inka archaeology in eastern bolivia: some aspects of the samaipata project

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the most important archaeological site in eastern bolivia is samaipata. although nordenskiöld worked there and recognised its significance, he did not produce a detailed description of it and did not even include one in an unpublished manuscript archived in the library of the egyptologische museum in göteborg. in 1911, he wrote that what makes the sculptured rock of samaipata so interesting is its position on the borders of the andes and the great plains of the eastern lowlands. it is on the edge of the jungle and a great distance from similar monuments elsewhere in the andes (nordenskiöld 1923: 6). in his opinion, the figures, seats and niches carved into the roughly 200 m long and 60 m wide outcrop belong to the most extreme outpost of the andean culture and are reminiscent of the inca carvings around cuzco, described by uhle (1910). following uhle, he interpreted the canals and basins carved in the rock as receptacles for food and liquid offerings in a complex of ancestor rituals:

"... so one has carved the rock not for some practical reason but for religious ceremonies ..." (nordenskiöld 1923: 7).

the first scholar to treat the whole complex as non-inka was leo puchte, an austrian immigrant to bolivia, who examined the ruins during two visits in 1937 and 1947 and who published the most complete drawing of the rock carvings until now. he interpreted them as a 'totemistic-animalistic temple' and described the depressions as seats for the souls of the ancestors during animistic rituals (puchte 1945b). during his researches in the late 50s, trimborn (1967) came to the conclusion that samaipata was an inca ceremonial center and border garrison. however, he did not explicitly consider the possibility of a pre-inca origin (trimborn 1967: 168).

later, the bolivian archaeologist, osvaldo rivera (1979b), in a serious discussion of the sparse evidence for archaeological remains in the region made a case for a pre-inca origin. both rivera (1979a) and carlos ponce sangines (1957), who both worked to get samaipata declared a national monument and thus be conserved, never denied the importance of the later occupation of the site by the inca.

indeed, the surface finds made by nordenskiöld and his companions, as well as the paces they bought from local people who claimed to have found them in the fields around the rock, seem to be of andean, i.e. highland, origin. however they contain some elements which do not suggest any particular inka style. in addition, nordenskiöld also identified lowland elements in the material culture of the site.

nordenskiöld (1923: 19) emphasised the location of the site at the natural border between the sierra and the lowlands and also at a significant lowland boundary, that between the humid molle towards the north, with its navigable rivers flowing towards the amazon, and the drier chaco to the south, which does not have any major navigable rivers. he described these as three anthropo-geographic regions in bolivia, the highlands, i.e. the andes, with high

inter-montane valleys and the altiplano; the lowlands to the north of the 17th or 18th parallel, i.e. santa cruz plain; and the chaco lowlands to the south. in the light of the theoretical currents of the time, perhaps he overemphasised the permanency of these borders which delineated his 'natural culture provinces'.

this question was later addressed by the geographer, carl troll (1931), in the context of the 'yunga problem'.

the yunga, or montaña, is that part of the eastern slopes between the perennial fog zone, i.e. the ceja de montaña, and the piedemont at the foot of the andes and may be seen not simply as a border but also as a zone of transition. it was not an empty region for recent research suggests that it can be considered as a zone of autochthonous cultural development, represented archaeologically in the north by what has been called the mollo culture (arellano 1985; ponce 1957), and in the southeast by various ceramic styles which have not yet been sufficiently defined or named.

samaipata is located in the piray valley, the second most southerly tributary of the amazon, at 1900 m a.s.l., where the edge of the andes turns sharply southward (figure 1). it belongs to the most southerly edge of the montaña zone itself where the three macro-environments, the andean valleys, the molle and the chaco, meet. in terms of communications, the montaña zone, with its humid forest vegetation, obviously is less passable than the andean slopes to the south of samaipata of the tucumán-bolivian forest zone. however it is around this location that the andes lie open for the incursion of lowland cultures; the principal entrance is the the deep
narrow drainage of the Río Grande, the southernmost Amazon affluent, which leads to the important Cochabamba valley. This may have been not only one of the routes taken by the Guaraní and Chiriguano during their invasions of the Inka empire (Nordskiold 1917) and the Spanish Viceroyalty of Peru, but also by earlier cultures who also have left traces in these 'valles mesoamericanos' since Formative times (Brockington et al. 1995).

