TEQUINHO GEOGLYPH SITE AND EARLY POLYCHROME HORIZON 300 BC-AD 300/500 IN THE BRAZILIAN STATE OF ACRE

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ABSTRACT

In Amazonian archaeological discussion the concept of tradition presupposes a keen connection between pottery styles and specific language groups. Multicultural traditions or transcultural adaptations are often pushed aside. Denise Schaan returned to the concept of horizon in order to explain a number of archaeological phenomena from a wide geographical and chronological perspective. Also in this study the concept of Polychrome Horizon is used, but it is divided between Early and Late Polychrome Horizons. At the same time an entirely new area, eastern Acre, and its archaeological sub-tradition Tequinho, dated 50BC-AD200 with its polychrome pottery, are brought into the discussion. Tequinho is situated in the interfluvial terra firme environment, and by its geographic position mediated contacts between the headwaters of the Amazon, the Ucayali and the Madeira rivers.

Keywords: Amazonian archaeology, Polychrome pottery, Horizon.
INTRODUCTION

The great quality of Amazonian polychromic ceramics was first described by Gaspar Carvajal, who participated in the Amazonian expedition of Francisco de Orellana in 1541-1542. Carvajal (1992:246) saw jars, pitchers, plates, bowls and “candlesticks” (probably referring to Santarém Florid style/Bottleneck vases with small mouths), considering them to be the best quality he had ever seen. Historically, the origin of the Amazonian Polychrome ceramic style is argued to be related either to the Incised Rim/Barrancoid tradition and its painted ceramics associated with Arawakan linguistic groups, or to finger-nail marked, corrugated and painted pottery associated with Tupi-Guarani linguistic groups. Nordenskiöld (1913), for example, associated the polychrome pottery of Mojos to the Arawak, and Lothrop (1932) the polychrome pottery of the Rio de la Plata (and the Ucayali) with Tupi-Guarani (see also, Ambrosetti 1895, Metraux 1928). Kroeber (1949:486) was more tentative, but writes that if the Arawak originated the style, many other linguistic groups such as Panoan in the Ucayali area developed it. Willey (1949: 190) also considered Guarani polychrome to be a part of a larger Amazonian painting tradition – not the creator of this tradition. Furthermore, at this time Howard (1947) had categorized the style as “the Polychrome Division of Amazonia.”

Meggers and Evans (1961, 1983) and Evans and Meggers (1968) noticed that the polychrome style expanded rapidly from the Ecuadorian Napo River to Central Amazon and further to the island of Marajó as well as to the upper Madeira River, allowing them to call the style the Polychromic Horizon Style. In 1970 Lathrap returned to the idea of connections between polychromic pottery and the migration of Tupi-Guarani linguistic groups. Instead of the Horizon Style he called it a ceramic Tradition, supposing that its origin might be found in Central Amazonia. In Brazil, Brochado (1984, 1989) followed Lathrap’s idea and created hypothetical routes of Tupi-Guarani expansion. Brochado, among others, used historical information about the distribution of Tupi languages studied and classified since Martius (1867), Rivet (1924) and Loukotka (1939, see also Noelli 2008) and compared these maps to the chronological and spatial distribution of ceramics and other archaeological objects associated with Tupi-Guarani. In ceramics, Brochado considered especially polychrome, corrugated and combed (escovado) potteries to be a part of the Tupi-Guarani tradition. Brochado gained many followers, and similar and more precise interdisciplinary mappings are still going on (e.g. Silva & Noelli 2017, Bonomo et al. 2015, Iriarte et al. 2016).
Nevertheless, some new archaeological sites with polychrome pottery in the Lower Amazon have strengthened the idea that contacts with the Barrancoid Tradition in the Venezuelan Orinoco (and the Caribbean Islands) already existed some two thousand years ago. Especially the ceramics of Pocó and Açutuba or Pocó-Açutuba present many characteristics of the Barrancoid Tradition (Hilbert & Hilbert 1980, Lima 2008, 2016, Lima & Neves 2011, Lima et al. 2006) associated with the Arawakan language groups (e.g. Cruxent & Rouse 1961, Roosevelt 1980, Rouse 1992).

Schaan (2012:181) preferred to speak of the Saladoid-Barrancoid Horizon “which influenced several Formative ceramic styles along the central and lower Amazon, penetrated the Amazon basin through the Orinoco River, coming from Venezuela. After AD 400, the Polychrome Horizon pottery makes its appearance, along with the proliferation of earthworks throughout the basin.” At this time, AD 400 was generally accepted as the date for the first appearance of polychrome pottery in the Amazon basin (e.g. Roosevelt 2014: 146, Belletti 2016: 351-352, see also Rostain 2013: 105). At the same time, nevertheless, some researchers paid attention to the fact that the Pocó and the Açutuba represent in many respects the oldest Saladoid and Incised Rim/Barrancoid Tradition in the Lower and Central Amazon with their own bi-chrome and polychrome pottery styles without direct connection with the “real” Polychrome Tradition. Lima and her colleagues (2006) dated the Açutuba phase between 300 BC and AD 360, or 300 BC and AD 600 (Neves 2012 - Table 4.3 - 4.). The Pocó phase may even have started some hundreds of years earlier (Almeida & Neves 2014: 176, Guapindaia 2008, Hilbert & Hilbert 1980, Lima & Neves 2011) even though it is somewhat unclear when its polychrome painting did emerge.

Also in the Upper Madeira, Miller (1992, cited also by Almeida & Moraes 2016: 403, Almeida & Neves 2014:177) published a very early date, 1049-750 BC, for the Jatuarana sub-tradition related to polychrome pottery. Nevertheless, new dates from the Upper Madeira indicate that this particular polychrome style did not enter there before AD 600/700 (Almeida & Moraes 2016:410-411, Almeida & Neves 2014: 178, Kater et al. 2020). On the other hand, in the Upper Madeira River basin the Pocó-Açutuba style seems to be older than in the Central and Lower Amazon. Currently, the Madeira ceramics attributed to the Pocó-Açutuba (Polychrome) Tradition is dated there from 1500/1000 BC to AD 200/400, while the Incised Rim/Barrancoid Tradition is considered there a completely separate and later phase that begins ca. AD 400 (e.g. Almeida & Moraes 2016, Kater 2020, Neves et al. 2020, Zuse 2016, Zuse et al. 2020).
In this article I introduce into the discussion the ceremonial polychrome pottery found from the Tequinho archaeological site I excavated with Denise Schaan and Alceu Ranzi in the eastern State of Acre. Tequinho Polychrome, dated 50 BC-AD 200, appears to be some kind of missing link between Pocó-Açutuba/Arawakan (in the Early Polychrome Horizon) and Tupi-Guarani (in the Late Polychrome Horizon) Traditions. Tequinho is situated in the interfluvial terra firme upland, and by its geographic position mediated contacts between the headwaters of the Amazon, the Ucayali and the Madeira rivers.

