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RIVER NETWORKS IN THE DISCOVERY AND CONQUEST OF THE PERUVIAN AMAZON BY INDIGENOUS COMMUNITIES IN THE ARCHAIC AND FORMATIVE AMAZONIAN PERIODS

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Abstract
This article was completed in 2024 as part of the documentary and bibliographic review carried out as part of the project "Inventory of archaeological sites with petroglyphs in the Achayacu ravine, sub-basin of the Cachiyacu River, district of Balsapuerto, province of Alto Amazonas" in Loreto, which is linked to the Sawi ethnic group. Local tradition and documents show that these petroglyphs were part of a cultural and economic circuit linking them to other Amazonian and Andean cultures and civilizations, where rivers were not only a means of transport and trade, but also of ritualistic travel or pilgrimage. Another important aspect is the existence of salt mines and petroglyphs in this area, a pattern that is repeated throughout the pre-Hispanic Andean-Amazonian border, indicating that they were important for trade and food in the region. In this sense, we set ourselves the objective of describing these river circuits in the archaic and formative Amazonian period based on current archaeological and ethnohistorical studies in order to find regularities in the process of exploration, conquest, and occupation of the territory by the pre-Hispanic indigenous peoples.
This is an interpretive and exploratory article that proposes a sequencing and interpretation based on written and oral sources and archaeological remains, from which it is concluded that there was a significant relationship between the river routes of occupation of the Amazonian territory, trade, and the emergence of early cultures and civilizations that were sustained by an agroforestry model and the management of flora and fauna, which coexisted with the extensive agricultural-livestock model of the highlands and the hydraulic-maritime model of the coast.

Keywords: river routes, territory occupation, culture, civilization, socio-cultural model, Amazonian peoples.

I. INTRODUCTION

We generally think that the discovery and conquest of the Amazon was a phenomenon carried out by Europeans from the 15th century onwards. The official history, which is Spanish-centric and Andean-centric, presents the Amazon as a territory populated by communities in a state of savagery, waiting to be "civilized" by the Andean peoples or by Europeans, as they were incapable of developing a sustainable socio-economic model for their environment. For this

reason, the concept of culture is used in a very generic way to refer to the Amazonian peoples, without specifying what degree of development they achieved.

In Morgan's logic, the cultural stages of savagery, barbarism, and civilization are what characterize human development, but if we understand culture as the dialectical relationship that humans establish with nature to obtain the means for their material and spiritual reproduction, and we use this term to refer to all the societies that occupied the Amazon from the first migrations until the arrival of the Spanish, it is not clear what stage of cultural progress they reached, since, according to this logic, every human community gives rise to culture, but not every community reaches the level of civilization.

Peruvian historiography has been dominated by the false view of an Amazonian cultural world that never reached civilization, despite significant archaeological finds of pottery and ancient human settlements, which reinforces preconceived ideas about the limited importance of the Amazon in the formation of culture and civilization in pre-Hispanic Peru.

However, new ethnographic and ethnohistoric studies provide another perspective that values and gives the Amazon a prominent place in American history, raising the question: What role did waterways play in the development and spread of cultural and civilizational processes in the Amazon? In this article, we critique the different theoretical approaches that deny the possibility of complex societies developing in the Amazon and propose a narrative about the conquest of the Amazon by the indigenous peoples and the role of waterways as migratory routes, but also as routes of interculturality and civilizational development, whose influence could have generated processes of Amazonization of the Andes at an early stage and, later, processes of Andeanization of the jungle in more recent periods of pre-Hispanic history.

II. METHODS AND MATERIALS

System of variables

Independent variable: Early formation of culture and civilization in the Amazon.

Dependent variable: Early occupation of Amazonian territory.

Type of study:

- ✓ Hermeneutic-exploratory
- ✓ Sample
- ✓ The phenomena and processes that developed because of the early occupation of the Peruvian Amazon.
- ✓ Methods, techniques, and instruments:
- ✓ Literature review, indexing, comparative tables.
- ✓ Data analysis techniques:
- ✓ Heuristic, hermeneutic, comparative, and phenomenological analysis.
- ✓ Materials:
- ✓ Documents, books, scientific articles from indexed journals, computer media.
- ✓ Hypothesis:

The river routes used to occupy the Amazonian territory were important axes in the early development of cultures and civilizations whose contribution was significant in pre-Hispanic Peru..

