulate three times around the corral, singing the following *copla*: *"la hacienda al corral, dando tres vueltas muchas mas han d'entrar."* Finally, they take the ritual paraphernalia out of the corral, to the East, because that is where the sun rises, but before there are 2-3 *cortadores*, standing to open the corral for the stampede of llamas, in charge of announcing their desire for growth of the household wealth (I want one hundred, I want two hundred...). Behind the last animal, all the assistants leave the ceremony except for the hostess who kneels down, prays, takes a handful of earth, and throws it in the air in a cross-shape.

As I said before, in the proximities of the corrals there is an *apacheta* which is also decorated (*chimpiada*) and they repeat the offerings as they did at the offerings at the pit. They also include the remains of the ears from marked animals (contained in the *chuspa*), the blood of one that has been sacrificed, more coca leaves, and what has been gathered in the ritual *pullo*.

Generally, sowing and harvest days are also moments for thanksgiving ceremonies. With the expression "*La tierra da, y la tierra quita* (The earth gives, and the earth takes)." As a prayer, they start offerings (again the trio of coca, alcohol and tobacco), buried or burnt in the agricultural plot (*canchón*).[6]

In an other occasion, thanking Mother Earth

constitutes a rite of passage from the first to second stage of childhood, when the boy or girl turns two years of age, expressed in the first hair cutting, called *rupa chico*, or *ruti chico*.[7] For this occasion, the boy or the girl arranges his or her hair, making a lot of *trencitas simbas* (little braids), following this the attendants start cutting one by one, and give the child preferentially young animals (like *tekes*, or young llamas), young goats, calf, lambs, or actually money, that from that moment will become property of the girl or the boy.

These ceremonies are totally or partially constituted by practices with prehistoric roots that can serve multiple purposes and exist in many contexts,[8] just as well as prehispanic terms used for naming aspects of the ritual. Words with origins in Quechua, Aymara, Cunza, and Cacán, are used to designate animals, plants and places, as well as an infinite number of productive activities. We could extend this consideration to a conjunction of cultural particularities of the inhabitants of Laguna Blanca, for example, myths and legends, or foods, music, mortuary practices, value system, or the structure of architectural space.

As we know, knowledge processes reflect differences, said another way, they are the consequence of the production of successive acts of distinction (delimitation of differences) for which comparison is unavoidable. The conceptualization of the material culture that the marks off human groups as much as their own discursive constructions react on representations of the past in a clear attachment to the processes of the construction of individual and collective identities. The basis for considering a human group as an ethnic group, begins with a sociocultural consensus on criteria, that occurs in a particular historical moment - probably mythified - where people start to agree on certain practices and discourses that tend to create a cohesion (founded in a dynamic process of negotiation of meaning and permanent actualizations of the same that open the possibility to delimit other cultures).

Ethnicity as a process of identification could imply (as a matter of pre-text) many sociocultural aspects of the *lagunistos*. However, if we want to center ourselves in the categories of self-adscription and of adscription on part of other cultures (this is a simplified version of Barth 1979) as classic ways of ethnic characterization, it makes a descriptive account of the *lagunistos* as an ethic group problematic.

Although, in relatively recent accounts the *lagunistos* were referred to as *indios* (for example in the journey of the German botanist Paul Gunter Lorentz in 1872 in Laguna Blanca (Gonzales 1971), or in the manuscript that R.A. Montilla gave in 1909 to the governor of Catamarca), or as *collas* (Carceres Freye 1956), the people of Laguna Blanca are not presented as being part of an ethnic group. This apparent contradiction leads us to the characterization of the *lagunistos* as integrated into social classes of denied ethnic identities, for which the stigma of their ethnicity means the denial of their adscription. In spite of this ethnic indefinition, it should not be strange that one confronts in the reality of Laguna Blanca that individuals participate in the "Andean World Cosmovision", a situation that we believe will be reinforced in the following pages.

Typology of Houses/Living Sites in Laguna Blanca

In our study we feel that it is important to refine knowledge of the dynamic regional construction, approximating to a general panorama of the peoples' landscape management. From the relevant data, we develop a classification of the architectonic structures upon which we focussed, and their construction techniques, and materials they were made of. Also our typology relates to the way the inhabitants conceptualize their landscape, answering to their models of space utilization. Because of this, we had to go back, almost circularly, to a previous question, "What is the conceptualization of space that will allow us to enter this universe?" In other words, from what ideas of space have we begun to formulate our proposal? We agree that the diverse elements of all societies are represented spatially in a way that the same space is socially constructed. We had thought about the rationality of the use of space, and we can see that the criteria of relevance conjoin, cross, and represent to us the evident complexity of human decisions defined as settlement space. So that, in the use of habitation space in Laguna Blanca, we have recorded differences in intensity, distribution, and aggregation of settlements. This presents us with an argument to postulate a typological order founded as much in physical and functional characteristics as in symbolic characteristics differentiated between:

a) Residential Base Aggregation

This refers to a level of architectural organization mediated by the encounter between two or more domestic groups in neighborhoods,[9] situated

close to a building (one or more than one) of a public institution. For example, in the locality of Laguna Blanca, the 23 domestic units are gathered around the primary school, the police station, the clinic, the church, the *Dirreción Provincial de Ganadería*, and of the water sanitation plant; in the locality of Corral Blanco, the five domestic units aggregate close to the buildings of the post office, the primary school, and the clinic; in the locality of Aguas Calientes, the only two domestic units are close to the primary school (in this last settlement we can find some other houses used by people during the school session). Each one of these aggregations correspond to a jurisdiction according to the census organization of the district.

b) Isolated Residential Bases

Usually, they assume architectural expression of a single domestic unit. Generally, we can find them located near *vegas* (marshes) or near springs. They are the center of the socioeconomic domestic production system of the territory in conjunction with one or more posts (*puestos*), or temporary habitations (see item c, and for various windbreaks see item d).

c) Posts / Temporary Sites

They are minimal occupational productive units of multifunctional space. They are crude constructions, although of variable size, that tend to be small in relation with the residential bases. They have at least one place that functions as a living/sleeping space, they can even have a second room that functions as a kitchen and even a third room that functions as a storage room.

d) Windbreaks

These are architectural structures of reduced dimensions, almost enclosed by stones, of low height, generally almost circular, destined to serve as shelter from the wind for the shepherd when he is guarding his flock. The construction denotes a level of expediency with which they were built, a quality that should not be understood as occasional utilization; on the contrary, the shepherds use the same windbreaks systematically through the years. There can be as many windbreaks as there are places that shepherds pasture animals. Usually, they do not have any kind of associated artifacts. These units were not counted (See Table 1).

The residential bases, the temporary sites, and the windbreaks, are part of a architectural complex of productive occupations. These three forms are part of the visible manifestation of the use of space (construction of the landscape) expressing the situated condition of the men and women of Laguna Blanca.

Setting aside the windbreaks for simplicity and expediency, we will point out the principle differences and similarities between the residential bases and the temporary sites, reflecting the expressions of the inhabitants of Laguna Blanca according to their own classificatory criteria. It can be said that the difference between temporary sites and residential bases have to do in the first place with the time of permanency in each part of the settlement system. The regime of occupation in each type of settlement is subordinated to the management of an economy in which herding occupies a central place. Although lately, there are lapses in the annual period in which the Llamas graze far away from their owners (not being followed especially) the time of the occupation of the residential bases

Table 1. Number of Residential Bases (Isolated and Aggregated) and of Temporary Sites (*Puestos*), with data discriminating for each jurisdiction, and those corresponding to the whole district. Data were obtained during fieldwork in 1992-1993.

		Living Sites				
		Residential Bases			*Puestos*	
Jurisdiction	**Population**	Isolated	Aggregated	Total		**Total**
Laguna Blanca	191	14	23	37	23	60
Corral Blanco	176	29	5	34	27	61
Aguas Calientes	175	26	2	28	37	65
Total	542	69	30	99	87	186

experiences a variation that goes from between 6 months to almost a whole year; for their part, the occupation of temporary sites fluctuates from 150 days to a year, and a couple of days every two months (changing according to the regimen of herding).

Commonly, in the principle residences (residential bases), a considerable quantity of activities take place during most of the year, on the other hand, the temporary sites are occupied in a transitory way the rest of the time. This combination means that the habitation structures (residential bases and temporary sites) participate in different construction modalities. In summary these are:

1) The principle residences have, in relation to the temporary sites, more elaborate construction, with more activity areas, and a larger size. The residential bases have up to 8 activity areas. On the other hand, the temporary sites never have more than three activity areas.