Tequinho is an important site situated in the “epicenter” of geometrically patterned earthworks found since 1977 in eastern Acre (Dias & Carvalho 1988, Pärssinen et al. 2003, 2009, Proust 1992:464, Ranzi 2003, Ranzi & Aguiar 2001, Saunaluoma & Schaan 2012, Schaan et al. 2008, 2012). Since my first visit to Acre in 2002, I understood that the peoples who had built so many different earthworks and roads in an area starting from northern Bolivia and reaching deep into the Brazilian state of Amazonas must have been a multiethnic formation that shared a common world view. The area is broad and at the time of European contacts, tens of indigenous languages were spoken there (Eriksen 2011, Metraux 1948, Pärssinen 2018). Furthermore, certain earthwork forms were concentrated in the specific zones of the greater earthwork area indicating possible differentiations between ethnic groups. Shared ideology, in turn, can be seen in the systematic use of geometric forms when ceremonial centers, or geoglyphs as Ranzi (2003) called Acrean earthworks, were constructed. Both of us agreed that an ancient civilization was concerned. We do not know whether the civilization had a shared name to represent its ideological unity, but we might call the civilization that constructed geometrically patterned earthworks and roads in Acre Aquiry, taking the name of the first historical exploration of it published by Chandless (1866a, 1866b, 1866c). Obviously, the question here concerns an indigenous name. The current hypothesis, given also by Dr. Sidney da Silva Facundes (personal communication in 2020), is that Aquiry may come from the Apurinã (Arawakan) word for caiman “(k)aikyry” (the River of Caimans; today known as the Acre river).

1 AN ANDEAN EXAMPLE AND POLYCHROME HORIZONS AS CHRONOLOGICAL AND STYLISTIC MARKERS IN AMAZONIA

As mentioned earlier, in the history of Amazonian archaeology, the distribution of polychrome pottery was first considered to be a chronological horizon that spread quite suddenly in
different parts of Amazonia across cultural frontiers as a diagnostic decorative and technological style (Meggers & Evans 1961). In the 1960s, and even before, the concept of a chronological horizon was debated among archaeologists working in Mesoamerica and the Andes (see e.g. Willey & Phillips 1958). At the beginning of the 20th century, Max Uhle used the concept for the first time in order to describe a stylistic homogeneity (horizon) that appeared in the Andes during the Tiwanaku and Inca periods. After working in different parts of the Andes, he concentrated on the Ica and Chincha valleys, from where he finally established his cultural phases for Peru. In that time Uhle (1913) started to speak about two chronological horizons: Tiwanaku and Inca. By this he meant that it was possible to find stylistic traits of these two cultures in different parts of the Andes that also gave a relative chronological position for other cultures. Kroeber (1924), who got to know Uhle during his stay in Berkeley from 1901 to 1903 (Rowe 1962a), and was familiar with Uhle’s collection and writings, adapted the terminology even to his studies in Mexico, and together with O’Neale, he used it in Andean chronology (Kroeber 1944, O’Neale & Kroeber 1930). In Peru, Tello (1970 [1931]) added the Wari to these two cultures, which formed a contemporaneous cultural entity with the Tiwanaku. Finally, in the 1950s when Rowe started to work with Max Uhle’s collection in Berkeley and after he organized additional excavations in Ica, he adopted Uhle’s concept of chronological horizon, and added to the list an earlier one, Chavin, based on the works of Kroeber (1944), Tello (1949), Willey (1945, 1948), and some others (see Rowe 1954, 1962b, 1962c, 1962d, 1998, see also Lanning 1967, Menzel 1964). Rowe did not search for complex cultural patterns, but like Uhle, had decided to establish a master sequence for Central Andean ceramic chronology without any evolutionary presuppositions. The starting point of each horizon was determined from the small Ica valley: when the first evidence of Chavin and Wari-Tiwanku cultures was detected and radiocarbon dated, it gave the terminus post quem date for the Early and the Middle Horizons. When the influence disappeared in the ceramics, the terminus ante quem date was established. Nevertheless, the Late Horizon was defined by using the historical information on the probable year when Inca expansion and the Spanish conquistadors reached the Ica valley. Today, Rowe’s chronology with three Horizon styles, Chavin (Early Horizon, 900-200 BC), Wari-Tiwanku (Middle Horizon, AD 600-1000) and Inca (Late Horizon, 1476-1534), and three other ceramic periods (Initial, 1800-900 BC; Early Intermediate, 200 BC-AD 600 and Late Intermediate Periods, AD 1000-1476), is almost
unanimously accepted among Central Andean specialists (see also Pärssinen 2015a, Rice 1993).