III. RESULTS AND DISCUSSION

Since the time of Albert Kroeber and Clark Wissler, the idea of two Nuclear Areas in pre-Hispanic America has been proposed: the Andes and Mesoamerica, while the Andes were considered a Nuclear Area that radiated culture. Between them was the so-called Intermediate Area or Circumscribe Area, which acted as a hinge between the nuclear cultural areas, and finally the so-called Peripheral Areas, which in South America were the Amazon and Patagonia.

In fact, this characterization fails to highlight that a large part of the Circuncaribean Area includes the Amazonian territories with Caribbean and Atlantic coasts. Today, we know that a huge trade developed across this territory, which would not have been possible without peoples capable of producing goods and aware of the importance of trade.

This movement of people and goods was made possible by the same river and sea routes that allowed the peoples of the Amazon to occupy the territory and develop cultural and civilizational processes since ancient times.

Therefore, we will first critique the theories that denied the possibility of complex societies developing in the Amazon, and then we will describe the archaeological remains that have been found around the main Amazonian river basins, which attest to an early occupation of the territory and civilizing processes that include a sequence of Amazonization of the Andes and Andinization of the Amazon that occurred continuously, but with varying intensity throughout Amazonian history, which runs parallel to that of the coastal Andean world. In this sense, the Amazon is not only a recipient of culture, but also a source of cultural influence that is fundamental to the development and understanding of pre-Hispanic Peruvian civilization..

INITIAL THEORIES ON CULTURAL AND CIVILIZATIONAL PROCESSES IN THE AMAZON:

Those who observed the Amazonian world after Tello did so from a cultural ecology perspective, which, according to Waterlow (1985) and Harris (1999), posed at least three problems that human groups had to overcome in order to adapt to the conditions of their environment:

Competence to obtain and process resources.
Coexistence with environmental challenges.
The organization, planning, distribution, and density of the population.
These issues are dialectically interrelated through the concepts of "carrying capacity" and "limiting factors," which are important elements in studies of the eco-culture and demographics of communities. Based on this observation, different theories have been developed about the process of adaptation and occupation of Amazonian territories. Some of these theories argue that advanced civilizations could not have existed in the Amazon, while others maintain that it was possible, but that these civilizations had very specific characteristics.

Geographical and environmental deterministic approach: Theories that denied the possibility of the development of Amazonian civilizations, which were heavily influenced by geographical and environmental determinism, include the following:

- **The theory of environmental constraints on the development of civilization:** According to Steward (1949), the inhabitants of the rainforest could not produce enough food surplus to sustain a complex society with strong social stratification due to environmental conditions. In the same vein, Roosevelt (1991) argues that the native cultures of the lower Amazon rainforest were local in nature and had a short and simple history, indicating that they had arrived in the Amazon in recent times.

However, based on the study of 16th-century chronicles and new archaeological discoveries in the 1960s, according to Megger (1984) and Neves (1989), it can be concluded that the Amazonian lowlands were home to demographically dense, sedentary human groups with distinct social classes prior to the European conquest, an opinion shared by Schaan (2007) in more recent studies. This led Steward to change his theory of the occupation of the Amazon and propose that it was occupied by populations from the Andes, who had suffered cultural decline in the lowlands. From this perspective, the culture of the Amazonian várzea would be of Andean origin, and the "primitive" culture of hunters, gatherers, and horticulturists would be the expression of a culture that had been frozen in time due to environmental conditions.

- **Soil poverty theory:** Initially, Betty Megger (1954) argued that the crucial phenomenon of the dialectical interrelationship between culture and the environment was survival and, therefore, a society's ability to produce food was fundamental. This aspect was what spontaneously regulated the size and density of Amazonian populations, without disregarding the sociopolitical and technological mediation of each culture. In this sense, according to Neves (1989), for Betty Meyer, a culture was sustainable to the extent that it was capable of developing agricultural production, for which a favorable environment was necessary.

In other words, better environmental and technological conditions led to more stable and denser population settlements, while less favorable environmental conditions and simpler technologies led to less demographic stability. For this reason, Meggers (1982) and Milton (1984) distinguish two fundamental ecosystems in the Amazon: the terra firme and the várzea, which are common to different cultural contexts.