2) In opposition to the temporary sites, the principle residences generally have structures with a larger structural differentiation (clay or stone ovens, weaving windbreaks, garbage pits, many corrals for the herd and harvest (*canchones*), pits where they keep seeds, occasionally latrines, etc.)

3) Temporary sites can belong to a domestic unit or only to some members of that group or also can be property of two or more domestic units. Their ownership can also be related to non-consanguineal relationships, the principle residences, on the other hand, correspond to just one domestic unit.

4) For reasons of actual household management, the temporary sites can be in places higher or lower than the principle residences. The regularity indicates that sites located in the lower areas are for sheep and goats, (more resistant to *Fasciola hepatica*), and sites higher (more than 3,600 masl) are llama sites (because these animals are more sensitive to endoparasites).

About the Settlements...

To order the criteria that the inhabitants employ when thinking of a new settlement, we thought it would be opportune to divide them into two factors. The first is the selection of the zone for settlement, including the following items:

a) relation with the properties of the land
b) responding to relations of kinship and neighborhood
c) proximity to water sources
d) characteristics of the soil for agriculture
e) relatively level slope
f) proximity to an archaeological site[10]
g) proximity to pastures
f) better institutional opportunities

The second factor corresponds to the orientation of the house, and it includes:

a)order, respect to the cosmological precepts
b) prevalent wind direction
c) location of principle roads
d) possibilities of expanding the house

The plans of the sites are created by the spontaneous planification of the areas; for their conformation, some share the walls and some just limit by their corners. Their construction dynamic is many times reflected in the sequence of steps implied in the construction process. The basic conformation of the different designs can be reduced to the distinction of five forms: 1) dispersed, 2) in line, 3) in "U," 4) closed, and 5) compact.

Entering in other details of the settlements referred to as the construction modality, we record a sequence of changes that go form a type that we call traditional to one we call institutional, or *abajeño*.

The first of them is represented by a settlement of type 3, or U (33.33% of the total of residential bases) with a average surface for each area that goes from 12-14 m^2. Each one of the areas have one independent entry that connects to a central patio. The walls are of stone (in 73.53 % of cases for Corral Blanca, 50% in Aguas Calientes, and 29.73% in Laguna Blanca) with mud mortar. The roof is from *paja* (thatch) (*guayada*, name derived from Aymara *waylla*, for a specific grass, *Festuca* sp.), and with two roof gutters (78.57% Aguas Calientes, 39.29% in Corral Blanca, and 10.9% in Laguna Blanca). The floors in the whole district are of earth in some 92.92% (the other 7.08% is, in part stone and cement) and they are semi-subterranean (between 0.20 m and 0.40 m depth). There is frequent use of the wood of *cardón* (*Trichocereus pasacana*) as a material of construction of posts, beams, doors and windows. The doors have regular dimensions of 0.70 m by 1.20 m and they are joined by *tientos* (leather straps). The windows have small dimensions, in many cases they are replaced by simple holes that are just closed with stones; in many areas we recorded the complete absence of this kind of opening. In the interior of the habitation areas, there are one or two *estrados* (platforms), made with stone and mud, and elevated from the floor between 0.30 m and 0.60 m. Their dimensions are 0.70 m wide and 1.90 m long. The *estrados* are joined to the wall and they are used during the day as a seat, and as a bed during the night.

With the construction modality of the type institutional or *abajeño*, we can see modifications in the architectural style, accompanied by the introduction of non-local materials. Lately, the use of a roof of *torta* (mud mixed with grass), supported by beams of alamo wood, and incorporating plastic for impermeability. Actually, the alamo wood is also used for doors and windows. Instead of stone or wood for the lintels, now they use cement; They also made the floor of cement in a few cases (and also painted in some areas). For tying and fastening, they use wire and nails respectively. In the traditional architecture as we said in the previous paragraphs, the roofs have two rain gutters. With the modifications the standard changed to roofs with one gutter. The use of alamo wood beams which are larger than those of local *cardón* wood, now spaces sensibly bigger can be roofed. Generally, the walls are constructed of adobe (unbaked bricks of mud) instead of stone, and the floors are the same level as outside.

After a comparison of the data, we were able to see that the passage from the traditional pattern to the institutional or *abajeño*, has taken place principally in the jurisdiction of Laguna Blanca. In the jurisdiction of Corral Blanco, this model has been partially adopted and the institutional modality is practically not represented in the jurisdiction of Aguas Calientes.

Without the pretension of making causal interpretations, we are able to comment that it was possible to investigate the reasons for this process of substitution because it was happening during our investigation. According to the inhabitants of Laguna Blanca, it was almost unanimous that these modifications approximate the ideal architectural model of construction exemplified by public buildings (e.g. primary schools).[11] In order to highlight the strength of some cultural impositions from this new architecture, many changes with the new institutional style were adopted with certain functional disadvantages.[12]

As we know, all residential bases and temporary sites possess a space destined for culinary activities. Although in general terms, there are differences in the construction details between cooking spaces of temporary sites and those of residential bases, the most notable are between spaces designated "kitchens" and other spaces in the sites. Basically, these differences are:

1) Kitchens have the most traditional plans. Most traditional kitchens are circular. In some cases, they do not construct special structures for cooking directly, but cooking is done outside, *al campo*.[13]
2) In general terms, fewer construction details of termination are kept.
3) Commonly, the spaces for kitchens are smaller and are constructed with local materials.

An interesting fact is that it is in the kitchen where the domestic unit spends most of its time in the house. It is a multifunctional location where not only do people prepare food, but it is the place where the family gathers at night, it is a place where visitors are received[14] and fed, and it is where small domestic animals sleep. Despite the importance this space has in the social domestic milieu, it does not receive special decorative attention, nor details in construction, nor quality of materials. The kitchen, being the most traditional space in the residential base is, without doubt, the space identified with women.[15] Finally, in the majority of cases, the kitchens are to the North of the settlements, and I will return to this fact later.

Ethnoarchaeological Considerations

The cases I am going to deal with provide an excuse to reflect on our own practice of archaeology, something I have characterized as *common sense archaeology* (Western) (Delfino 1995a:69). This concept should be referred to as a conjunction of basic suppositions widely accepted, to a large degree unconscious, unquestioned and self-evident. As Manuél Gándara V. (1987:9) said,

> Es evidente que, más que teorías observacionales bien definidas, explícitas y corroboradas, la arqueología incorpora un conjunto de procedimientos técnicos, repetidos por tradición, cuya fundamentación teórica permanece siempre sin discutirse.
>
> It is evident that, more than well-defined observational theories, explicit and corroborated, archaeology incorporates a conjunction of technical procedures, repeated by tradition, whose groundedness remains always without discussion.

Other authors concerned with epistemology have alluded to this problem using other notions. Some of the connotations of the paradigm would be partially contained in the common professional sense to which I have referred, while others such as mindscape and basic underlying assumptions would be yet more important than the proposed concept (see Kuhn 1985; Maruyama 1980; Gouldner 1973; Lores Arnaiz 1986 respectively).

If we accept that in each act of distinction we

produce differences in the corresponding reality, we see that, when we refer to "the common sense archaeology," punctualized as "Western" (in terms of cosmovision), we introduce the possibility of alternative cosmovisions (e.g. Mamani Condori 1992a,b). In South America, concepts like these have been coined "Andean Rationality" and "Andean Cosmovision" (see for example Golte 1987; Grillo 1990). Archaeologists who produce interpretations from these or other cosmovisions will be in a position to obtain different final results.[16]

Perhaps here we should reflect. More than once, I have argued in favor of an "Andean World Cosmovision" because I value the contextual interpretive possibility that it offers, but I am conscious that when categories are lacking an historical dimension, and are reified acquiring an essentialist character, they could work against us.

Probably one of the most interesting things about ethnoarchaeology is its reflexive possibility. From this form of knowledge we can look at details of multicausal variation in the knowledge we possess of *other cultures* producing a reaction that constantly questions archaeological practice. One thing we can examine is the practice of producing causal interpretations almost entirely based on functional criteria.

In order to reflect on these issues, we will examine four examples of this manner of questioning. They are:

1) The *pircas*[17] as the limits of society
2) The size of settlements, A Question of Prestige?
3) Interior space: Roofs as deposits of objects and ideas
4) To the Left, Round Kitchens.