Kroeber, Meggers and Evans were present when Willey (1948) presented his paper “A Functional Analysis of “Horizon Styles” in Peruvian Archaeology” in the Conference on Peruvian archaeology that was held in 1947 at the Viking Fund headquarters in New York City (Bennett 1948). In this paper Willey (1948) presented his idea of five horizons: Chavín, White-on-Red (painting), Negative (painting), Tiwanaku, and Inca. More than ten years later, before Rowe had definitely dropped out White-on-Red and Negative paintings from the list (because he could not detect those styles in the Ica valley), Meggers and Evans (1961) started systematically to use the horizon concept also in Amazonian archaeology. Borrowing from Willey’s model the idea of the White-on-Red and Negative Horizons, they found four Amazonian decorative techniques that could be suitable for chronological markers of horizons: Polychrome, Zoned Hachure, Incised Rim, and Incised Punctate (see also, Barreto et al. 2016: 590-591). In 1970 Lathrap changed the horizon term to tradition (see also Willey & Phillips 1958: 35-40). Consequently, when Simões (1972) listed different Brazilian archaeological phases, he did not use the term horizon; instead, he categorized them under five traditions: Zoned Hachure, Incised Rim, Polychrome, Incised Punctate and Other. Seemingly his idea was that more than chronological markers, these different decorative techniques represented more permanent cultural traditions related to certain ethnic and linguistic groups. Thus, archaeologists working in Amazonia, including Meggers and Evans (1983), soon started to speak about different manufacturing and stylistic traditions, trying to find a correspondence between linguistic groups and ceramic styles, and in a way returning to the ideas originally started around the turn of the nineteenth and twentieth centuries.


This interest in combining material markers with any spoken language can be justified, but at the same time it can be criticized for certain limitations. Today the concept of tradition in the Amazonian context presupposes a very keen connection between technological and decorative pottery styles and specific language groups. Questions concerning multicultural traditions (such as the case of earthworks building Aquir...
civilization) or transcultural adaptations (such as the case of the Panoan-speaking Conibos and Shipibos in the Ucayali) have been pushed aside. Nevertheless, it is very possible that the expansion of some ceramic traditions in Amazonia were conducted through indigenous exchange systems between different ethno-linguistic groups – not only by a significant wave of migration (Hornborg 2005, Eriksen 2011, Lima 2008, Lyon 1987, Neves 1999, see also Schaan 2015:102).

From the multidisciplinary point of view, we must also remember the distinctive nature of historical, linguistic and archaeological data. Historically recorded religious, economic or political changes do not immediately affect all material culture that can be detected archaeologically, or vice versa; a rapid change in material culture does not necessarily imply a simultaneous reorganization of religious, economic or political life (see Braudel 1980: 25-54, 64-82). In numerous cases, the lack of correlation between archaeological and intangible evidence has been documented. In Mexico, Smith (1987: 37-54) analyzed ethnohistorical and archaeological records of the Aztec expansion and concluded that the supposed artefactual markers of conquest spread to some provincial regions before the actual incorporation of these regions into the Aztec state. Also in the Andes the situation seems to be quite similar if we study the chronology of Inca-style ceramics and architecture in relation to that of the historically established Inca expansion. Current evidence firmly indicates that the Incas adopted much of their imperial style from the Lake Titicaca region, where it had developed during the Late Intermediate Period from the earlier Tiwanaku style (Pärssinen & Siiriäinen 1997, Pärssinen 2015b). Thus, the tradition was there at least a hundred of years before the Inca expansion (see also Marsh et al. 2017). Furthermore, in the Andes especially the Early Horizon and to a great extent also the Middle Horizon were based on the expansion of religious ideologies manifested in Chavin, Tiwanaku and Wari styles (e.g. Burger 1992, Isbell et al. 2018, Korpisaari & Pärssinen 2011). Both Horizons were multicultural phenomena as was the Late Horizon that was created by the expansionistic and multicultural Inca State (e.g. Murra 1980, Pärssinen 1992, Rowe 1946). Also in Amazonia, Eriksen (2011) and Carling et al. (2013) have demonstrated that many locally produced ceramic styles, such as those produced during the Paredão phase (AD 700-1200) in the middle Amazon, were maintained by some groups for millennia “without adapting the style of their pottery despite long periods of contact and outer pressure from major ceramic tradition” (Carling et al. 2013:35).

These kinds of facts probably let Schaan (2012,
2015), together with Roosevelt (1993, 1999, 2013), maintain the concept of horizon in the Amazonian context, too. It is more neutral toward direct linguistic correspondence and it aims to see a larger number of archaeological phenomena from a wider geographical and chronological perspective. At the same time it leaves space to use the concept of tradition in long-lasting and regional contexts (e.g. Pocó-Açutuba or Tupi-Guarani Tradition). In fact, neither in the Andes nor in the Amazonia can we understand horizons without understanding the different traditions on which each horizon was composed. Even in the Andes, the settlement and burial traditions of Tiwanaku, for example, were quite different compared to Wari (Conkling 1991, Isbell & Korpisaari 2015). Nevertheless, both states had a common religious cult and ceramic iconography. After all, we use theoretical concepts as tools of analysis, and if any concept used appears to be contradictory or useless we will abandon it. In fact, almost the same seems to have happened to the chronological concepts of “Formative Period” and “Polychrome Horizon”. As Neves (2007) once wrote, in the Amazonian context we may speak about “the Formative that never ended” (Neves 2007). Indeed, we may argue that if only one phase dominates an entire ceramic period it is not a very good tool for analysis. The same may be said concerning the concept of Polychrome Horizon, and even on the technical-stylistic & long-lasting concept of Polychrome Tradition. If the Polychrome Horizon lasted more than 3,000 years and never ended, or if the Polychrome Tradition included two or more totally different traditions there is no sense to use them as before. This is why some archaeologists working in Amazonia have currently started to use the concept of Polychrome Tradition only for the chronologically later tradition related to Tupi-Guarani language groups and their expansion. Many other polychrome traditions possibly related to Arawakan (e.g. Pocó-Açutuba, Saladoide) or other expansion/adaptation processes were now left out from the definition (see Neves et al. 2014). This is somewhat confusing and makes it difficult to use the concept of Polychrome Tradition in connection with Tequinho polychrome pottery. It is contemporary with the Pocó-Açutuba Tradition/Phase, and has few similarities with it – supposing that there were some contacts. Nevertheless, even though the Tequinho sub-tradition with its’ polychrome pottery seems to be older than the newly dated Jatuarana sub–tradition (AD 700-1550) directly related to the Tupi-Guarani and so called Amazonian Polychrome Tradition in the Upper Madeira, Tequinho pottery shows even more similarities with Jatuarana than with the Pocó-Açutuba Tradition (see e.g. Almeida 2013).
Thus, to avoid more confusion with terminology, I will return, as Denise Schaan did, to the older horizon concept, but now dividing it into at least two chronological periods: Early Amazonian Polychrome Horizon and Late Amazonian Polychrome Horizon. The Early Amazonian Polychrome Horizon corresponds tentatively to the years ca. 300 BC-AD 300/500, when polychrome potteries were produced in the Central Amazon, the Lower Amazon, Acre, the Upper Madeira, the Venezuelan Orinoco, Guyana, and possibly during its final phase in Bolivian Mojos (see e.g. Dougherty & Calandra 1981-1982, Jaimes Betancourt 2012, Plew 2005, Prümers 2014, Prümers & Jaimes Betancourt 2014), and in the Island of Marajó (see e.g. Roosevelt 2013, Schaan 2012). According to Lathrap et al. (1985:61) and Myers (1988:60), the first polychrome pottery also appeared in the Ucayali during the Yarinacocha phase, ca. 100 BC. The Late Amazonian Polychrome Horizon corresponds to the great second wave of the expansion of polychrome pottery starting possibly from the Upper Madeira or from the Island of Marajó ca. AD 900 onward continuing up to Amapá and French Guyana (Rostain 2011), the Rio Negro, to the Middle Solimões River (Gomes 2011) and the Ucayali, the Napo (Arroyo-Kalin & Rivas Panduro 2016) and Colombian Araracuara (Herrera et al. 1982) before the European colonialism that interfered in the process from ca. 1550 onward.

