Rethinking the Andes–Amazonia Divide

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This chapter explores relations between the Andes and Amazonia as implied by an ideal case study, that of the Llanos de Mojos in Bolivia. For the Llanos de Mojos boast one of the best studied archaeological records of any region of the eastern lowlands of South America. As far back as the early twentieth century, Nordenskiöld was already considering this topic in almost all of his publications on the history and archaeology of the Llanos de Mojos. His views are clear, as exemplified by the following statement:

Highland culture has not spread into any part of the lowlands of eastern Bolivia. It is most likely that the Indians of the lowlands borrowed one thing or another from those of the highlands, that there occurred from time to time some limited cultural exchanges, as will no doubt be confirmed by future research. Nevertheless, it is safe to say that the Indians of the eastern lowlands of Bolivia remained entirely independent of the powerful highland culture. (Nordenskiöld 1910, 807; author’s translation)

Naturally, much more archaeological research has been conducted in the Llanos de Mojos since the days of Nordenskiöld’s pioneering work.

To begin with, the Llanos de Mojos need to be defined as a geographical unit, dominated by regularly inundated savannahs (see Figure 4.3.1).

To the west these savannahs run up against the foothills of the Andes, and to the east against the wooded hills of the westernmost outcrops of the Brazilian shield. To the north the limits are the Beni and Guaporé rivers, while the southern limit is defined by the confluence of the Rio Grande with the Chapare. The whole area covers 150,000 km², and although archaeological sites are known of right across it, reliable archaeological data are confined to certain areas and time-periods.

The great majority of the archaeological contexts known from the Llanos de Mojos belong to cultures that flourished during the last thousand years before the Spanish conquest (AD 500–1500). Recent research, however, points to an occupation as far back as the early Holocene (between 8000 and 2000 BC) (see Lombardo
et al. 2013; Capriles et al. 2019; Chapter 4.4) and the region does seem to have played an important role in the domestication of plants (see Lombardo et al. 2020). Manioc (*Manihot esculenta*), peanut (*Arachis hypogaea*), chilli pepper (*Capsicum baccatum*) and squash (*Cucurbita maxima*) all possibly dispersed out of an origin in this region as domesticates (Piperno 2011a, S459, Figure 1B). Since manioc and peanut appear in the Zaña Valley on the western slope of the northern Peruvian Andes as early as 7000 bc (Dillehay 2013, 286; Chapters 2.1 and 2.4), some
contacts or interactions between the Llanos de Mojos and the Andean world must have existed from far back in prehistory.

It remains little understood why there is such a gap in the archaeological evidence between the sparse early Holocene occupation and the massive presence of different archaeological cultures from c. AD 500 onwards. The fact that there are similar types of hiatus in various regions of Amazonia (Neves 2008, 363–4) suggests that the gap might reflect a real event in which the region was indeed abandoned.

The Llanos de Mojos were densely settled by sedentary agriculturists during late pre-Hispanic times (AD 500–1400), as evidenced by various forms of earthworks for water management and agriculture (channels, dams and ridged fields; see Denevan 1966; Erickson 1980, 2010; Walker 2004, 2018) as well as by settlements continuously occupied for almost a millennium (Dougherty and Calandra 1982; Prümers 2013, 2015; Prümers and Jaime Betancourt 2014a). Among the earthworks the raised fields are the best studied, and the fact that similar ones are to be found in the highland basin of Lake Titicaca has been mentioned repeatedly in the literature. However, claims that they could indicate contact between the two areas have been missing, with good cause (although see Chapter 1.4, for a contrary view). The fact alone that raised fields can be found all over the world (see Rostain 2013, 26–9) and were constructed in each region at different moments in history demonstrates that their presence (and absence) is not to be related with ‘culture contact’, but with specific geographical and climatic conditions (see McKey et al. 2014; McKey and Rostain 2016).

The sub-regions of the Llanos de Mojos show marked differences in their ceramic inventories, reflecting different archaeological cultures. Investigation of these regional cultures is still in its infancy and most data available come from just two areas east of the Mamoré river. The first is the Casarabe region, the focal point of the largest habitation mounds known in the Llanos de Mojos. The second is the Baures region, home to settlements established on natural levees protected by complex systems of ditches. I shall first summarize what can be said about those cultures to date, and then turn to the lack of evidence for Inca presence in the Llanos de Mojos.

Evidence from the Casarabe region

More than 100 sites with mounds have been registered in the Casarabe region (Lombardo and Prümers 2010, 1877). They date to c. AD 500–1400 and are therefore contemporaneous with Tiahuanaco and later regional cultures in the Bolivian highlands and inter-Andean valleys.