1) Pircas and The Limits of Society

> ...significant symbols extract, partially, their symbolic significance from pragmatic significance, but they are not, in some fashion, mere systems of abstract structural symbols. (trans. from Hodder 1994:137)

We said that important fragments of reality can be explained, by interpretations of an organicistic type. However, we see that, for the comprehension of other aspects of human complexity, we must direct our attention to an ideational camp. As a means of illustrating this, I will present an example that will help us to reflect on the complementary articulation of approximations many times considered as excluded alternatives. The case is that: in Laguna Blanca *all that has significance for men and women*, excepting springs and ovens, *is walled*. Although the land can be marked off by land owners or renters, the question of the walls should not be reduced only to the idea of demarcating possessions or property.

Obviously people wall up corrals to enclose animals, particularly in local herding, or to retain some of the animals for dairy (domestic animals introduced by Europeans). According to native households, llamas are only enclosed for special times and occasions (e.g. for the *Señalada*, for slaughter, or in the case of *chasnarlo*, packing an animal).

But *canchones* (agricultural plots) are also walled, as well as subterranean deposits of seed potatoes, and garbage; in similar fashion people wall in trees, looms, and in general, the residential base has a perimeter wall.

One cannot explain the conjunction of all of these cases as a preventive measure against damage from animals. I do not believe that the fact that dogs scatter garbage, that burros, mules and goats graze on small trees, that goats and sheep eat crops, or that pigs are able to dig up deposits of seed potatoes, etc., is sufficient to explain all of these situations.

Perhaps an important guideline for beginning our inquiry is that in precolumbian times, particularly in the Formative Period when occupation of the eastern piedmont of Laguna Blanca was very intense, or, much later, with the introduction of the European hacienda, people walled in their agricultural plots, or *canchones*. Perhaps someone arrived at the thought of another precautionary measure this time to guard the llamas; but the actual experience of managing a household demonstrates to us that the herders insist that llamas graze in altitudes higher than 3650 masl, above the location of these *canchones*.[18]

The *pircas* can also be interpreted as barriers to erosion, but, in this case, it would not be necessary to have a wall on the uphill side of the slope. From another argument one is able to adduce that walls serve as barriers against wind and perhaps this is the most convincing reason, at least if one is searching for *ad hoc* functional hypotheses. Without diminishing the importance of these bioenergetic alternatives, I believe that reducing the problem to these causes results in an exercise of simplification that is too limited. It even seems doubtful that in this way we are able to give a satisfactory account of the conjunction of reasons that are operating to explain the why of the perimeterization of "the things of the people" in Laguna Blanca.

In order to consider an alternative, we shall think of the cemetery. As with all of the cemeteries of the country, in Laguna Blanca, the cemetery is delimited with a wall, but here the functionalist arguments lose their effectiveness because one does not need to "enter" to visit the dead. Undoubtedly, we have a demarcator of context, and it is improbable that the wall is a windbreak (the living spend few hours during the year there, and the energy expenditure involved in constructing a wall is notably high). Also, the door is curiously oriented toward the East, similar to the majority of doors in residential bases in Laguna Blanca.[19] If we consider that there is a correspondence relation between the "World of the Living" and the "World of the Dead", then, the circumscription of the dead, as a non-functional resource indicates to us a similar circumscription of the living.

I maintain that the most plausible interpretation is that in Laguna Blanca, people are making contours of significance with their walls. Or in reality, human (or domestic) significance is constituted because of the assignment of limits. Now I return to an issue from the beginning of this section: "Why are the springs and ovens not enclosed in *pircas*?

In order to initiate another examination of meaning, I will describe interviews that contain significant elements for our reflections.[20] In a study of *pachamama*, Acuña (1993:19) encountered some testimonies of interest for an examination of alternative arguments.

> ...el 1° de Agosto *no se enciende el horno ni se recibe agua* 'porque ese día se están peleando los elementos: agua, tierra, aire, fuego. (italics not in original)
>
> ...recuerdo que al tomar precauciones con el agua y el fuego del día 31 de julio, se nos decía a los menores que el 1° *no debíamos mirar el interior del pozo, ni sacar agua* porque veríamos algo horrible. Interrogamos a las señoras mayores y la de 90 años nos explicó 'ese día (el 1° se pelean los cuatro elementos: agua, fuego, aire o viento y tierra.' Esto implicaría el retorno a un caos, por el enfrentamiento de los elementos, situación que pondría en peligro a la tirra, a Pachamama. Este es sin duda el motivo de precauciones y cuidados observados en todos los testimonios. La Tierra entra en conflicto el 31 de julio en altas ohras de la noche, por ser las tinieblas propicias para caos y amigos ed la muerte. Tras doce horas de lucha, al mediodía del primer día de agosto, la tierra está en peligro de ser vencida: el Fuego podría incendiarla y termniar su fecundidad; el agua anegarla y termnar con su consistencia; el Aire o el Viento podría dispersarla y terminar consu estabilidad, y entonces el mundo dejaría de ser la morada del hombre. Pero los hombres perciben el peligro que corre la Tierra, Pachamama, y acuden en su ayuda con el ritual del mediodía. (italics not in original)

Intending to make sense of these statements, we are able to establish a divison between that which has (or should have) limits, and that which does not have (or should not have) limits. This gives us the impression that all of the things of people (made-domestic, as in the totality of made things) should be delimited. The limits between people are marked by their possessions, for them it "should be" indicated with a barrier that separates and differentiates their possessions, and these signs should be made in the view of others. In contrast, that which is of *pachamama*, and that which is given to the deity as a thanks or prestation (and not as mundane, earthly possessions as a concession of people), should not be set apart from the totality and should not have external signs of possession. The spring and the oven (in the indigenous view, the spring for fire) belong to *pachamama*, with unequivocal signs that people do not wish to risk the potential danger of inciting her.

Finally, we are able to think that the *pircas* (the limits) in Laguna Blanca, are not only signs of protection, guarding or property, but also the enunciation of the significance of demarcation of things that pertain to people in an interaction with the divine.

2) The Size of the Settlements: A Question of "Prestige?"

As one of the purposes of our investigation, we intended to look at the reasons for differences between the sizes of residential bases, and we will try to arrive at a formula of local validity for counting domestic space in order to obtain demographic projections.

Consulting the literature on demographic estimation, the data obtained in the District of Laguna Blanca resulted in notably higher predictions. It seems as though other work is too limited by context to be usefully generalized.

For example Berberián and Nielsen (1988:63) presented some calculations of interest for comparative analyses of population estimation:

> Según Narroll (1962) una persona requiere de un espacio de 10 m^2 para desarrollar sus

funciones sociobiológicas. Otros autores consideran demasiado elevada está cifra. Así, para Hill (1966), sería de 4.55 m^2 por persona, mientras que Longacre (1976) estima 4.10 m^2 and Summer (1979) lo lleva a 5 m^2.

According to Narroll (1962) a person requires a space of 10 m^2 in order to satisfy his sociobiological functions. Other authors consider this figure to be too high. According to Hill (1966) the figure should be some 4.55m^2 per person, while Longacre (1976) estimates 4.10 m^2 and Summer (1979) gives a figure of 5 m^2.

For his part, Charles L. Redman (1991:265) mentions the work of Kent V. Flannery (1972) where he proposed that village/hamlet communities register a mean of 10 m^2 per person (calculated coincident with Narroll's figures).

In our case, taking data from 26 residential bases located in the jurisdiction of Laguna Blanca (corresponding to 70.27% of the total in the jurisdiction), we obtained a mean surface area in a residential base (or habitation) per person of 29.54 m^2 (see data in Table 2).

Our data were "highly significant" according to a Chi-square analysis (relating the age differences of the head of the domestic group (HDG) with the area of the residential bases) in two combinations: 1) HDG's 40 years or older, and 2) HDG's less than 40 years of age. Also, we calculated the mean membership of a domestic unit and the mean area of the residential base for each group; the results were significant.

1) The mean number of members for domestic units belonging to HDG's less than 40 years old is 5.8 members, while the mean for domestic units belonging to HDG's greater than or equal to 40 years of age is 5.19 members.
2) The mean area of residential bases for domestic groups belonging to HDG's less

Table 2. Data gathered in Laguna Blanca (Dept. Belen, Catamarca, Argentina) 1992-1993. Age of head of domestic group (HDG), number of persons per domestic unit, area of residential base, and mean surface area of each residential base per member of domestic unit.