During the Initial (or Formative) Polychrome Period (ca. 1500 BC-300 BC) painted polychrome potteries were produced, at least, in the Upper Madeira, the Venezuelan Orinoco and Guyana, and during the Intermediate Polychrome Period (ca. AD 300/500-900) painted polychrome potteries were produced, at least, in the Island of Marajó as well as in Mojos (Bolivia), Orinoco, and possibly in Acre and in the Upper Madeira.

| Initial (or Formative) Polychrome Period | ca. 1500 BC-300 BC |
| Early Polychrome Horizon                | ca. 300 BC-AD 300/500 |
| Intermediate Polychrome Period          | ca. AD 300/500-900   |
| Later Polychrome Horizon                | ca. AD 900-1550      |

Figure 1 - Chart of early and late polychrome horizons in Greater Amazonia.

Finally, it is important to clarify that this model presents the spread of two greater Horizon waves of polychrome pottery as chronological markers in a Greater Amazonia. However, according to our current knowledge, the first polychrome pottery was produced in the Upper Madeira a thousand years earlier before this technical innovation started to spread relatively rapidly over a broad area forming the Early Polychrome Horizon. Polychrome pottery disappeared from many areas and the Early Horizon ended. Nevertheless, in some areas such as Marajó Island polychrome
pottery was in full use during the Intermediate Polychrome Period before it formed part of the multicultural Late Polychrome Horizon (see Roosevelt 2013, Schaan 2012). Similarly in the Andes, the Tiwanaku ceramic tradition developed during the Early Intermediate Period, formed part of the multicultural Middle Horizon, and disappeared in the Late Intermediate period ca. AD 1200 (see e.g. Korpisaari & Pärssinen 2011, Pärssinen 2015a).

2 GEOGLYPH-TYPE EARTHWORKS, AQUIRY CIVILIZATION, AND THE QUINARI CERAMIC TRADITION IN EASTERN ACRE

The archaeological site of Tequinho is located in a terra firme drained by the upper tributaries of the Purus River – the Acre (originally Aquiry) and the Iquiri Rivers – situated near the Acre state capital Rio Branco (Figure 2). An ancient multicultural civilization, earlier named Aquiry, constructed geometric earthworks and built a system of roads in this very same area. Today we make a distinction between (1.) geoglyphs that are ditched embankments where ditches used to be dug inside of the embankment, and (2.) earthworks with embankments only (without a ditch). We also have a separate category for (3.) geometrically arranged mound settlements that are younger than geoglyphs (Saunaluoma et al. 2018). Today Amazonian geoglyphs, geometrically patterned ditched embankments, have raised a lot of general interest. Acrean geoglyphs have been put on Unesco’s tentative list of world patrimony sites. In total, more than 500 geoglyph sites have been detected so far in the area bigger than Switzerland occupying ca. 60,000 square kilometers (see also, Pärssinen & Ranzi 2020, Rampanelli 2016). Furthermore, we estimate that in the future the area will be doubled or even tripled in size.

At the moment, in eastern Acre the oldest ceramic stratum is dated from a big elliptical geoglyph called Ramal do Capatará excavated by Schaan (Figure 2). It gave the date 1631-1430 cal BC (Beta-288234; see Saunaluoma & Schaan 2012:7-8). Somewhat earlier we had obtained a date 1211-942 cal BC from a stratum also containing ceramics inside of the Severino Calazans archaeological site (Ua-37238, see Schaan et al. 2012:136). The last mentioned date may be related to the beginning of earthworks constructions in Severino Calazans since quite a similar radiocarbon date, 2920 – 2730 BP, has also been obtained from the Los Angeles site (Dias 2006), and a thermoluminescence date 2555 ± 174 BP from Xipamanu I site (Bellido et al. 2007). Nevertheless, these early dates have a context problem: many earthworks have been established on sites with earlier human activities (Pärssinen et al. 2020a). Thus, so far our earliest
secure carbon dates related to actual earthworks constructions come from four samples – associated with an embankment structure with ceramics, and excavated inside of the current ditched enclosure (pit 20A, levels 120-156 cm) of Severino Calazans (Pärssinen et al. 2020a). These give the following dates: 730-376 cal BC (Ua-59600), 735-386 cal BC (Ua-59602), 741-389 cal BC (Ua-59601), and 751-402 cal BC (Ua-59499) confirming, at least, that the Xipamanu I date 2555 BP is correct. In every case, the peak of geoglyph construction was between 300/250 BC and AD 900/950, and some of them were still used until ca. AD 1300 (Schaan et al. 2012, Saunaluoma et al. 2018).