It is this specific relationship between highland and lowland cultures that lead to a series of five field campaigns in Samiapata between 1992 and 1995 undertaken by a team from the University of Bonn under the direction of the senior author. Excavations produced material from Formative to Colonial times that allows us to take a new view of cultural development in the region.

Excavations at Samiapata

The archaeological complex of Samiapata comprises an area of about 20 ha. It is enclosed by two perimeter walls whose foundations can be identified at several points (Figure 2). The principal topographical features are two parallel ridges about 300 m apart with a small valley in between. Part of the northern ridge is a 300 m long and 60 m wide rock saddle which is almost entirely carved (Figures 3 and 4). It does not appear that the planning and construction of the structures and the design and execution of the carvings were completed at the same time, but that there is a sequence of artistic work. Apart from a few eroded elements, several spatial and even iconographical complexes, some of which might not be of Inka provenance, can be isolated. In the two cases of the niche galleries (Sector 9 and Sector 16), there is a clear superposition of stone walls on top of the carved structures (Figure 5). Additionally, the cutting of the flanks of the rock on the southern side in order to achieve a vertical plane into which large niches were carved overlies and violates former patterns. These niches serve as the northern side of a series of temple structures positioned on the first platform adjacent to the rock. One of these was called by Pucher the cells of the priests, ‘templo de las sacristías’. It had been cleaned, drawn and
photographed by Nordenskiöld (Figure 6). Our re-examination evidenced a line of postholes which allows some speculation about a phase of reconstruction of the temples (Figure 6).

During the cleaning work in 1994, systems of terraces covering the slopes of both hills, a number of houses and other stone structures were recognized and mapped (Meyers 1993). A great hall, or kallanka, 68 m in length and 16 m in width and comparable to the kallanka at Inkallaqta near Cochabamba, which Nordenskiöld (1915) also described, was excavated. It lies in the southwestern corner of the central plaza, which itself is surrounded by a wall and is roughly 100 x 100 m (Sector 11). Moreover there are house compounds in the northern corner of the plaza (Sectors 2 and 8), on the eastern prolongation of the carved rock (Sectors 6 and 7), and a tell-like habitation mound on its western side (Sector 10). The latter overlooks not only the plaza but also an area between a complex of 11 middle-sized buildings on a lower platform (Sector 13), which has been called the Akilawasi because of the surface collection by local peasants of textiles in pots and many spindle whorls.

The plaza with its large kallanka, the medium-sized structures, the ceremonial rock area, the terraces and the storage complexes, or kollkas, located on tops of neighboring hills, one of which had been described by Hermann Trimborn (1967: 124-129) as Cerro de las Rueditas, clearly suggest an imperial complex similar to those found in the Cuzco area or in other provincial Inka centers. Minor structures, such as canals, cisterns, stairways, traces of the old Inka road, and a small fortress with concentric walls on the top of an nearby hill overlooking the whole area, complete the arrangement not only of a ceremonial, but also administrative, Inka center, perhaps at the rank of a provincial capital, as has been recently suggested by historians (Pårsinnen 1992; Saïgnes 1985).

In all excavation sectors, including the kallanka, an earlier stone building phase and at least one other occupation phase with wooden constructions is present (Meyers 1993, n.d.). It is assumed that both stone
construction phases are Inka in origin, since each is associated with Imperial Inka ceramics. The latest phase of construction at the site probably dates from the early colonial occupation of the site in association to the U-shaped Spanish patio house found on platform 1 immediately south of the carved rock (Figures 4A and 4B). Beneath the latest Inka floors, as well as above them, Lowland pottery, such as thick gray wares with incisions, burnished patterns and handle appliques in semicircular form, has been found. This evidence appears to correspond with the chronicle of Alcaya (1906 [ca. 1605]) who related that there was a double occupation of the site by the Inka during their war against the Guarani-Chiriguano, and with other historical documents relating to the “... fuerte de savaypatata ...” as a Spanish fort and base camp during the Toledan and later hostilities with the same ethnic group. Thus the current name, El Fuerte de Samaipata, does not strictly rely on its Inka occupation but to its use as a fort in Colonial times. Indeed, based on his examination of the Inka remains at Samaipata, Nordenskiöld argued that there was no reason to interpret it as a fortress.