	Name	Age of HDG	No. Inhabitants	RB Area	Area/Person
1	Fidela G.	58	4	344.02	86.00
2	Rosalio V.	42	4	306.08	76.52
3	Fidel G.	42	4	273.00	68.25
4	Juan S.	40	6	245.85	40.975
5	Nicanor G.	55	5	231.00	46.20
6	Eugenio E.P.	50	4	223.87	55.97
7	Santos S.	57	4	218.24	54.56
8	Epifania G.	72	7	207.36	29.62
9	Nemesio G.	78	4	205.92	51.48
10	Nicandro G.	58	5	199.84	39.97
11	Antonio S.	33	6	197.88	32.98
12	Pedro S.	73	7	182.02	26.00
13	Ermelinda G.	56	8	173.16	21.64
14	Pantaleon G.	76	4	150.36	37.59
15	Adolfo S.	42	7	122.67	17.52
16	Luis G.	42	6	122.62	20.44
17	Jeronimo Y.	35	6	120.12	20.02
18	Horacio G.	65	4	117.14	29.28
19	Marcelino P.	32	7	97.60	13.94
20	Andres G.	33	2	89.03	44.51
21	Saturnio G.	37	6	81.49	13.58
22	Santos F.G.	33	7	78.00	11.14
23	Roque J.G.	30	6	72.53	12.09
24	Epifanio S.	36	5	61.32	12.26
25	Eusebio E.P.	35	8	37.04	7.41
26	Ricardo G.	35	5	17.50	3.5

than 40 years of age is 85.25 m^2 (14.7 m^2 per person), in contrast, the mean area for domestic groups belonging to HDG's greater than or equal to 40 years of age is 207.07 m^2 (39.92 m^2 per person).

These numbers demonstrate clearly that in one of the combinations the domestic group possesses a larger number of members and occupies less area (more in relative terms than absolute), while that of the other combination presents residential bases of larger area but fewer persons.

This is strong evidence of differences between the values that we obtained and those postulated by other investigators with respect to the basic area estimated per person. These high values cannot be attributed to the fact that there has been a recent radical migration in Laguna Blanca. We drew kinship charts and specified which members of the domestic units were not in the district, and we established that the members that were absent were no more than 10.6% of the total population.[21] If they came back to the domestic units to which they belong we would have a mean of 13.14 m^2 for the residential bases which HDG are less than 40 years old, and 35.69 m^2 for the HDG greater than or equal to 40 years. Even considering this, our figures are much higher than those of the authors cited above.

The data indicate that there is no proportional increase in surface area of a site with the increase in number of inhabitants.

In contrast, the data indicate that surface area inhabited increases in relation to the stage of the life cycle of the domestic group. Particularly, it was clear that surface area inhabited varied with the age of the HDG (him or her), with sites of HDG's greater than or equal to 40 years of age being twice the size of their younger counterparts.

Trying to interpret the results obtained we think it would be useful to refer to a recurrent mechanism in the life cycle of a domestic group. This cycle demonstrates to us that, when the young abandon their domestic group (for work, to get married, or for both reasons simultaneously), the site begins a new cycle (the constitution of a new domestic unit). On the other hand, we noted that adult males (children and sons-in-law) would increase the labor force necessary to expand the work possible at a residential base (as we indicated, construction work is an entirely masculine job). However, we can say little about the quantity of individuals that inhabit a residential base.[22]

Finally, we maintain that understanding the dimensions of space generated by the inhabitants of Laguna Blanca in a unequivocal relation with the minimal functional space per person necessary, impedes understanding of the complexity of the problem, losing the importance of ideational aspects, for example, wealth, possession, and property.[23] Perhaps questions of prestige are more important for understanding space in Laguna Blanca than those strictly functional. We maintain that, in societies that maintain a value systems different from a bioenergetic one, architectural manifestations should adopt a presumably different expression.[24]

Although the bioenergetic hypothesis seems insufficient, prudently, we are not able to discard it because our interpretations are preliminary. However, we are confident that some of the details of the use of space and the methods we employed can help in thinking of alternative hypotheses when we wish to evaluate demographic projections in archaeology.

3. Interior Space of the Roofs as Deposits of Objects and Ideas

The third case concerns the use of internal space on roofs as storage areas. Although our study was done on various residential bases and temporary sites, we will only present data recorded at a settlement located known as Relincho Muerto (26°39' latitude, 66°37' longitude West, and 3,980 masl). We chose this case because it provides an interesting case for reflection, synthesizing many compromised aspects in construction of the architectural and ideational model for their geography; on the other hand, it permits us to indicate some of the possible consequences in similar archaeological situations.[25]

Description of the Settlement of Relincho Muerto (see Figures 1-4)

The settlement has three contiguous areas in a line. One of them, the kitchen, is located to the North of the residential base (or as we said, to the left of the settlement[26]); in the southern area is the habitation space. The middle space resulted from very little extra work; the spaces at the extremes provide lateral walls and it was only necessary to raise front and back walls and cover it with a roof. The settlement is completed with a path parallel to the series of spaces, and another *pirca* below, parabolic in form, and employed for a woodpile.

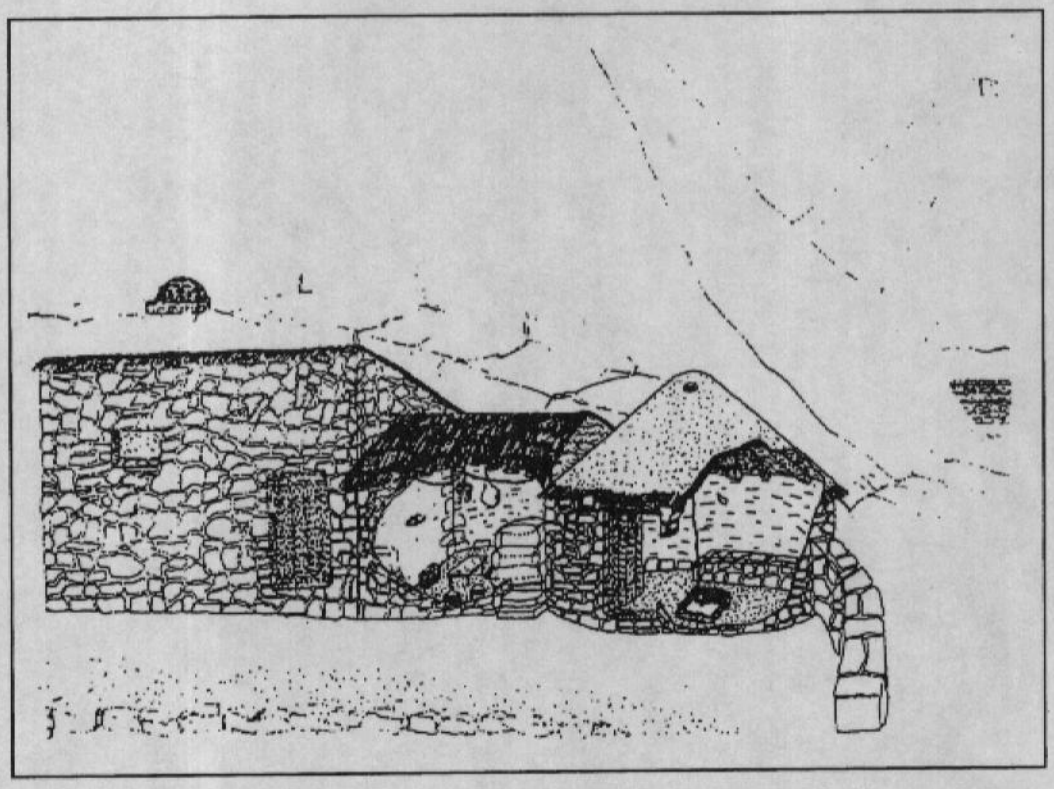


Fig. 1. Relincho Muerto, District of Laguna Blanca, Department of Belen, Catamarca (3,980 m.a.s.l.). General perspective.

Completing this site, is a windbreak that protects a floor loom, an oven, and two large corrals for the herd. All of the front of the occupation is utilized as a dispersed midden. In addition, there are two large grinding stones in the front of the site (a mortar and a *pecana*).

The kitchen is ellipsoid in plan. The walls were made of stone and mud mortar. In the SW sector of the space, there is an *estrado*, or platform. In the E-SE sector, one finds a door of rectangular form with a height of 1.22 m, and a width of 0.50 m. The door has a lintel of *cardón* wood from which hangs a cover constructed with planks of *cardón* tied with leather; the hinges are also made of leather. Also in the E-SE sector we find two small quadrangular openings, one chest-height of 1.49 m, and with of 0.10 m, the lintel formed directly by the roof at 1.60 m height.

The earthen floor is below ground at a depth of 0.14 m. A cooking structure is located in the center of the kitchen (called *conchana*). It has a rectangular form (0.69 m by 0.75 m), which is defined by some stones and the floor is slightly excavated. A wire with a hook hangs from the ceiling, about 0.70 m above the hearth, and serves to hang cooking vessels. Also, a type of wire grill is supported on the rocks.