All known Amazonian geoglyph-type earthworks belong to the ceramic period that was called locally the Quinari Tradition, established by Dias (2006) and Dias & Carvalho (1988), and summarized by Nicoli (2000) and Schaan (2008). Nevertheless, only a relative few shards have been found on ordinary geoglyph sites. In every case, the Quinari Tradition has been divided into five phases, denominated Quinari, Iquiri, Iaco, Xapuri and Jacuru, of which only two correspond quite directly to earthwork sites: Quinari, Iquiri and to some extent also Iaco. According to the original definition, these phases have a great variety of forms, but typically globular and cylinder forms are combined. Another common feature is the use of caraipé in ceramic paste as the most common

Figure 2 - Map of a part of the Upper Purus River Basin showing the current area of the known geoglyphs and the Tequinho, Ramal do Capatará, Severino Calazans and Fazenda Atlântica archaeological sites (grey dots) discussed in the text. Drawing by Sanna Saunaluoma, Martti Pärssinen & Wesa Perttola.
tempering material, while red slip and red on white painted lines are used as predominant decorative techniques. Incised potsherds are said to appear in lesser amounts while polychrome painting is not mentioned at all.

Unfortunately, when Dias and Carvalho established these phases they mainly observed regional differences; they never established any chronological frameworks for their five phases. Thus, they are quite useless when chronological markers are sought. However, after excavating geoglyph sites in Acre for more than ten years we may, on the one hand, accept that the use of caraipé in ceramic paste is, indeed, a common feature for most of the sites. On the other hand, we must note that the diagnostic pottery combining globular and cylinder forms is extremely rare in the sites we excavated. The form may have been common in funeral sites, but from ceremonial geoglyph sites we have found only a few expressions of this form. Incised shards also appear to be even more common than painted shards, and finally, polychrome pottery seems to be equally common as bi-chrome. Thus, the Aquiry civilization should be placed on maps describing the distribution of Amazonian Polychrome Horizons, and in general, as Saunaluoma (2016) puts it, we should classify Acrean precoceramic characteristics more firmly, taking into account not only the sub-region but also the context (ceremonial, funeral, and domestic) and chronology.

3 ARCHAEOLOGICAL EXCAVATIONS IN TEQUINHO

As mentioned earlier, most known geoglyph sites do not contain many ceramics. A clear exception is the Tequinho site, studied in 2012-2014. The Tequinho geoglyph site covers an area of approximately 15 hectares, consisting of a ditched enclosure with three concentric ditches and adjacent embankments, as well as a structure which currently forms a three-sided square (U-form) with two concentric ditches. Originally it may have been question of a square where the eastern ditch had fallen down. Additional embankments can also be seen inside and outside of the main enclosure (Figures 3-4). Roads radiate from the largest enclosure in the four cardinal directions, and some other direct roads connect the two ditched enclosures (Pärssinen et al. 2021, Virtanen & Saunaluoma 2017). During the mentioned years, 18 test pits and a 24-meter-long trench were excavated in Tequinho. Because the interior open square of the main structure seems to have been cleared of all waste after each ceremony, the archaeological findings concentrated on the small mounds, embankments and ditches.
Figure 3 - Plan of the Tequinho site showing the location of the test pits and a detailed structure of Trench 9L-F discussed in the text.
Drawing by Martti Pärssinen.
The first eight pits were excavated in 2012 and 2013 as part of familiarization courses for local school children and university students under the direction of Dr. Denise Schaan and Dr. Sanna Saunaluoma. The results of these preliminary excavations are not included in this article. Nevertheless, one of the Tequinho test pits (Pit 9A) was excavated into an artificial mound, of ca. 2.2 meters height and ca. 30 meters diameter, situated on the western side of the main avenue leading to the site. After the initial pit 9A was created in the center of the mound, we continued excavating in a west–east direction a 24-meter-long trench 9A-L into the mound (Figures 3, 5-7). In the first 40 cm below the surface of pits 9I, 9H and 9G we found a few iron and plastic objects indicating quite recent activities, but otherwise the trench was practically undisturbed. The shards found in the mound are still under comprehensive analysis. In this article I will concentrate on the pre-colonial polychrome pottery found from this particular 24-meter-long trench 9L-F well below the somewhat disturbed uppermost stratum.
Figure 5 – The northern profile of Pits 9A, B, C, D, E, F and the location of six C14 samples listed in Table 1.

Figure 6 - The northern profile of Pits 9I, H, G and the location of five C14 samples listed in Table 1. The first 40 cm of the uppermost stratum contained a few recent objects and hence was partially mixed with pre-colonial ceramics.
4 DATING OF THE EXCAVATED MOUND IN TEQUINHO

Twelve samples from Trench 9L-F at Tequinho were radiocarbon dated (Table 1). Charcoal from secure contexts was collected for radiocarbon dating, and these samples were analyzed in the Ångström Laboratory of the University of Uppsala. All calibrations have been made by the OxCal v4.3 program, using the Southern Hemisphere Atmospheric SHCal13 curve (Bronk Ramsey 2009, 2017).

The oldest point appeared to be an earlier small mound (Figure 5), which yielded the date 2864 – 2481 cal BC (Ua-48320), indicating a much older occupational period at the site. Much later, however, a depression was made over this older mound that contained Brazil nut shells (Pärssinen et al. 2021). The oldest archaeological stratum (9D, at a level of 120 cm below the surface) of the newer mound yielded a date of 63 cal BC-124 cal AD (Ua-48319). After this date, the mound had been extended towards the west. From there, the latest date derives from pit 9H (160 cm below the surface), with a date of 123-340 cal AD (Ua-48324).