**An Inka fortress to the east of Samaipata**

Strategically it is logical that the imperial frontier must have been located further east, perhaps in the easternmost foothills of the Andes, and from where the eastern plains to the north and south can be controlled. It is probable that the frontier is marked by a site known as La Fortaleza, which lies some 50 km air-line distance east of Samaipata. It is situated about 800 m above sea level on a platform below a peak called Parabonconillo, which dominates the plains between the Rio Piray to the north and Rio Grande to the south. This mountain range comprises the most easterly heights before the lowlands of Santa Cruz; and on a clear day it is possible to see the departmental capital from it.

The total area covered by the visible archaeological remains is about 8 ha. Dense brushwood covers the whole site, so that only the larger architectural remains can be recognized without clearance. Accurate survey and measurement is difficult. In fact, the site consists of two architectural complexes, each on a flattened eminence and which are separated by a relatively deep ravine (Figure 7).

The southern complex consists of a small hill enclosed by a large freestanding perimeter wall, which is preserved to a height of 1.50 m. At nearly equal distances there are unusual bastion-like structures. Inside, mainly on its northern and eastern sides, there are large circular structures which are built upon a system of artificial terraces, which themselves surround great parts of the hill. On the flattened hilltop the outlines of two other structures have been recorded; to the north there is
Figure 7: Sketch plan of La Fortaleza
a large rectangular building with four doorways facing eastwards and an irregular ovoid structure to the west. It is probable that all of the upper part of the hill was enclosed by walls.

The northern complex was built upon an natural rocky ledge, which abruptly ends on its eastern side at a vertical precipice of about 200 m. From this commanding position, there is an excellent view over the Santa Cruz lowlands. It has approximately the same dimensions as the southern complex. There are vestiges of at least two, probably three, perimeter walls. In the inclined parts of the rock outcrop, small steps were cut in the rock to serve as flat bases for stone wall foundations. Like the southern complex, the walls are fortified with bastion-like projections, within one of which a pile of small slingles was found. Inside the outer walls there are many structures suggesting a relatively dense population. In contrast to the southern complex, the structures are mainly rectangular, of which two are significant; a large rectangular building with four or more doorways, a tallanka, opening to the east, and in front of it there is a rectangular, stepped pyramid with a ramp-like access to the top. The great rectangular building, the platform and one of the bastions are aligned and oriented towards the east and the precipice.

Although our visit was only short, it is possible to make some general statements about La Fortaleza. The site has a clearly defensive character, indicated its extraordinary geographical position, the large perimetrical walls and the bastions. In addition, the site has an independent water supply, based on some small brooks and a large lagoon in the surroundings. It occupies a commanding position and could have controlled the plains between the Rio Piray and Rio Grande and therefore the route into the mountains.

Who constructed and used this complex? Although no definite statements can be made at this stage of investigation, there are some clear indications pointing to the Inka, for example, the rectangular tallanka-like stone buildings and the central platform which seems to have been an ushnu-like structure. Surface finds include some sherds of an Inka aryballus as well as ceramics of Lowland-type. The presence of an Inka fortress to the east of Samapata is not surprising as it seems rather logical that the great inland centres of Inkaallata to the north and Inka-wasi to the south of Samapata would have been protected by such a fortress in such a location.

All the mentioned sites not only have military aspects but also seem to have fulfilled state religious and administrative tasks. In fact, a glimpse at Nordenskiöld's travel diary provides us with a map of one of the nearby pukaras to the south called Pucarilla, which is situated on a hilltop above the jungle in the Mascarey valley, the last tributary of the Rio Grande before it leaves the Andes. The pukara consists of an inner and outer defensive circle but no longer has any visible structures so that Nordenskiöld was uncertain about its cultural origin.