The Casarabe mounds, ranging in size from 1 to 20 ha and up to 20 m high, are pyramidal structures built on artificial terraces in the middle of their sites. In some cases, polygonal causeways enclose the sites, so their size can be determined precisely. In the Loma Salvatierra, the enclosed area was 21 ha (see Figure 4.3.2),
but at another site with two polygonal causeways, the inner one enclosed 75 ha and the outer one 300 ha.

Although the size of these sites alone is surprising considering their Amazonian setting, what makes them especially peculiar is the recurrent pattern of planned architecture discernible in their layout. This layout does not compare to anything known so far from South America and thus points to an autonomous development.
The same can be inferred from an analysis of the ceramics excavated at settlements with monumental architecture in the Casarabe region. More than 40,000 diagnostic ceramic sherds have been analysed by Jaimes Betancourt (2012a, 2012b), and not a single piece shows evidence of influences from the Andean region. On the contrary, ‘the ceramic material analysed has its own traits and belongs to exclusively Amazonian traditions. Neither stylistic attributes nor technical characteristics of highland ceramics were found’ (Jaimes Betancourt 2012b, 182). Of course, just two sites do not in any way constitute a reliable sample, so I should mention that over 50 other archaeological sites with monumental architecture in the Casarabe region have been surveyed by various archaeological projects – including our own – and test excavations have been conducted at 10 of these.¹ The results of all this research confirm Jaimes Betancourt’s conclusions, as cited above. They thus refute earlier assessments by Nordenskiöld (1917) and Howard (1947) of possible relationships with ceramics of the Mizque valley, interpretations already disputed by Bennett (1936, 396), but still cited in recent publications (Orellana Halkyer et al. 2014, 589).

There is, nonetheless, at least some evidence for contacts with cultures outside the region, in the form of artefacts made of ‘exotic materials’ such as stone and metal. Stone is not naturally available in the alluvial deposits of the central Llanos de Mojos, so every piece of stone here must be an import. Stone axes are quite common in private collections and among exhibits in local museums (in Trinidad, San Ignacio de Mojos, or Santa Ana de Yacuma). There are marked differences in the material and shape of these objects, which frequently show traces of prolonged use, sometimes resulting in asymmetric shapes and reduced sizes. Some of these ‘axes’ seem to have been (re-)used as pendants.

During our excavations at the Loma Mendoza and Loma Salvatierra sites we found 46 stone artefacts and one raw stone. The latter weighed approximately 2 kg, accounting for more than half the total weight of all the stones recovered. To judge from their weight alone, then, a single person could have brought all of these stones into the sites on a single occasion. They were recovered from different contexts, however, spanning the whole period of the sites’ occupation. Furthermore, the objects are made of different types of stone (three distinct kinds of sandstone, white quartz, basalt, granite, amazonite and sodalite) indicative of different geographical origins. The amazonite probably came from Brazil and the white quartz from the Iténez region. The objects made of sandstone, granite and basalt could have come either from Chiquitania or from the Andes. The only artefacts that certainly came from the Bolivian highlands are a number of sodalite beads. Cerro de Sapo in the Cochabamba Department has been identified as the unique source of pre-Columbian artefacts made of sodalite found right across the central and southern Andes (Ruppert 1982, 1983), and signs of pre-Hispanic mining have been reported at the site itself (Ahlfeld and Wegner 1931). It is highly probable, then, that the sodalite beads found at Loma Salvatierra also came from Cerro de Sapo, although no chemical analyses have yet been performed.
Metal objects were especially rare at sites in the Casarabe region. Nordenskiöld (1913) found no metal objects in the three mounds that he studied, nor were any found during excavations at Loma Alta de Casarabe (Dougherty and Calandra 1982) or at Loma Mendoza (Prümers 2004). Only at the Salvatierra site were personal adornments found that were made of copper and bronze, and most came from a single grave, radiocarbon dated to c. AD 670–770. This grave was found at the centre of a smaller platform south of the main pyramidal building, and was probably the first in a series of burials in that platform. Everything points to the person in the central tomb having belonged to a dominant class, especially the assemblage of personal adornments found with him (Prümers 2009, 109–13). Among these were three copper discs, that had been part of a headdress, and earplugs. They were plain, without any trace of decoration. The biggest disc, with a diameter of 7 cm and a weight of 37.3g, had been perforated near the edge by brute force (see Figure 4.3.3). This detail illustrates that metal objects were unfamiliar, and so argues strongly against the possibility that the discs were cast at the site.