Figure 7 - The northern profile of Pits 9L, K, J and the location of one C14 sample listed in Table 1.
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<th>Lab. number</th>
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<td>46BC-204AD</td>
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<tr>
<td>Tequinho 9A</td>
<td>160 cm</td>
<td>charcoal</td>
<td>1956 ± 34</td>
<td>Ua-48329</td>
<td>-26.8</td>
<td>39BC-204AD</td>
</tr>
<tr>
<td>Tequinho 9A</td>
<td>130 cm</td>
<td>charcoal</td>
<td>1963 ± 39</td>
<td>Ua-48322</td>
<td>-27.8</td>
<td>46BC-204AD</td>
</tr>
<tr>
<td>Tequinho 9A</td>
<td>100 cm</td>
<td>charcoal</td>
<td>1879 ± 39</td>
<td>Ua-48323</td>
<td>-26.5</td>
<td>71-321AD</td>
</tr>
<tr>
<td>Tequinho 9H</td>
<td>160 cm</td>
<td>charcoal</td>
<td>1841 ± 34</td>
<td>Ua-48324</td>
<td>-28.3</td>
<td>123-340AD</td>
</tr>
<tr>
<td>Tequinho 9H</td>
<td>110 cm</td>
<td>charcoal</td>
<td>1874 ± 33</td>
<td>Ua-48325</td>
<td>-26.1</td>
<td>80-249AD</td>
</tr>
<tr>
<td>Tequinho 9H</td>
<td>55 cm</td>
<td>charcoal</td>
<td>1966 ± 35</td>
<td>Ua-48326</td>
<td>-27.3</td>
<td>46BC-203AD</td>
</tr>
<tr>
<td>Tequinho 9I</td>
<td>210 cm</td>
<td>charcoal</td>
<td>1968 ± 33</td>
<td>Ua-48327</td>
<td>-26.1</td>
<td>46BC-202AD</td>
</tr>
<tr>
<td>Tequinho 9I</td>
<td>150 cm</td>
<td>charcoal</td>
<td>1935 ± 33</td>
<td>Ua-48328</td>
<td>-25.5</td>
<td>35-210AD</td>
</tr>
<tr>
<td>Tequinho 9L</td>
<td>70 – 80 cm</td>
<td>charcoal</td>
<td>1910 ± 32</td>
<td>Ua-50107</td>
<td>-24.4</td>
<td>66-226AD</td>
</tr>
<tr>
<td>Tequinho 18</td>
<td>145 cm</td>
<td>charcoal</td>
<td>1476 ± 34</td>
<td>Ua-50108</td>
<td>-27.2</td>
<td>553-666AD</td>
</tr>
</tbody>
</table>

Table 1 - C14 dates obtained from Tequinho.

Even though some 2.20 meters of soil were accumulated in the central part of the mound, no significant time differences existed between the bottom and the top of the mound. For example, almost the same dates were recorded from 210 cm below the surface of pit 9I (46 cal BC-202 cal AD) as from 55 cm below the surface of the next pit 9H (46 cal BC-203 cal AD). Nevertheless, the soil was not mixed (below 40 cm), but instead showed a clear stratigraphy. All these indicate that the mound was accumulated quite rapidly over the span of a few generations. As a result, we decided to combine three similar vertically sampled dates from the center of the mound (pit 9A 100, 130 and 185 cm below the surface; samples Ua-48323, Ua-48322 and Ua-48321 respectively seen in Figure 5). Using the “combine” function of the OxCal v4.3 program, the three samples yielded dates of 62-193...
cal AD with a probability of two sigma (95.4%) (X^2-Test: df=2 T=0.0 [5% 6.0]). Hence, by using all calibrated dates, we may safely state that the second mound was accumulated due to human activity between 63 cal BC-340 cal AD (Pärssinen et al. 2021), and most likely between 63 cal BC-193 cal AD or, in general, ca. 50 BC-AD 200.

From Tequinho, we have one other date derived from test pit 18, made in a 4.8-meter-deep ditch that was filled with soil cleaned from the central plaza of the main geoglyph. The sample was taken from a level 145 cm below the surface, and yielded a calibrated date of 553-666 cal AD (Ua-50108). The same layer contained one shard of the polychrome pottery (red and reddish brown on a light brown surface) indicating that the polychrome tradition continued in Tequinho during the Intermediate Polychrome Period. However, the correct date for all the other polychrome and non-polychrome ceremonial ceramics presented in this article corresponds to the years ca. 50 BC-AD 200.

5 DESCRIPTION OF TEQUINHO CERAMICS

The mound situated in the northern entrance of the ceremonial road leading to the Tequinho site appeared to be some kind of redistribution point where food and beverages were deposited and served during different ceremonies. Some grinding stones, macrofossils, spindle whorls and ca. 38,000 shards of mostly high-quality drinking and serving vessels were found at this particular location. All potteries were broken, and many shards show marks of fire after they were broken. In some cases part of the pottery is black due to fire and smoke, while other shards of the very same pottery do not show any mark of fire at all (Figure 8:6). Furthermore, due to the acidity of the soil, the original slip (engobe) of many shards has disappeared. Equally, the typical post-cooking paintings disappeared very easily on the white, red, brown, yellowish or black slip or on the plain surface. Thus, only rarely the entire original painting could be detected.

Taking into account diagnostic shards of rim, neck, body and base, more than fifty different pottery forms may be established. This confirms the earlier supposition of a great variability of forms related to the Quinari Tradition. Both everted and inverted rims are common in the Tequinho ware. Openings could be circular, but also elliptical, quadrangular and irregular forms do exist. Geometrically modeled labial flanges are quite common, but mesial flanges are extremely rare. Basic base forms are globular and plain, and occasionally also semielliptical base forms do exist. However, all appliques and specifically modeled body forms are extremely rare.

In the ceramic paste, the generalized use of
caraipé temper can be confirmed. It is the most common temper material in paste along with grog. Furthermore, sometimes small pieces of carbon and local conglomerate gravel are also used as temper in the Tequinho ceramic paste. In addition, our preliminary analysis of nine different chemical components of 23 ceramic samples demonstrates that the Tequinho ceramics are quite homogenous and contain mostly quartz (SiO2, ca. 65%), aluminum oxide (Al2O3, ca. 24%) and iron oxide (FeO, ca. 5%). Also potassium oxide (P2O5, ca. 2.5%) and titanium dioxide (TiO2, ca. 1.25%) are clearly present (Elisabeth Holmqvist-Sipilä, personal communication in 2018).

The most typical decorative technics is incision made either inside or outside of the rim. Punctate decoration is rare, but does appear every now and then, for example, together with fingernail decoration (Figure 8:16). Vertical combing is quite common in the neck of everted potteries (Figure 8: 15b), and one line of corrugation does appear in flanges of some everted ware (Figure 8:14).