- **Environmental circumscription theory:** The first researcher to oppose the argument that insufficient agricultural capacity was an obstacle to cultural development was Robert Carneiro (1961), who argued that the progress of Amazonian communities did not appear to be limited by their agricultural skills. His statistical calculations on the food production of the Kuikuru indigenous people of the Amazon showed that they were able to establish themselves permanently in the same eco-region while maintaining a demographic load well above that of the 20th century. His model was based on cassava production, whose empirical measurements, according to Chagnon and Hames (1980), refuted the environmentalist arguments that poor soil was responsible for the low population density in the Amazonian lowlands.

According to Carneiro (1970 and 1995), the absence of complex societies in the lowland jungle, unlike in the Andean world, is not due to environmental factors, but rather to deficiencies. As can be seen, in all regions where the state emerged, it is linked to the existence of agriculture, mines, maritime routes, and trade as relevant factors. In the Amazon, agricultural communities were considerable, but they were quite scattered throughout the territory, so the population density was apparently low and the pressure on agricultural land was insignificant. However, as we will see later, this view is also questioned today.

Everything indicates that the high concentration of resources in the várzea allowed the communities settled there to differentiate themselves from those on the mainland, coming to be considered a special environmental district. According to Adams (2002), in the Amazon there is no clear distinction between fertile and infertile land, as there was no strong environmental differentiation. According to Porro (1995), population growth in riverine areas led to violent military occupation of the territory and the subjugation of the defeated ethnic groups, who were forced to submit to the victors in order to continue benefiting from access to the river. This dependence gave rise to Amazonian chiefdoms as embryonic forms of states**.**

- **The protein hypothesis:** Donald Lathrap (1968), based on the observation that cassava was the staple food of the peoples of the Lower Jungle, argued that low protein potential and the scarcity of fauna suitable for human consumption, rather than the poverty of the land, were the main factors limiting the settlement of large populations in the Amazon. From this perspective, he explained the sociocultural changes of the Amazonian population, proposing an ecological model that identified limited access to high-quality protein as the main barrier to settlement and population growth and social organization.

Likewise, as we will see later, Lathrap (1968) proposed that the interfluvial communities may have had culturally advanced communities as their antecedents, which were expelled inland by ethnic groups arriving in the várzea, adapting to the ecological conditions of the mainland.

However, it was Daniel Gross (1975), a pioneering anthropologist in attempting to qualify and quantify information on the volume of animal protein consumed by the original Amazonian communities, who concluded that, although protein scarcity was a limiting factor in the Amazon, the communities responded to this phenomenon by creating social mechanisms to adjust their population density, sustaining themselves within the carrying capacity of the territory, that is, by planning dispersed but systematically united populations.

On the other hand, Santiago Mora (2006) suggests that highly structured social groups may interact with groups of hunters and gatherers who provide advanced ethnic groups with exotic products that they use to make symbols of prestige. Not only do hunter-gatherers demand agricultural products to provide themselves with amino acids, but complex political communities also require exotic resources. This reality has been observed in Amazonian jungle communities in Malaysia and the Philippines, which have very similar socio-ecological conditions..

CRITICISM OF ENVIRONMENTAL OR GEOGRAPHICAL DETERMINISM AS AN OBSTACLE TO THE DEVELOPMENT OF CIVILIZATIONS IN THE AMAZON:

In reality, all these theories, despite their usefulness, were highly deterministic, both geographically and environmentally. Nevertheless, they were important, and many of their postulates and ideas should still be taken into account as food for thought. The criticisms that have been made of these theories based on comparisons with archaeological remains and new anthropological and historical research are:

a. The theorists who initially studied this process of adaptation and settlement of the Amazonian peoples in the territory started from the mistaken view that they only migrated within the territory and moved around within that environment.

b. The approaches developed for the Amazon have overestimated the role of geographical determinism and underestimated the role of human ecology, since these peoples, before arriving in the Amazon, were carriers of knowledge and were able to adapt to environmental changes, incorporating this knowledge into their relationship with the environment.

c. Sedentarization has been mechanically associated with agriculture, when this process could have developed based on the proximity of resources and the ability to use rivers not only as a source of food but also as a means of transportation within and outside the Amazon.

d. The conflict between different Amazonian ecoregions has been overestimated, while the collaboration and exchange that may have existed between them has been underestimated.

e. The interfluvial areas have always been considered poor areas due to the impossibility of producing sufficient food through agriculture, but they are rich in fibers for the manufacture of valuable goods and medicinal roots and herbs that could have been the basis for an exchange of comparative advantages since ancient times. With regard to this factor, Arvelo-Jiménez and Biord (1994) argue that the most powerful curacazgos did not emerge only in the várzea, but also on the mainland, with their political power, rather than their agricultural productivity, being the basis for their survival.