All metal objects from the Salvatierra site have been analysed by energy-dispersive X-ray fluorescence (XRF) spectrometry (Maldonado et al. 2010). The results showed that the three discs were of almost pure copper, while a small folded metal object found in the same grave, in the oral cavity of the dead, was of arsenic bronze. Interestingly, some minor metal fragments found in disturbed contexts near the surface at the top of the main pyramidal building were made of tin bronze, or in one case copper-arsenic-nickel alloy (Table 4.3.1). This might indicate that trade routes had changed over time, such that metal was then obtained from different sources.

![Perforated copper disc from Loma Salvatierra. © Heiko Prümers.](image-url)
Table 4.3.1  Chemical composition of the metal samples from Loma Salvatierra. © Heiko Prümers.

<table>
<thead>
<tr>
<th>#</th>
<th>Context</th>
<th>Cu</th>
<th>Sn</th>
<th>Fe</th>
<th>As</th>
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<td>&lt;0.005</td>
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Evidence from the Baures region

Settlements on natural levees surrounded by ditches are typical of the Baures region. No site has yet been identified as having a succession of overlying occupations, and until recently there was general agreement that these sites date to the latest pre-Hispanic and early colonial times (Dougherty and Calandra 1985a, 47–51; Erickson et al. 2008, 16–17). This view has recently been challenged, however, by new evidence for two earlier occupations radiocarbon dated to cal AD 350–550 and 600–850 (Jaimes Betancourt 2016; Jaimes Betancourt and Prümers 2015; Prümers and Jaimes Betancourt 2017). There is still a gap between these earlier occupations and the later one, dated to cal AD 1300–1500, but continued occupation of the levees should now be entertained as a plausible new working hypothesis. Such occupation would probably have been limited to small settlements that were displaced from time to time within the limited area offered by the individual levees.

Sites delimited by ditches have been reported from other regions of southwest Amazonia, such as the upper Xingú (for example, Heckenberger 2009, 2011), Acre state (for example, Saunaluoma and Schaan 2012; Saunaluoma et al. 2018), and the northernmost lowlands in Bolivia (Arellano López 2002; Arnold and Pretol 1988). A form of shared tradition has been postulated for these sites (Erickson 2008, 170; Mann 2008), but supporting evidence is still rather poor.

Within the Baures region, two distinct ecological settings have resulted in two different settlement patterns. The southern part is flat and exposed to regular flooding, so dispersed natural levees of varying size determined where settlements were established. In contrast, the northern reaches belong to the western outcrops of the Brazilian shield, and are hilly and well drained, so that settlements could be established almost anywhere, and indeed some of them are actually found side by side. As in the Casarabe region, the density and size of pre-Hispanic settlements in the Baures region, especially near the modern village of Bella Vista, is astonishing. In an area of 200 km$^2$ mapped with LIDAR, some 20 sites have been documented, among them seven with an enclosed area surpassing 200 ha (Prümers 2014). The sites are often separated by no more than a small depression, and they are within a five-minute walk of each other. No archaeological data are yet available for most of these sites, however, so their chronology and cultural affiliations remain to be determined.

Nevertheless, it is worth noting that among the abundant ceramic material from the sites excavated near the village of Bella Vista and at the Jasiaquiri levee, there are no pieces that show any traits indicating influences from the Andes. On the contrary, vessel forms, decoration technique and the use of cauixí as temper all point to a purely Amazonian tradition and a close connection with ceramics from the Guaporé region to the east (Jaimes Betancourt 2014). No ‘exotic’ materials were found in the excavations, and they are likewise absent from private
collections of pre-Hispanic material in the Baures region. Artefacts made of stone are rare, and without specific analysis it is impossible to say where the material they are made of may have come from.

In summary, the archaeological evidence from Baures, just like that known for the Casarabe, San Ignacio, and Santa Ana regions, continues to firmly support Nordenskiöld’s observation (1913) that the lowlands of eastern Bolivia were almost completely independent of Andean cultures. This situation might have changed during the final expansion of Inca state, but evidence is still scarce.