The conical roof, made of *torta* represents one of the most traditional forms in the region. The roof is constructed in the following steps. After finishing the wall that composes the perimeter of the space, the principle beam is placed constructed of two logs of *cardón* tied with cords of leather. Upon this they place a radial form of 19 logs. After this structure is covered with *monte*,[27] they place a cap of *paja*, or grasses (called *iro, Festuca* sp.) On top. Finally, they finish it off with the *torta* (a mix of mud, *paja*, and small pebbles that serve as a binding agent).

In the high part of the roof, there are three-sided holes that allow smoke to escape as a kind of chimney.

It is interesting to emphasize that the logs of the roof have three series of eggs from the *colán* (a bird similar to the grouse or *perdiz*) stashed in them. Also, in other locations of the roof, they should have eggs of the *suri*, the ostrich-like South American Rhea (*Pteronnemia pennata*). On the floor there are other objects. A large ceramic vessel is supported on its small mouth. Also, there are two large stones that were employed as seats. Outside the kitchen there were various bones *caraqueados* (bones broken for the extraction of marrow).

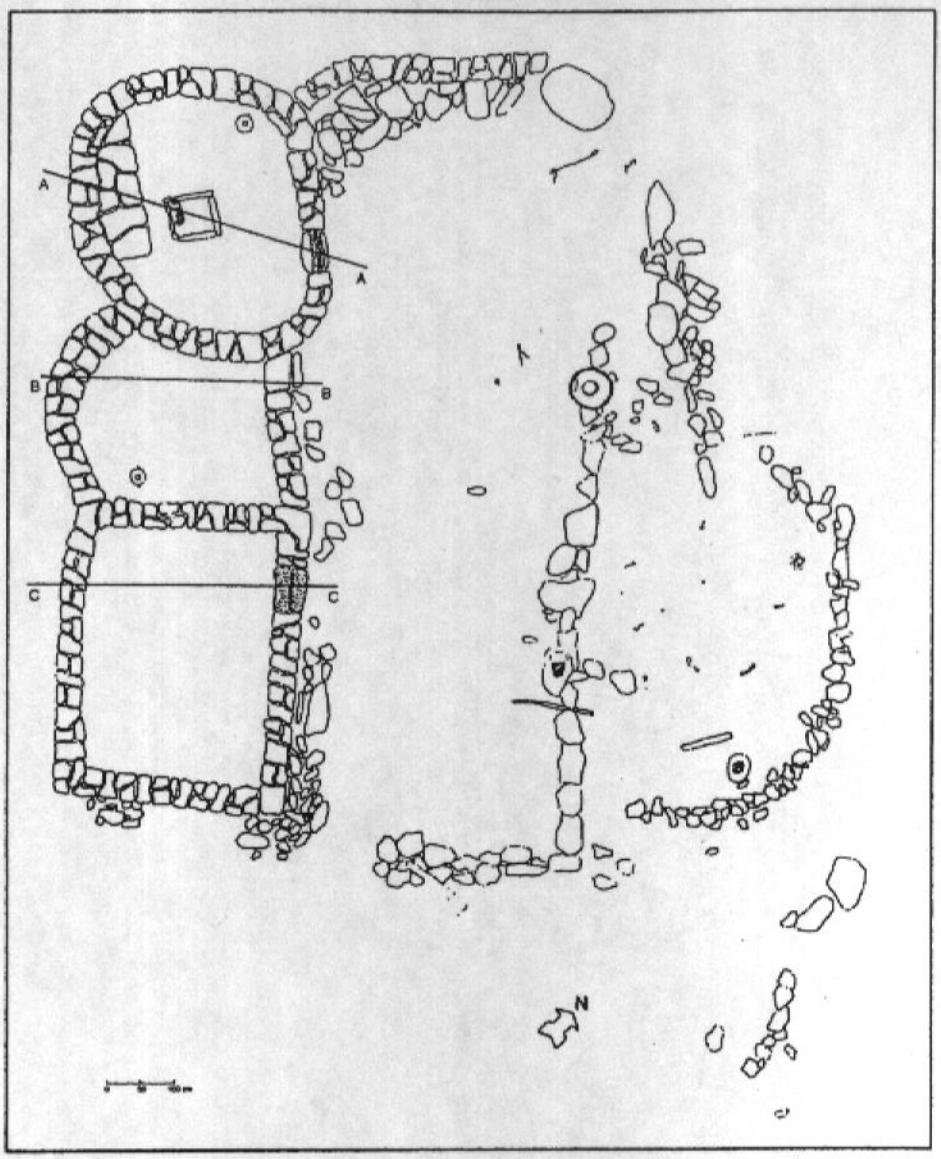
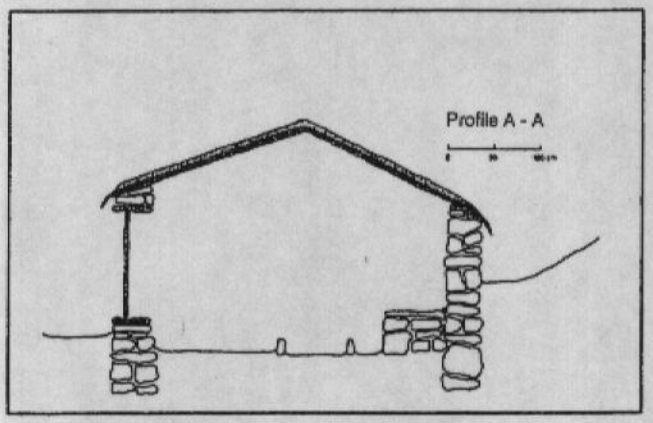


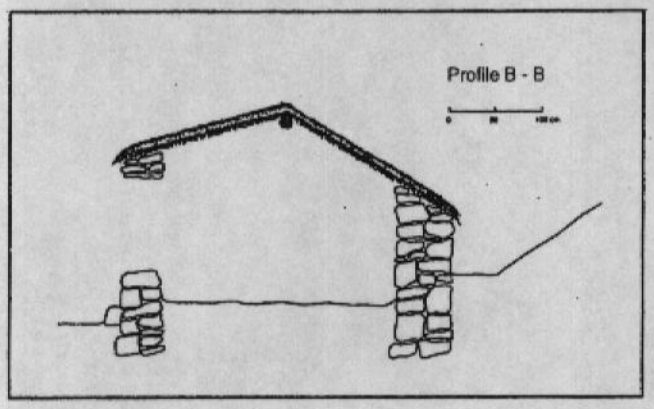
Fig. 2. Relincho Muerto, District of Laguna Blanca, Department of Belen, Catamarca. General plan.

Turning to the description of the other two places, first, we will look at the South of the site. The form of this structure is rectangular, with internal dimensions of: 2.70 m wide, 3.80 m long, and a habitable area of 10.26 m^2. The walls were made of stone. The rectangular doorway is on the E-SE wall, its height is 1.35 m, and the width is 0.55 m. The door covering is entirely made of *cardón* wood tied with leather *tientos*. On this same wall is a small window of relatively square form completely framed in *cardón* wood. Its dimensions are: height from the exterior floor to the lintel, 1.90 m, chest-eight is 1.60 m, and the width is 0.30 m. The floor is semi-subterranean. The roof is a *torta* with a slope of 30°, and is made from 10 logs of *cardón*. In the South corner there is a flat stone that serves as a shelf.

The form of the middle space is rectangular and relatively small (2.86 m long by 2.20 m wide). The area roofed is 6.30 m^2. The foundation and the walls are made of stone, the walls having a simple mortar of mud. The mean width of the walls is 0.45 m. The doorway is located in the East wall, the height between the floor and the lintel is 1.60 m, the chest height is 0.45 m, and the width of the doorway is 0.60 m; the form of the doorway is rectangular, with no covering, just a lintel of *cardón*.

The roof is of *guayada* with two rain gutters (one slope is more than 30° the other less than 30°). The roof is constructed with 10 logs of *cardón*.





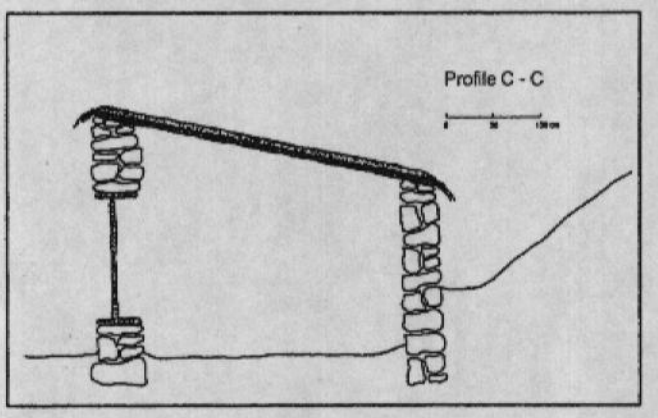


Fig. 3. Relincho Muerto, District of Laguna Blanca, Department of Belen, Catamarca. Profiles (see Fig. 2).