f. It has been assumed that life has remained frozen in time since the arrival of the Spanish until the present day. According to Roosevelt (1994, 22), however, demographics have changed substantially due to a drastic reduction in the population on the mainland and in the interfluvial areas, while most of the indigenous communities that occupied the várzea became extinct or migrated to the interfluvial areas, being replaced by mestizos and creoles.

g. The ability of the original Amazonian communities to develop food preservation technologies has been underestimated. The production of cassava starch and the salting and smoking of food have been part of the knowledge of the original peoples of the Amazon since ancient times. It is important to note that salt mines are found along the most important migration and occupation routes in the Peruvian Amazon. As we will see later, these mines are associated with petroglyphs that mark not only occupation of the territory but also trade. Adams (2002) argues that the current characteristics of the indigenous populations are very similar to those of the first Amazonian horticultural societies. However, this similarity in horticultural practices and access to protein sources through hunting does not mean that the establishment of small, distant villages was a regular occurrence over time. Rather, it may be the result of a process of archaization that occurred as an effect of the conquest.

h. According to Porro (1994) and Roosevelt (1994), protein deficiency could be overcome by planting seeds, as was the case in the large chiefdoms of the central Amazon and the Orinoco in the lower Amazon. On the other hand, this was also overcome through wildlife management, aquaculture, and the use of aquatic mammals and reptiles that were also incorporated into the diet of native communities.

i. It has not been taken into account that linguistic and ethnic diversity has not been and is not an impediment to trade and political relations within and outside the Amazon. Chroniclers have already recorded interesting forms of exchange between Amazonian peoples and between Amazonian and Andean peoples without the use of many words, but rather conventional methods of measurement known to the different cultures of the Amazon and the Andes.

j. The role of the Amazon's secondary valleys and rivers as areas that could support significant human settlements and serve as hinge zones between different ecological zones within and outside the Amazon has been underestimated.
k. That they were unable to obtain scarce products in the environment in which they lived through exchange and trade outside the Amazonian environment. No account has been taken of the existence of products such as salt, coca, ornamental feathers, and other products that could have served as commodity currencies between different communities within and outside the Amazon.
l. The capacity of Amazonian populations to transform the environment in order to optimize production conditions was underestimated. Terra Preta do Indio, restingas, and camellones were technologies known to Amazonian peoples that enabled them to sow, live, and trade in conditions of low water or flooding.
m. The capacity of Amazonian peoples to develop their own urban model is underestimated. However, according to Miguel Alexiades and Daniela Peluso (2016), the urbanization process in the Amazon began approximately 4,000 years ago. On the other hand, according to Heckenberger (2008), the Amazonian urban model was reticular in nature, involving a system of urban settlements organized in functional networks that reproduced their social organization in the territory. These urban networks could cover territories as extensive as those of Santarem (Brazil) or Faldas de Sangay (Ecuador), which are 14 and 12 kilometers long, respectively. Thus, we can speak of urbanism without cities in the Amazon, which is very different from the concentric model of the Europeans or the axial model that developed in Mesoamerica. Another aspect refuted in the present study is the inability of Amazonian peoples to develop commercial activities. However, according to Hornborg (2005: 593), this activity developed regionally and was very complex, as pre-Columbian Amazonia was made up of several multi-ethnic (or more likely supra-ethnic) trade and exchange networks which, according to Alexiades (2009), Whitehead (1994) and Neves (2001), were connected to other regions including the Andes, the Orinoco basin and the circum-Caribbean region. In the case of the Peruvian Amazon, commodity currencies came to be used, with a distinction between those used locally and those used in interregional trade.

All these criticisms make it possible to take a new approach to the possibility of the existence of civilizations in the Amazon, a view that is strengthened by new archaeological discoveries made in the 1970s.

THE STAGES OF SAVAGERY, BARBARISM, AND CIVILIZATION IN PRE-HISPANIC AMAZONIA

There is evidence of early relations between jungle and Andean communities, which led to the permanent Amazonization of the highlands and the Andeanization of the Amazon at various points in history.

Henry Lewis Morgan argued, from an anthropological perspective, that humanity had gone through three stages of cultural progress: savagery, barbarism, and civilization. Although this approach was criticized by Frank Boas (1911), who argued that no cultures were more developed than others and that they must be understood in their historical context, we will nevertheless use this framework for the purposes of organizing information and defining cultural horizons. Similarly, we will use the concepts of Paleolithic, Mesolithic, and Neolithic, which archaeologists use to designate societies based on their technological and material achievements.