The color of paste varies from black and grey to brown and reddish. Orange is also a common color. Interestingly, the color of paste may intentionally vary between the inside and outside of the vessel. In some cases the paste itself may be polychrome forming layers of different colors. In one particular case (a vessel with a 20 cm rim-diameter, Pit 9L, level 90-100cm) I observed a black layer in the center of the paste. The next internal and external layers are gray, the third layers are orange and the fourth layers – the finishing slip – are red on both sides.

As in the case described above, in Tequinho pottery the surface treatment by a colored slip (engobe) is common. For this slip, the most general colors are red, brown, yellowish, black and white. Sometime only one color is used to make a slip, but also bi–color and polychrome slips are common on the surface. In addition, an incised line between two different slip colors is quite common (Figure 9: 7, 21, 25). The most common combinations are a red and brown slip, or red/brown with a white slip (see Figure 9: 24-25), but other combinations do also occur (see Figure 9: 23a). Nevertheless, most black and brown slipped potteries do not have other decoration than incisions near either side of the rim of the pottery (see Figure 9).

The polychrome painting is sometime realized directly on the natural surface of a vessel. For example, shard number 26 (Figure 9) has a purple and black painting on a polished brown surface. Most typical, however, is a painting on a white slip, and, in a smaller scale, a painting on a red or yellowish slip. The colors used in the paintings are black, red, brown, orange, yellow, and sometimes white and purple (Figure 9). Finally, I would like
Figure 8 - Examples of non-polychrome ceremonial shards excavated in Tequinho.
Figure 9 - Examples of polychrome shards excavated in Tequinho.
to mention that in some Tequinho pottery the effect of color is also obtained by incision. As explained earlier, the ceramic paste may have different color layers. When the potters grooved figures deep enough into the ceramic surface, the color of the next layer appears before the eyes of the observer (Figure 8: 1-3). This technique is known in Venezuelan Saladoid pottery in Parmana, especially during the Camoruco phase, starting ca. AD 400 onward (Roosevelt 1980: 195, 216; Roosevelt, personal communication in 2013). Thus, some contacts between these two areas can be supposed.

The variability of forms among the polychrome pottery is quite reduced in Tequinho compared to Incised-Rim and other vessels. Typical polychrome pottery forms are presented in Figure 10. Forms a and b are probably typical for drinking cups; c-f are probably typical for serving vessel, and forms g & h are typical for bottles used for liquids. From all of these forms, the most common in the Tequinho corpus are the bottles g and h and the serving vessel d.

In the Tequinho ware, paintings are usually realized inside of black, red or brown division lines. Especially round, oval, curved, and rectangle elements are common (Figure 9: 1, 3, 6, 10, 15, 21). Often these are combined with staggered, serrate, curved and direct lines (Figure 9: 9, 10, 19). Also thin pointed or meandering lines are used to form the totality of the iconographic messages (Figure 9: 3, 10, 19, 20).

Quite typical for the composition of Tequinho polychrome painting is the combination of a circular pattern and a rectangular pattern that has two concave sides forming sharp corners (Figure 10: 1). The combination of these two patterns, circular forms and sharp edges, is quite common during the Early Polychrome Horizon. We can find similar patterns from the Saladoid Tradition in Venezuela (Rouse 1992, fig. 20h), the Pocó–Açutuba Tradition in the Lower Amazon (Hilbert & Hilbert 1980: Est.2h,i; Lima 2016, fig. 6b) and from the same Pocó–Açutuba Tradition in the Upper Madeira (Kater et al. 2020, fig. 4:TE-2141-36). This union of soft and sharp pattern has many manifestations in Tequinho ceramics, and it is equally common in Tequinho incised vessels (Figures 8: 5, 6, 9, 15a). Another common feature between Tequinho polychrome and incised potteries is the motif combining a crescent and a semicircle/ellipse (Figures 8: 4; 9: 3, 4 and 10: 2). It may be part of local iconographic tradition. Somehow this motif reminds us of the waxing crescent and the waning gibbous phases of the moon in the southern hemisphere, but it could of course be a totally different thing. Finally, painted hook motifs that are sometime represented as the
Figure 10 - The most typical forms of Tequinho polychrome pottery, and two typical decorative patterns used in paintings and incised potteries.
head of a bird (or armadillo) with its sharp beak (Figures 8: 11 and 9: 5-6), as well as a rounded head of a mythological, serpent-like animal (Figures 8: 6 and 9: 22) appear both in the incised and painted ceramics of Tequinho. A quite similar mythological serpent-like animal is known already in Venezuelan Saladoid bi-chrome painting of the La Gruta phase (ca. 2100-1600 BC; see Roosevelt 1980, fig. 55), and in Hupa-iya iconography of the Central and Lower Ucayali ca. 200 BC (Lathrap 1962: 985, fig. 99d). Later, a similar motif appears in the Jatuarana sub-tradition (ca. AD 700-1550) of the Upper Madeira River (Kater 2018, fig. 78), and occurs for the second time during the Late Polychrome Horizon in the Ucayali (Weber 1975, fig. 40), the Napo (Evans & Meggers 1968: Plates 23, 45, 47, 49, 50) and even in the Araracuara of the Columbian Amazonia (Herrera et al. 1982, figures 9-10). This mythological animal also appears on the painted tripod potteries of Hernmarck Mound in the Mojos of Bolivia excavated by Nordenskiöld (1913, figures 123, 130, 131, 135; 2017: Lám XLVII). Curiously, a similar combination of hooks as well as a circular and rectangular pattern with concave sides that we have observed in Tequinho, also seem to have been common in the Hernmarck Mound, dated AD 1100-1400 (Jaimes Betancourt 2016; Nordenskiöld 1913, 2017, passim). Even though tripod ware is absent in Tequinho, similarities in design patterns and motifs indicate some continuity between Early and Late Polychrome Horizons.