**Where did all the Incas go?**

If the narration of Diego Felipe de Alcaya in his *Cronica cierta* (1636/2011) is as correct as its title claims, then Mango Ynca successfully entered the lowlands of what is today Bolivia with 8,000 warriors and established some sort of Inca colony in a mountainous region located about 500 km (‘100 leagues’) north-east of the town of Santa Cruz de la Sierra. He then sent his son Guaynaapoc to Cuzco, who arrived there just after the Spaniards had captured Atahuallpa. So he returned to Paytiti accompanied by ‘up to 20,000 Indians’. Thus reunited, the ‘Lowland Inca’ ensured their peaceful reign over ‘innumerable provinces of different nations’, and ‘in the same way as Cuzco was the head in this realm, in that grand kingdom it is now the Paytiti called Mojos’ (Alcaya 1636/2011, 245).

Although the Llanos de Mojos are flat and therefore differ considerably from the description of Paytiti given by Alcaya, the region has repeatedly been identified with the ‘Paititi’ or ‘tierra rica’ of the chronicles. This is not surprising, given that other chronicles give different descriptions that allow for many different interpretations (see texts in Combès and Tyuleneva 2011; Renard-Casevitz et al. 1988, 101–7; Chapter 5.1). But if the Llanos de Mojos were identical with Paititi, there should be some Inca-related archaeological evidence. None has ever been reported from the region. Negative evidence is of course always a weak argument, but in this case it should at least be borne in mind. Surveys have been conducted along the Orthon river (Arellano López 2002), on the shores of Lake Rogaguado (Echevarría 2008; Tyuleneva 2010, 35–83), along the Apere river (Erickson 2000b; Tyuleneva 2010, 73–81), the Yacuma and Rapulo rivers (Walker 2008a, 2011a), near Exaltación (Tyuleneva 2010, 30–3), Santa Ana de Yacuma (Walker 2004), San Borja (Erickson and Faldín 1978), and San Ignacio (Michel López 1993), and not a single object of Inca provenance has ever been reported. This is all the more surprising since the Quipucamayos maintained that the Inca had conquered ‘the Moxos’ with gifts. Furthermore, Inca sites and material culture certainly have been encountered on the western and northern borders of the Llanos de Mojos. Several Inca sites have been identified along the Beni river (Álvarez 2002). Unfortunately, little can be said about them, since only the Las Piedras site, at the confluence of the rivers Beni and Madre de Dios, has yet been investigated to

At Las Piedras, only a few ceramic sherds of Classic Inca style have been found, and the stone architecture is unspecific. Nevertheless, other findings of probable Inca provenance have been reported from the area of Riberalta (Siiriäinen and Pärssinen 2001, 64–5), making the interpretation of the Las Piedras site as an Inca fortress more convincing. Even the bronze plate from Northwestern Argentine, known to have been found in 1921 near Riberalta and published as ‘Placa del Bení’ (Posnansky 1957, 127, Pl. LXXX.A; Ponce Sanginés 1994; Roos 1994), might serve as an additional argument. A recent study of the few known pieces of this highly diagnostic group of objects (Cruz 2011), has convincingly argued for an association with late pre-Inca or Inca times. The same study also demonstrates that the metal plates of this specific group, found in Bolivia and Peru, all came from Inca sites.

Taken together, such evidence clearly indicates Inca presence at Las Piedras. But what kind of presence? According to Alcaya, almost 30,000 Inca settlers entered the lowlands to colonize Paititi, so the scarce evidence from Las Piedras would most plausibly fit with just a temporary military camp. If so, where did the Incas go on to from here?

As shown by Combès (2008, 2011b), an extensive and well-established trade network in silver and gold objects connected ethnic groups between the Guapay river and the Pantanal, and from there southwards to groups along the Paraguay river. One of the sources of the metal, the ‘Cerro de Saipurú’, had been occupied by the Incas, and recent surveys near the modern village of Saipurú have succeeded in identifying two Inca settlements and the location of the mines (Cruz 2015; Cruz and Guillot 2009). Interestingly, with the exception of Alcaya’s Crónica cierta, early colonial chronicles make no mention of these mines, which is why Combès (2009, 2011b) has argued that Alcaya’s depiction of Paititi should not be rejected out of hand.

Perhaps past researchers have just not looked far enough, because the possibility of Inca incursion into regions so distant from the Andean foothills seemed altogether too fantastic. Cruz and Guillot have now begun to do so, proposing that Inca sites should be sought in the Serrania de San Fernando, the Pantanal, and the Serra dos Paresis of Mato Grosso (Cruz and Guillot 2009, 11; see also Levillier 1976 and Combès 2011b).

To close, then, let me take on the role of a sixteenth-century informant, and state that the tierra rica is still far off, and that in all certainty, Paititi lies ‘over there’.