From this perspective, the first stage comprises hunter-gatherer societies, the second stage comprises communities that practice horticulture, agriculture, and livestock farming, but alternate these activities with hunting, fishing, and gathering, while the third stage sees the development of urban life and the state, which is associated with agricultural societies, although in different contexts, these societies could also sustain themselves through other activities such as maritime and forestry activities.

In the case of the Amazon, the available archaeological information allows us to maintain that the Paleolithic is a stage that we can identify, based on the discoveries at Pedra Furada, from 40,000 BC to approximately 9,000 BC. The Mesolithic period would be between 9,000 and 3,000 BC, and the Neolithic period began approximately 3,000 BC and lasted until the European conquest of the Amazon.

These stages are common throughout the Amazonian territory, but in the case of Peru, we must note that the Paleolithic is still considered a theoretical stage, since while in Brazil the remains of Pedra Furada prove the ancient occupation of the Amazon, in Peru no archaeological remains of such age have been found. However, accepting that most hunting routes crossed the Amazon from east to west, these primitive groups traveled through the territories and waterways in that direction, as evidenced by remains as ancient as those found in Tequendama, in present-day Colombia. Although no sites as ancient as those from this stage have yet been discovered in Peru, there is agreement on the developments achieved in the Mesolithic and Neolithic periods in the Amazon with those of other regions of the Amazon. Therefore, it is logical to think that the Peruvian case was no different from the rest of the Amazon.

AMAZONIA: SETTLEMENT WITHOUT AGRICULTURE?

Miseley Moseley (1975) proposed the theory that the indigenous communities of the Peruvian coast were able to become sedentary communities without knowing agriculture due to geographical and environmental conditions, characterized by the narrowness of the desert territory and the proximity of marine resources, valleys, and coastal hills that provided all the protein, carbohydrates, and fiber necessary for life. In addition, stable climatic conditions made migration unnecessary.

This same process could have occurred in the Amazon, because the enormous rivers, valleys, and forests provided the main resources necessary for life, thereby favoring the sedentarization of communities that were able to coexist—as they do today—with peoples who were culturally more accustomed to a migratory lifestyle.

Juan Solorzano (2017), in describing the early settlement of the Amazon, argues that approximately 6000 BC, the first sedentary communities emerged on the Amazon coast and along the great rivers, in whose sites a huge amount of remains of shells, fish, and other marine and river animals have been found. These groups are called complex hunters, precisely because of the degree of development that the ecosystem itself allowed them to achieve. This means that the path of development of sedentarization and Amazonian civilization could have had, as Roberto Sánchez (2018) argues, several paths, and the one taken could have been different in different sociocultural environments.

AMAZONIZATION AND ANDINIZATION: PRIMITIVE ETHNIC GROUPS AND ARCHAIC CIVILIZATIONS.

Archaeological remains indicate that migratory movements between the Amazon and the Peruvian Andes were very early and frequent, due to the relative convenience of the Amazonian waterways, both under normal conditions and during low water periods. However, educational systems assume that this movement was initially from the highlands to the Amazon, when the facts show that the initial movement must have been in the opposite direction.

Macera (1982) proposes the term “selvatization of the highlands” to highlight the influence of Amazonian peoples on the early development of Andean culture and civilization, arguing that this was an older process. Similarly, Kauffman uses the term “serranization of the jungle” to refer to the Andean influence on the jungle. However, the most accurate terms would be Amazonization of the highlands and Andeanization of the jungle, since they refer to the influence of the Amazonian peoples on the Andes and vice versa. We will therefore use these concepts in the description and analysis of the phenomena of interculturality between these two geographical areas.

THE ENVIRONMENT AND THE PRE-HISPANIC AMAZONIZATION AND ADINIZATION PROCESSES

Waterwys are normally an ideal means of transporting goods and people from the Amazon to the vicinity of the Andes, and were used by indigenous peoples in prehistoric times to migrate between the two regions. Similarly, during prolonged dry seasons in prehistoric times, riverbeds became grasslands and savannas that facilitated land travel. As we can see, prehistoric man always found a way to take advantage of and adapt to climatic conditions in order to migrate.

These migrations may have been frequent in the Lower Paleolithic Amazon, when nomadic hunter-gatherer peoples moved around preying on the resources of the environment until they were exhausted, since the technical development of the communities did not allow for greater adaptation and transformation of the geographical environment.