CONCLUSION

In this article I have presented basic characteristics of the ceremonial Polychrome pottery used during the Early Polychrome Horizon, from 50 BC to AD 200, in the geometrically patterned archaeological site called Tequinho situated in eastern Acre. At that time Tequinho was part of a network that formed an earthworks-building civilization called Aquiry. In general, the Tequinho ceramics show affiliations with ancient western Amazonian Initial/Formative styles – including non-Polychrome Shakimu and Hupa-iya phases in the Ucayali (see also, Saunaluoma & Schaan 2012). Some similarities can also be found between Tequinho pottery and the Venezuelan Saladoid and Brazilian Pocó-Açutuba Traditions. Furthermore, ceramics resembling the widespread Amazonian Incised-Rim/Barrancoid Tradition, or as Schaan (2012) saw it the “Saladoid-Barrancoid Horizon,” is also present, but at the same time, characteristic modeled forms and generalized use of appliques attributed to the Barrancoid Tradition, is almost totally absent in Tequinho. Instead, corrugate sub-tradition together with fingernail, combed and brushed ceramics is better represented. The earlier
mentioned traditions Saladoid, Barrancoid and Pocó-Açutuba, are often associated with Arawakan language groups (see e.g. Cruxent & Rouse 1961, Oliver 1989, Roosevelt 1980, Schaan 2012), while the four last-mentioned technical decorative styles in grog tempered ceramics are regularly associated with Tupi-Guarani Tradition (see e.g. Alconini 2015, Brochado 1984, Lathrap et al. 1987, Milheira 2014, Pärssinen 2003). Equally, the quite common practice in Tequinho polychrome ware, to alternate between white and red colors and to divide differently colored engobes or slips by an incised line, is also associated with the (Late) Polychrome Horizon and especially with its Tupi-Guarani Tradition (see Almeida & Garcia 2008, figure 3).

In Tequinho, the most typical Tupi-Guarani pottery forms with a conical or a semi-elliptical base appear to be rare (compare, e.g., Megger & Evans 1983, figure 7.19, Bonomo et al. 2014, figure 1, Iriarte et al. 2016, figure S2). Nevertheless, after the Early Polychrome Horizon had ended, the most typical form of a Tequinho polychrome serving vessel, shallow bowls of the type d (Figure 10) is adopted in the Panoan Ucayali during the Cumancaya phase (Myers 2002, figure 20a, 21c) and in another direction, it appears as up–side down in the upper part of conical Tupi-Guarani potteries (compare, Figures 9:23a-b and 10d and Montero et al. 2014, figure 2, Bonomo et al. 2014, figure 1t and 1u). Furthermore, it is possible that larger Tequinho-type bottles (Figures 8:7, 9:1, 10g) were adopted in the Ucayali by the same Panoan culture groups during the Intermediate Polychrome Period (DeBoer 2011, figure 4.2). This evidence strengthens the idea of Aquiry as an independent and quite heterogeneous entity. As a multiethnic civilization, it had keen contacts with many societies and many linguistic groups in the greater Amazonia.

Finally, the fact that the Aquiry civilization flourished in eastern Acre until the beginning of the Later Polychrome Horizon may explain why some Tequinho pottery forms and many stylistic and technical elements were later adopted in different parts of Amazonia. In another words, the earthworking societies living in Acre seem to have had a very long-lasting impact on the later development of other Amazonian cultures and civilizations.

At the moment Tequinho is the only ceremonial geoglyph site with a good amount of well-dated polychrome pottery. This is why Tequinho can currently be considered a type-site for regional ceramics, and, in general, a sub-tradition of the Quinari ceramic Tradition. However, in this article we have only dealt with the ceramics found from the mound accumulated at the northern entrance
of the main enclosure of Tequinho. Nevertheless, the few shards found in different test pits in the same site, including one polychrome shard, do not differ greatly from those shards excavated from the trench 9LKJIIHGABCDEF. Thus, we may cautiously say, at least as a hypothesis, that the Tequinho sub-tradition continued until AD 650 based on the radiocarbon date 553-666 cal AD obtained from test pit 18. It is, however, more difficult to determine when the sub-tradition of Tequinho began.

It is clear that all the basic characteristics of the Tequinho sub-tradition were already established when the Tequinho site was inaugurated for ceremonial use around BC 50. At the time when the three ditches of the main Tequinho geoglyph were originally excavated, different earthworks had already been built over a period of about 500 years. Unfortunately, only extremely rarely has any polychrome painting been conserved for our millennium. So far, the only published example of Acrean polychrome pottery outside Tequinho comes from the Fazenda Atlântica site, excavated by Saunaluoma (2012). She found there a carinated bowl decorated by incision, and two shards painted with red-and-black (or brown) on a white slip. The bowl and two polychrome shards were excavated from Unit 5, which gave the radiocarbon date 127-335 cal AD (Saunaluoma 2012: Table 2). Hence, it is contemporary with our Tequinho case.

It is important to note, nevertheless, that general characteristics of Tequinho pottery are not very different compared to a somewhat older site called Severino Calazans, situated halfway between Tequinho and Fazenda Atlântica (see Schaan et al. 2012, Pärssinen 2020a). Severino Calazans ware is of a somewhat lower standard than the ware excavated in Tequinho, and thus, all paintings have disappeared. However, similar shallow bowl form (type d) that was much used in Tequinho as polychrome serving ware, was known in Severino Calazans. The use of red, brown, yellowish, black and white slips are also common (including bi-chrome slips) in Severino Calazans, as well as the use of caraipé and grog as tempering material. Finally, incisions near the rim of the pottery form a very typical decorative finishing. These kinds of ceramics have been found from the stratums dated ca. 350 cal BC – 50 cal AD (Pärssinen et al. 2020a). Thus, it is possible that similar ceramics that were used in Tequinho were already known in eastern Acre from 350 BC onward. Hence, as a ceramic phase, the time frame of Tequinho ceramics, 50 BC-AD 200, may tentatively be extended from 350 BC to AD 650. This would mean that the Aquiry civilization was an important component related
to the rapid expansion of the Early Polychrome Horizon due to its central geographical position. Furthermore, it is even possible that the Aquiry civilization played an important role when the Late Polychrome Horizon started to expand from AD 900 onward. However, at the moment we are missing all confirmative evidence for this chronological extension for the Polychrome Tequinho sub-tradition, and hence further research will be needed to establish a more secure ceramic chronology for eastern Acre. In every case, I consider the concept of Polychrome Horizon an extremely useful tool for analysis in the greater Amazonia if we split it into two corresponding and separate chronological periods.

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