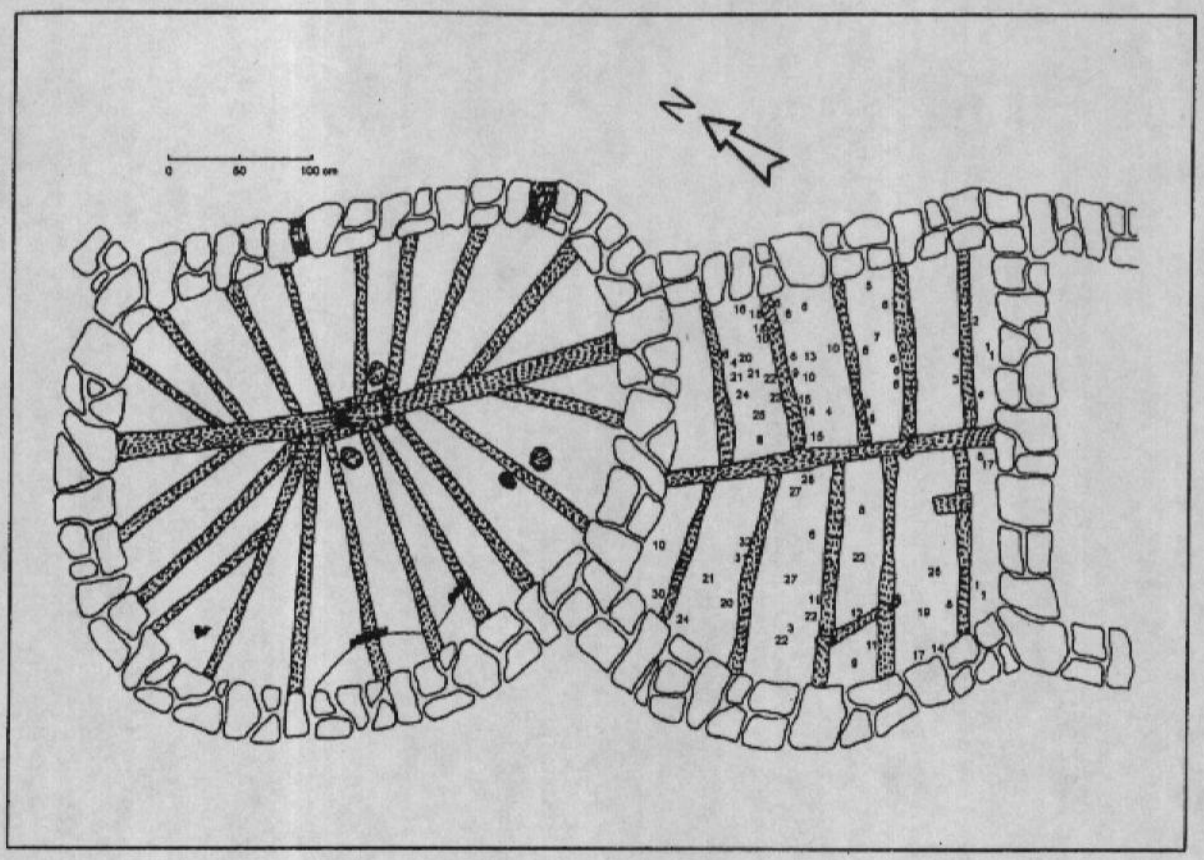


Fig. 4. Relincho Muerto, District of Laguna Blanca, Department of Belen, Catamarca. Interior view of the roof.

Looking particularly at the internal part of the roof, the construction technique creates a great quantity of spaces between the sticks of *monte*. These spaces are used as deposits. Among the beams and logs many things are stashed in bags with diverse objects such as lassos, cords, bolas, etc., and they accommodate other objects. In the middle area of Relincho Muerto we recorded, among other things (see Figure 4): 1) a *suri* egg, 2) a wood needle, 3) a metal rod, 4) a llama tail, 5) a wire hoop, 6) rags, 7) button hole of braided leather, 8) wires, 9) small decorative wool balls *(pompón)*, 10) cork, 11) metal handle, 12) *suri* bone, 13) fox (*Dusicyon* sp.) hide, 14) scissors, 15) metal file, 16) puma (*Felis concolor*) foot, 17) spun wool, 18) *suri* feathers, 19) hide, 20) *cierre relámpago* (zipper), 21) broken knife, 22) plastic bag, 23) synthetic wool, 24) small hide, 25) llama wool, 26) large basket, 27) orange peel, 28) a small stick wound with wool, 29) vial of medicine, 30) net bag, 31) paper, and 32) a spindle. As one can appreciate in Figure 4, frequently the objects in this list appear in most of the rest of the space, multiplying the number of objects in the roof.

Also, among the beams of the roof appear what we can call "food scraps." When we asked the inhabitants whether they placed the remains of wild animals such as bones (from *suri*, *quirquincho, or Chaetophractus vallerosus*), shells from birds (*suri*, *colán*), etc., the responses in all cases made reference that the remains were there "*para que haya más* (so that there will be more)," or in the case of the puma foot, an animal dangerous to the households (according to the *Lagunistos*) because it is hunted as an enemy, not only to consume its flesh, but also to employ its fat in medicines. Furthermore, the claw of the pulgar digit of the front left paw is an amulet for hunters (according to tradition, it is the claw with which the puma kills). From what we have seen and heard, these bones and egg shells have a propitiatory function. Also, on numerous occasions, we saw the maxilaries of *tekes* (juvenile llamas) in the roofs of kitchens. When we asked why, our informants replied that they were there "*para que mejore la hacienda* (because it improves the household)."[28] We can see that the roof is not only a cover for a habitable space, but also and principally a multifunctional and polysemic part of the site.

It is important that the kitchen is also the place of storage, and where in addition to what they keep in the roof, they keep a large quantity of wool in three bundles, a large box with empty bottles and many other objects (on the floor). The floor is perfectly swept, so that one cannot see any food scraps, or discarded objects (as we did not see in the contiguous kitchen). This is in contrast to the appearance of the patio.

It is important that we did not see remains of food on the floor as we did in the roofs. Food remains mostly were tossed out in middens near the kitchen.[29]

We think that, when these sites are abandoned and the natural deterioration of the roofs begins, food remains fall out of the roofs indiscriminately. We can ask then, "In what contexts are we going to interpret these food remains?"

When Fernando Márquez Miranda (1939:213) described the house of a settler, he gave us another interesting case where we might adopt alternative suppositions of archaeological context. The author observed in the roof of a house "... *está construido de una mezcla de barro amasado con antiquísmos trocitos de céramica, piedrecillas y pajas*... (is composed of a mix of mud with ancient bits of ceramic, pebbles, and grasses)."

We think that given these two examples, there is good reason to take extreme care in excavating sites with precise attention to micro-stratigraphy, and to consider that roofs are not only "covers of contexts," but also deposits of similar things that appear on floors, but with different archaeological significance.

Once again, while our work is on-going, we think that the details we offer here are useful in considering alternative hypotheses for interpreting the archaeological record.

To the Left, Circular Kitchens

As we indicated in the section on settlements, one of the most traditional construction characteristics in Laguna Blanca would be the circular plans, utilized only in the kitchen areas (an architectural characteristic that only occurred in places distant from the center of the Laguna Blanca district). From the references of settlers, many kitchens had this form in the past, but in later times, this form has been abandoned in favor of a rectangular design.

Another regularity that we would like to mention is that the kitchens (independent of their form) were mostly located North of the settlements or also, we could say to the left of the settlements.[30] As indicated in note 27, in order to determine left from right, one needs to define direction vs. orientation. In concordance with the suppositions of the Andean World Cosmovision, when the sun rises and organizes time, in the same act gives light, life and heat, organizes space, and references the landscape. For example, when someone in Laguna Blanca gives directions that include references to large rocks, caves, stone images, and all types natural or anthropomorphic landmarks, the directions are not complete without statements such as "the cave is toward the afternoon sun," or "the pictographs are toward the morning sun." As we said, the sun is the organizer of time and of the landscape, and is considered in the most significant acts of the inhabitants of the puna. The place where the sun makes its appearance is the point for organizing the landscape as well as the people that inhabit it. This is reflected in some of their practices (perhaps in a major human transcendence): in dealing with the dead, in the space of a settlement, and cómplementarily, we are able to record another tradition relevant to this basis in the importance of animal production for the reproduction of groups with a fundamentally pastoral economy in the festival of *La Señalada*.