This phenomenon was studied in depth by Augusto Cardich (1980), who associated the phenomena of drying and reestablishment of the climates of the Amazon and the mountains with the Magapata (21,000 BP) and Aparaga (10,000 BP) glaciations, These periods correspond to the drying up of the jungle and the creation of forest refuge regions in the Amazon, while in the period known as Yunga (7500 BP), the Amazon expanded into areas that are now considered Andean.

These climatic changes must also have caused fauna to move towards the mountains in search of better climates and, if we take into account that the Amazon was already populated, it is possible, from our theoretical point of view, that the Andes also became a refuge for the Paleolithic Amazonian population that settled on the eastern flank of the mountain range when the Amazon expanded towards the Andes.

In this sense, it is possible that an early period of Amazonization and Andeanization was led by peoples with Middle Paleolithic technology who were engaged in hunting, fishing, and gathering in regional circuits, stalking herds of animals that migrated east-west due to seasonal and climatic changes.

The remains linked to this period are located on the eastern flank of the Andean mountain range, bordering the Ceja de Selva and the Selva Alta mentioned in Table 1, and correspond to periods of expansion of the Amazon towards the Andes and dramatic climatic changes. These archaeological remains could be evidence of this migratory process, as their dating coincides chronologically with the Aparaga glaciation (10,000 BP) and later with the Yunga period (7500 BP) described by Cardich. It is possible that this phenomenon may have been repeated in the different river basins discussed in this study. However, it is necessary to study the behavior of the paleoenvironments in this archaeological zone in greater detail.

Following this logic, we can argue that in the Upper Amazonian Paleolithic, when technological development allowed for better adaptation to the environment, there was population growth that caused surplus populations to move to the Andean region due to resource scarcity, which led to a large movement from the Amazon to the Andes.

A second intermediate period of Amazonization and Andeanization occurred from the Amazonian Mesolithic, when the first cultures and ethnic groups emerged, to the Amazonian and Andean Formative periods. During this period, agriculture was discovered and the first urban centers emerged. Over a long period of interaction, the socioeconomic models of the two cultural areas diverged, without this being an impediment to trade, commercial activities, religious pilgrimages, and political relations between communities in both cultural spaces.

A third period of late Amazonization and Andeanization occurred in the Amazonian Neolithic period. During this period, social relations in the territory were related to the spread of the agricultural model in the Amazon, an activity that grew due to technological improvements and demographic growth. During this period, specialization and the social division of labor were strengthened, generating surplus value that could be consumed, exchanged, or alienated. As a result, incipient class conflicts and contradictions arose between the agricultural model of the highlands and the agroforestry model of the Amazon.

What Kauffmann calls serranization is a late phenomenon, characterized by the advance of the expansive Andean agricultural model over the territory occupied by Amazonian agroforestry peoples. This began in the eighth century AD and includes conflicts between the Incas, Chachapoyas, Bracamoros, Omaguas, and Moxos, who represent these different models. Similar conflicts may have arisen earlier, varying in scale..

Table 1

PERIOD	PROCESSES	ARCHAEOLOGICAL REMAINS
7000 A.C. A 3000 A.C.	**AMAZONIZATION AND EARLY ANDINIZATION**	**Faical (San Ignacio de Cajamarca), Yomon and Michinal (Jaén) and Lauricocha (Huánuco), located in the high jungle, in the Amazonian river basin and on the eastern flank of the Andes, this population was able to move between the Amazon and the mountains since ancient times..**
3000 A.C. A 800 D.C.	**AMAZONIZATION AND INTERMEDIATE ANDINIZATION**	**Tutishcainyo, Kotosh, Chavín, Shakimu are archaic civilizations that maintain very close cultural ties. They reflect these processes of Amazonization and early Andeanization, but linked to early civilized societies.**
800 D.C. A 1532 D.C.	**AMAZONIZATION AND LATE ANDINIZATION**	**Chachapoyas reflects a process of assimilation of Amazonian and Andean patterns into a single cultural expression, but also the coexistence of the Zapotal, Omaguas, Moxos, Bracamoros, and Inca cultures, which reflects the stabilization of a state culture.**