One very diagnostic feature of La Fortaleza is the bastion, which is repeated at least at one of the numerous pukaras, Inkapirca, to the south in the region around Sucre, where wars and skirmishes with the Chiriguano took place in Colonial times. It consists of a large perimeter wall with seven rectangular bastions (Lee 1992: 12-13, fig. 8). Like Pucarilla, there is no apparent evidence of internal structures, at least none were noticed by Lee. Such bastions appear to be a European element of fortification technique and it can be assumed that we also here concerned with Spanish colonial defensive structures against the Chiriguano attacks. On the other hand, such features are also reported for Inka fortresses in Ecuador (e.g. Almeida 1984) who suggests that they date from Colonial times. However it is certainly possible that they could also be of Inka origin. Therefore it is probable that there are at least two successive site occupations at La Fortaleza by the Inka and the Spaniards.

However the Inka occupation itself might not have purely defensive character. The stepped platform of the northern complex can be clearly interpreted as an ushnu. Although such sites are best known from the great Inka centres in Central Peru, associated with military reviews and rituals; in conquered territories they are a sort of state symbol (Hyslop 1990: 70-72). Indeed, there are a concentration of these platforms in other peripheral areas, such as Pambamarca in northern Ecuador and in Catamarca in NOA (Hyslop 1990: 72-101; Raffino et al. 1997). The ushnu of La Fortaleza with its stairway is located in front of a tallanka-type building and is separated from it by what could be interpreted as a central plaza; in other words, this is the classic plan of other Inka centres.

Taking into account its exposed position on the very edge of the Andes and with a panoramic view over the lowlands to the east, the fortification aspect of the site is important; yet the site reflects an open display of state power directed towards the people from the Lowlands. If the ceremonial and display aspects are taken into consideration, then it can be assumed that the Lowlands were also in the hands of the Inka.

Conclusions

Since the beginning of scientific research on the Inka, and of Andean studies in general, there has existed a dichotomy between the highland (i.e. high) cultures and the eastern lowland (i.e. low) cultures which has lead to the definition of the eastern margin of the Andes as a definite cultural divide. The underlying concept is not just determined by ecological considerations. It can also been reduced to a topos the Spanish chroniclers adopted from the Inka and probably reinforced the notion of their civilized subjects in contrast to the fierce uncivilized Chunchos or the Chiriguanaes to the east. The continuous conflicts of the latter with both the Inka and Spaniards created the image of a sharp border in that region which does not seem to have existed in earlier times. Even Nordenskiöld (1923: vii), in the preface to the German translation of his book, states that the Chiriguano only migrated to their present home region in post-Columbian times and that the Inka formerly used the term Chiriguano to refer to all Indian tribes settling the border region between their empire and the Chaco. Furthermore he admits that in pre-Inka times the eastern Andes was a zone of contact and exchange and that only as a response to the attacks of the Chiriguanos did the Inka build a defensive line (Nordenskiöld 1923: 54-65). He also refers to the archaeological finds in the regions of Mizque, Pulquina and other mountain sites where he documented both Lowland and Highland ceramics in association and even an admixture of their characteristic styles.

This situation could have persisted during the first Inka occupation phase when they settled beneath the carved rock of Samapata, a site that might have already been a well known and frequented ritual center for the whole eastern region. According to a peaceful policy, they would have tried to get an arrangement with Lowland people, at least in the so-called Llanos de Grigotá as is related in the chronicle of Alcaya.
An earlier version of a paper was presented at the workshop: “Past and Present in Andean Prehistory and Early History” in Göteborg, Sweden on 16-17 September, 1996.

1. “During my travels 1908-1909 I spent a bit more than a week on the sculptured rock near Samaipata close to the road between Santa Cruz and Cochabamba...” Manuscript No. 5554, Ethnografiska Museet, Göteborg. The senior author is especially grateful to Dr. Sven-Erik Isson of that museum for permission to consult Nordenskiöld’s field notes during a visit to Göteborg in 1996.

2. cited and translated from the German edition 1923. The Swedish original dates from 1911.

3. See the publication of part of the collection in Trimborn (1967: 164). Unfortunately most of the sherds were lost when a mule carrying them had an accident.

4. One of our guides told us that there is a 4 hour route to Samaipata.

5. Our informants told us of more fortresses on the edge of the Andes, one of them on the final heights on the northern side of the Río Grande.

6. The term Chiriguano turns out to be another topos created in colonial times and that has been alienated from its original ethnic connotations, just like the term cañari and the kullawaya.

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