In the burial of a dead person, they place the corpse extended in the earth, with care that the head points East, while to the West, where the feet are, they place a cross. When we described the *Señalada*, we mentioned the importance of extending the *pullo* East-West, and that the animals should enter from the East and leave toward the West. And as we indicated, the settlements are expressly oriented so that the inhabitants leave in the mornings and encounter the sun, and it is said that the settlements are constructed maintaining the precaution of communicating with the East. Here we see a coincidence between the abode, of the "World of the Living," and the abode of the "World of the Dead:" the sun is what gives order and organization to these worlds.

We are confident that we have presented enough arguments for the preeminence of the East-West orientation as an orientation of space such that if we look to the East, the North is on our left and the South is to our right.

Now we can look at how these ethnoarchaeological data and interpretations accord with the archaeological record.

Formative sites in Laguna Blanca conform to the pattern of residential bases resulting from the aggregation of various spaces. There are strong similarities among the residential bases, especially

in their construction characteristics, (materials and techniques employed), as in their architectural conception in relation to the landscape. The plan of the smaller sites is subcircular between 3 and 7 m in diameter (although some exceptional sites reach 11 m). The major sites commonly contain grinding implements of considerable dimensions, some with multiple uses. The general impression is that these spaces were for public activities, and their dimensions enabled them to function as "patios" (very probably lacking roofs). For their part, the numerous places for planting (that complemented residential concentrations) found in intervals along the piedmont, formed contiguous aggregations.

Realizing the distribution of archaeological sites along the side of Nevado de Laguna Blanca, we made intensive site surveys there.

Later, we excavated the site Piedra Negra No. 2. Its architectural design permitted unequivocal recognition of three sectors. The central one was formed by major spaces with grinding implements (patios), and two lateral sectors of smaller size (one to the North and one to the South). In order to study whether the site presented some type of functional differentiation, we chose one space in each sector, the North named "A" and the South "B."

By comparison the two areas had different architectural characteristics. The area "A" had an internal diameter of 4.5 m; possessed a unique passage that ran North-South that began in two stones of large size (*jambas*), also, two stairs lay there to counteract the differences in level. The actual exterior surface of the area was located 1.31 m above the interior level, the internal mean height (from the superior part of the wall to the occupation floor) is 1.86 m. Area "B" has an internal diameter smaller than "A" (4.25 m), has two passages (one oriented according to the direction N-S, and the other SW-NE). It also has a rectangular receptacle made by taking advantage of portions of the last hallway and the wall. The exterior surface of the space is located 0.50 m above the level of the interior; the height from the superior part of the wall to the occupation floor is 0.75 m. The subterranean floor was prepared and also excavated in a natural substrate. Although the sediment contains abundant pebbles, the surface attains a paved appearance.

When we began our excavations, one of our questions was how the archaeological patterns would relate to our ethnographic models. We expected that the North structure, "A," would contain structures for combustion and the major concentration of bones, burnt and with cut marks.

We were able to confirm a formal coincidence between the ethnographic record and the archaeological one (circular spaces to the North or left of the settlement that have combustion structures). While we are tempted to suppose an interpretive coincidence, we are far away from proving stability of this pattern through time, through more than 1500 years of the structuration of the domestic space in relation with the landscape (and for transitivity far from noticing the value that they have in terms of the stability and the choosing of space for the construction of a settlement). We can say even less about the association between the kitchen space and femininity in Formative societies. We are trying to demonstrate inferred human behavior as a conjunction of decisions that respond to diverse orders, that, while implied as strictly bioenergetic, exceeds them.

When in the section on "Ethnoarchaeological Considerations" we indicated the importance of the concept of the Andean Word Cosmovision, and we warned about the risk of its indiscriminate use, we were thinking that the premises we derived could be contextualized from an equation composed of three points: the sociocultural, the spatial, and the temporal. We can value the concept of the Andean World Cosmovision by considering the conjunction we found between: words of Quechua origin, the cult of *pachamama*, and the great part of the traditions related above.[31]

We compared some of the data generated in the excavations with those found ethnographically and we established a formal coincidence. But when we compare other fragments of archaeological information available with the ethnographic data we see that the coincidences disappear.

In the explorations conducted by Vladmiro Weiser in 1923 and 1924 in Laguna Blanca, he excavated nearly 100 cists. Many of them were drawn in his fieldnotes and there is evidence that the dead were given a different treatment than they are today. Excepting one case where the cranium was oriented to the South, the rest were oriented to the North and West.

Although as archaeologists, we try to extract knowledge from regular conjunctions, we need to consider contingent mechanisms of behavior on the past archaeological record. Sometimes, an association between the functional and ideational is invalid, in this case the projection on spaces of combustion concepts of gender or the orientation of the dead. Such considerations include incorrectly anchoring suppositions on our own investigations.

Final Considerations

Perhaps a result is legitimized by appealing to the neoliberal model of efficiency articulated since the actual "process of globalization," in part reinforced in our society by concepts of the "mini-max" type (minimum effort for maximum gain). As it was supposed, archaeology did not have the opportunity to remain estranged from these assumptions. Although such models are tainted, their principle problems do not necessarily arise from their association with neoliberal assumptions. Those of us who sympathize with methodological anarchism, are not going to be the ones to pretend that other investigators abandon this or any other kind of theoretical approach. However, we believe it is important to show which uses would be abusive.

In the literature, it is stated that when interpretations of the neofunctionalist model operate within their narrow-minded criteria, it only sustains the plausibility of the hypothesis that we have called "common sense archaeology." Although we can give many examples that demonstrate how this special class of "common sense" works, we only need to remember as an example the numerous works in which it is always proposed that whenever something has been decorated (e.g. ceramics, caves or whatever other evidence of material culture), then it can be concluded that it represents the ritual, the ceremonial, or the extraordinary while when artifacts are found on the margins of this aesthetic process (i.e. plain wares), one should assume that these were used as utilitarian, or domestic, or daily goods or wares exclusively (see Delfino 1995a, Osborn 1979).

However, we think that it is necessary to take all possible precautions to counteract the undesirable effects of these types of assertions, taking care especially with mechanistic formulations, although it should not be understood that we are suggesting that functionalist hypotheses should be abandoned. In any case, we think that these assertions can represent a major improvement if they were used as null hypotheses (H_0). As null hypotheses, it would be enough to demonstrate their incompatibility with data.

Another impression that seems to suggest common sense archaeology is the belief that technofunctionalist hypotheses offer greater "theoretical security" (objectivity?) than those that originate from a cosmological order. This supposed security is based on the confidence of assertions based on bioenergetic questions that do not participate centrally in ethnocentric cosmovisional suppositions (as is supported by technofunctionalist reasoning that remains "protected" from interpretivist subjectivity).

Perhaps the principle danger is to forget that different cultures have ideas very different with respect to questions so basic as, for example, those referred to "What can be considered garbage and what is not?" "How does cosmovisional supposition affect the mini-max hypotheses?" "On what depends the recycling of artifacts or parts of them?" "When can artifacts be essentially discarded?" And then, "When can artifacts again reenter in the context of use?" "What should be considered sacred and what profane?" "Can one make an efficient distinction of these spaces?" (How close or how far can one be in respect to the other?), and in consequence, "What effect does the idea of sacredness have over daily life?" In this sense, "What other suppositions that are constantly used are implicit and still have to be demonstrated (without falling to circular reasoning)?" "What definitive indicators characterize the sacred?" (or we will continue to fall back on familiar ideas: the special case, the unique case, or that which results from some performative aesthetic), etc.

These and many more questions result in an interesting reflective exercise, and anyway, we think that this will become a central point, where a good part of the contribution to the exercise of ethnoarchaeological knowledge would reside.

Notes

[1]The term, *abajeño* (antonym *arribeño*) characterizes people or customs from a lower altitudinal level (the prepuna, or the valleys (or *vallisto*)).

[2]We have recorded cases in which the limit of certain cultivars is higher, including 3,900 masl, however, climatic stress makes this an exception. For this reason, 3650 masl is the altitudinal limit for stable agricultural productivity.