Own production

RIVER ROUTES AND LAND USE IN THE PERUVIAN AMAZON

Archaeological research shows that Amazonian communities migrated to the mountains and then back again. This process led to the emergence of early prehistoric cultures and archaic Amazonian civilizations. Based on archaeological, anthropological, and linguistic studies, we propose the following sequence of territorial occupation, cultural development, and civilization in the Amazon region:

a. Amazonian Paleolithic: in the case of Peru, this is still a theoretical stage. The human groups that entered the Peruvian Amazon from the east to the west were rudimentary hunter-gatherer and fisherfolk communities. At this stage, we cannot speak definitively about ethnic or linguistic groups. However, it is possible that they moved between the Amazon and the highlands. Later, they may have come into contact with more advanced peoples.

b. Mesolithic and early Neolithic Amazon: During this period, peoples with greater knowledge entered the Amazon. These groups already knew pottery, horticulture, and agriculture, with some groups being sedentary or semi-nomadic. These social groups did belong to already defined ethnic groups that migrated to the Peruvian Amazon from distant regions of the continent for different reasons, which we can sequence as follows:

✓ From the north, non-forest ethnic groups linked to the Valdivia culture of the equatorial zone.

✓ From the south, the Pano and Tupi Guaraní ethnic groups. The former may have been linked to the cultural developments of Zapotal, Tutishcainyo, and Shakimu, while the latter may have been linked to a profound cultural expansion that later took them to Marajo Island at the mouth of the Amazon River. The Tupi Guaraní groups achieved their greatest cultural development in the late Amazonian Neolithic period with the Omagua culture.

✓ From the northeast, Arawak ethnic groups associated with the Barracoide culture also migrated along this route, but their influence must have been weak, as there are currently no ethnic groups linked to this linguistic family in the Peruvian Amazon.

c. **Late Neolithic:** These are the groups that entered the Amazon as a result of the Andeanization of the jungle fringe, mainly Quechua and Aymara groups, before and during the Late Intermediate and Late Horizons, which were contemporary with the Omagua and Moxos civilizations**.**

However, it should be added that this sequence occurs in waves and that, therefore, migrant groups, despite being of the same ethnicity, have different levels of knowledge and develop different adaptation processes. On the other hand, this general pattern does not rule out the possibility that larger ethnic groups may have entered the region and, upon settling and dispersing throughout the Peruvian Amazon, given rise to smaller ethnic groups.

According to Santos Gamero (1992), when the Spanish arrived, the dominant groups in the Amazon were the Omagua-Yeté in the northeastern Amazon, the Conibo in the central Amazon, and the Piro in the southern Amazon. According to Spanish observations, these were complex societies known as "ribereños" (river dwellers) that formed political and military alliances in the main riverine areas. These peoples had friendly trade relations and conflicts with the peoples of the secondary riverine areas and with those who settled in the interfluvial areas.

However, this reality observed by the Spanish was the result of a long process of migration, adaptation, and miscegenation. In their origins, these groups followed different routes to occupy the Amazon, which are fundamentally linked to the waterways on whose banks they left various material and cultural remains of their presence, such as petroglyphs, rock art, remains of lithic technology, and remains of human settlements with varying degrees of development.

In the case of the Peruvian Amazon, we can distinguish the following routes:

Diagonal routes: these are formed by rivers that descend from the equatorial mountain range and, as explained by Geoffroy de Saulieu and Lino Rampón Zardo (2006), use the slopes of the Napo, Tigre, and Pastaza rivers to join the Marañón and Amazon rivers. Non-forest peoples linked to the Valdivia culture traveled along this route. This same category also includes the Madre de Dios River route, through which the Pano and Tupí Guaraní groups entered, although it is also used by Arawak peoples.

✓ Transversal routes: these are the routes followed by the Amazonian peoples as they ascended the mountain range, following the course of the rivers that originate in the glaciers.

✓ Longitudinal: Formed by the Ucayali and Huallaga rivers, these routes connect the transverse and diagonal routes, facilitating transit in what we now know as the Peruvian Amazon.

✓ Next, we will describe these routes, the remains found along them, and the cultural processes that developed as a result of migration and trade relations.