[3]These "accounts" form part of the relevant material in our investigations in Laguna Blanca realized as an "Ethnography for Archaeology, " funded by a Beca de Perfeccionamiento del Consejo Nacional de Investigaciones Cientificas y Tecnicas (1992-1994), and part of an investigation supported by the Universidad Nacional de Catamarca, according to the Secretaria de Ciencia y Technología (1994-1995).

[4]In other regions, this is the day that the "*Augustukuy* (Festival of August in Quechua) is begun.

[5]The thread is twisted to the left, it is always used in ceremonials and in a great number of rituals. Among other examples, it is enough to cite that when an animal is born, before cutting the umbilical cord, they make two knots in it with *hilo zurdo*. This type of thread is also used to make the "*flores*" during *La Señalada* (see also Boman (1992[1908]:513-514) in reference to a ritual to counteract the effects of soul loss, and a ritual in Pujio and Tomoeda (1994:288) called "Fiesta de Agosto").

[6]It is interesting that the areas of cultivation are also known as *corrales de siembra*. Relations of meaning between plants and domestic animals seem to cross more than once. During the first planting, as part of preparing the soil, plots are used to enclose animals. It is expected that the household will pay the land, and the payment is simply called *cultivo de animal*.

[7]Other synonyms from other regions are: *rutiado, chujcharrutu, chujcha rutukuy*, in Quechua meaning "the festival of cutting hair" (*chujcha* = hair, *rutu*. = to cut, and *kuy* = festival).

[8]When people create a new space at a site, they always make offerings to *pachamama*.

[9]The social relation of neighborhood remains represented in part from the interaction of a human group constituted historically by the actualizations of social relations, such that the place of residence operates as an identifying referent, but is not confused with it.

[10]In the case of construction at the altitudinal limit of agriculture, probably the settlement is placed on an archaeological site for two reasons: (a) for utilizing stones as construction materials, and (b) especially, for the belief that the "corrals" (*canchones*) open by "the ancients" are immediately fertile for agriculture.

[11]Its enough to mention that in 1993 the Argentine state developed an explicit national plan to eradicate "*rancho*" schools (referring to rural or crude looking structures). They demolished old and dis-accredited schools in the district (that had a similarity with traditional residential forms in Laguna Blanca) following replacements by structures that, for example, employed metal roofs and openings with glass (materials that have proven inconvenient for the temperatures and winds of this region).

[12]Going into some of the details, while the roofs of *guayada* should have to be repaired before 8 years, mud roofs that are *torteados* (reinforced with mortar to make them impermeable) were in less than 2 years (in the previous note, it was pointed out the inconveniences of metal roofs); another of the disadvantages is the generation of great interior spaces, difficulties in heating them in a rigorous climate anywhere wood is very scarce.

[13]In the District of Laguna Blanca the presence of these type of kitchens is not able to be explained by an hypothesis based on seasonality, as in other regions of the puna (kitchen areas roofed for winter, while in summer culinary activities are done in the open air, in spaces without roofs nor with a perimeter structure, or with only a windbreak).

[14]In general outside visitors such as a doctor or an archaeologist (at least the first time) does not pass by the kitchen, instead going to a special place that functions as a reception are (for example, a store room), or directly is received in the patio, at a seat.

[15]All the references we have obtained confirm this. Including when we visit residential bases in which we find men living alone, when cooking or heating water for tea, spontaneously the problem appears to us of solitude and the lack of a woman with reference to these chores. These questions lead us to reduce the doubts on the association between cooking and the kitchen area as a feminine space.

[16]This question is not able to be read in terms of the normative conception of culture. There does not exist a determinism that obliges people to interpret according to preestablished modes, only to refer to variations in the configuration of mental maps (with distinct fragments of information), producing different results, up to the point of personalized ambiguity in the interpretation.

[17]*Pirca*: wall of stone (from the Quechua *percca*). In most of the Andean world, the action of constructing a wall of stone is known as *pircar*. The term *pircado*, employed as an adjective, refers to having a wall of stone nearby.

[18]The reasons, for which they prescriptively graze camelids in the high *vegas* is because these have excellent natural pastures (here there is no risk of infection by the introduced endoparasite they call *unca - Fasciola hepatica*).

[19]"*El conjunto de cuartos que constituyen la casa, afecta generalmente la forma de "U", con sus galerías que dan a un patio interior. Este patio esta abierto hacia el bajo (*hacia el Este*), pero muchas veces la protección (*contra los vientos*) es aún mayor e entonces allí se levanta el muro de pirca o adobe protector, cuando no se encierra el patio, con habitaciones a los cuatro lados*" (Caceres Freyre 1956:397). Our observations result coincident with respect to the orientation of the settlements, although we appreciate that the criteria that dictate this orientation, not only respond to climatic

reasons, but also implicate questions of cosmovision (Delfino 1995b).

[20]Although the testimonies were recorded more than 500 km from Laguna Blanca (in Prov. Jujuy, Argentina), they lend support to a cosmovision of an Andean Rationality (employing the term "rationality" in the sense of Criado Boado 1991:19).

[21]Also, here we have good census data (at least for the past 25 years) and they do not suggest that there have been migratory movements, nor some population reduction, in all cases there is evidence of a small constant demographic increase.

[22]If surface area is employed as the only indicator in archaeological cases, this fits into the possibility of confounding small residential bases with temporary sites (*puestos*), in order to increase precision, one must analyze the total cultural context (among other factors, productive position of the settlement, grade of functional complexity).

[23]In this case, the possession, or also, property, should be understood as how much is possessed, and not as being possessed.

[24]We coincide with Hodder's (1994:95) expression that "*El tema del espacio que los individuos o grupos necesitan o creen necesitar para ciertos actividades es, al menos en parte, una cuestión de simbolismo, de significado y de intención.*"

[25]Part of the considerations that I described above were presented at the XI Congreso Nacional de Arqueologia Argentina, city of San Rafael, 23-29 of May, 1994.

[26]As we know, in order to be able to judge which is left and which is right in a settlement, one should define previously a pair of operations: on the one hand, a *direction*, and on the other, an *orientation*. Earlier, we amplified this theme, where we justified our assertions.

[27]The expression *monte* designates a series of low woody shrubs such as *checal* (*Fabiana densa*), *tola* (*Parastrephia phylicaeformis*), or *rica-rica* (*Acantolippia sasoloides*).

[28]Apparently in Laguna Blanca (as in the rest of the Andes) the wild and the domesticated have the same preferred locations. We can see that represented in two principle ceremonies, one in the cold and dry season, the rebirth of a new cycle, the propitiation of the wild world: the first of August for *pachamama*, and the other of initiation, in the warm and wet season, the propitiation of the domestic world, the festival of *La Señalada* (Hocquenghem 1987:26).

[29]In various of the recordings of "roofs as deposits" we were accompanied by our guide Fidel G. (42). Before our questions and comments in which we referred to why they kept "broken things," it was manifest to us that the *lagunistos* considered the possibility of future reutilization of such objects and that for them they were not viewed as garbage. Thinking of broken objects and presumptions of "food refuse" we should refer to the formulation by Ian Hodder (1994:95): "... *suele ser habitual reconstruir la economía de un sitio prehistórico a partir de los restos óseos (capitulo 1, p. 28). Pero dar por sentado que los huesos abandonados en un asentamiento tienen algo que ver con la economía equivale a hacer conjecturas acerca de como aquel grupo humano pudo considerar o percibir los animales, huesos, desechos, etc. Muchas sociedades atribuyen significados sociales complejos a los animales domésticos, a los huesos y a la sociedad. Suponer que los huesos no se transforman culturalmente equivale a dar por sentado que las actitudes de 'ellos' no eran muy distintas a las 'nuestras.*"

[30]As we said in note 16, the kitchen is a space reserved for the feminine. We believe that the associative relation between kitchen:woman:left is not accidental. Consult Arnold (1992; Burger and Burger (1994); Firestone (1988); Santa Cruz Pachacuti (1993); Silverblatt (1990), among others.

[31]Although this is not the central theme that occupies us we are able to say that a good part of the cultural coincidences encountered between Laguna Blanca and other places in the Andean World perhaps are based in the fact that the Inca Empire threw a mantel of ideological homogeneity over its territories of influence (although with out doubt tenacious indigenous cultural components existed before their arrival, each region showing different tonalities from the classic Cuzco traditions). On the other hand, when one takes the time to remember the fundamentals of the concepts of the World Andean Cosmovision, one encounters them in a "Cultural Matrix of Andean Civilization" that supposedly, has its roots in times much earlier than those of the Inca period. As argued by Julio C. Tello, their origins go back to the Chavin Horizon (or inclusive according to our investigation, they go back to the Initial Period or the Late Preceramic).

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