DIAGONAL ROUTES

They were the ones that connected secondary sub-basins with main rivers. These were fundamental because they allowed the Amazon to connect with the northwestern equatorial region of the mountains and coast, as well as with the southeast towards the Beni areas and the Chaco region, which were among the first areas to be populated on our continent. These diagonal routes connected secondary sub-basins with main transverse basins that originated in the mountain range, facilitating migratory movement and intercultural relations. In this case, we can distinguish the following diagonal routes:

a. The routes that descend from the Napo, Pastaza, and Tigre rivers towards the Marañón. This allowed Amazonian migration to the equatorial highlands and also allowed the Amazon to be influenced by the Valdivia culture, as in the case of the Chambira culture, and through it to spread to the Huallaga and Ucayali regions.

b. The routes of the Beni, Mamoré, San Miguel, Blanco, San Martín, and Guaporé rivers, which flow into the Madre de Dios River. These routes were used by the Pano and Tupi-Guaraní migrations to the Peruvian jungle, which are associated with various cultural and civilizational developments in Ucayali and Loreto. Later, the Arawak people, associated with the Moxos civilization, were able to migrate.

NAPO-PASTAZA AND TIGRE RIVER ROUTE

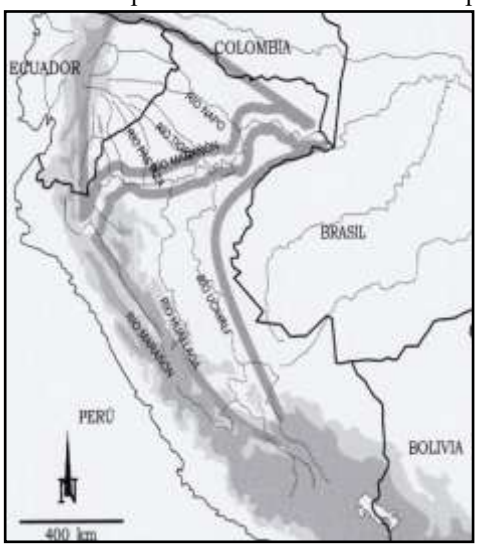
This route was important because it allowed contact between the Amazonian peoples and the Valdivia culture that developed on the pre-Hispanic equatorial coast. Its geographical location also allowed early contact with the Chambira culture, one of the most important and ancient ceramic peoples of the Peruvian Amazon.

When the Spanish arrived, these territories were populated by the Omagua-Yeté and Kuna peoples. However, it was also an area of influence and trade for the Panatahuas peoples, who sailed from the Huallaga and interconnected the region with the rest of the Amazonian territory.

According to Santiago Rivas (2008), an important cultural feature of this area is the hydrographic context of this basin, which has a large number of rivers that converge and connect. Thus, the Morona, Pastaza, Santiago, and Tigre basins, which run parallel to each other, are joined by smaller tributaries whose headwaters or "divortium acuarium" are limited to a few kilometers apart, with landing places suitable for trade or exchange. These rivers communicate directly or indirectly with the Marañón, which in turn connects with the Huallaga, Ucayali, and Amazon rivers. To the north, the Eastern Cordillera of Ecuador rises imposingly, interconnecting with the coast.

According to Santiago Rivas (2008), studies in the Upper Morona and Upper Pastaza have identified a dozen archaeological sites, which already reveals the permanent transit along this route. Ada Medina Mendoza (2008) also reported ceramics similar to those found by Morales, Fung, and Ravines, and by Porras in the Ecuadorian Huasaga.

To understand the pre-Hispanic cultural environment in the Pastaza-Morona region, it is necessary to refer to the findings of Daniel Morales (1992), who discovered an early pottery tradition in the Chambira basin, with spouted bottles decorated with feline figures, which are also found in other Andean cultures, except that the Amazonian ones are older. This same pottery may also be associated with the Marañón route, as this cross-country route converges with this river. It is clear that at this confluence, forest and non-forest peoples who entered the Amazon came into contact, generating an intercultural process that allowed the development of fairly advanced societies.



In this area, we can distinguish different types of population settlements.

- **Riverside dwellers:** People who live on riverbanks on sandbanks, terraces, or non-floodable land created by human intervention. These areas are still inhabited by indigenous peoples today

- **Interfluvial:** located in the interior of forests, on high hills, near small streams that provide them with water**.**

The remains of Kumpanamá also belong to this river route, being an archaeological site located in an interfluvial area. However, it is juxtaposed to the Marañón and Huallaga routes. It could be deduced that this area was very important since ancient times, first for the transit of Amazonian and Andean people in both directions and second for commercial transit within the Amazon, as well as outside the Amazon. In some way, Kumpanamá could have been a commercial hub, but also a scene of conflict between the ethnic groups located on the main rivers and those on the secondary rivers or in the interfluvial areas.

According to Fernando Lucero and Paola Moreno (2010), the Shuar or Jibaro people are very important in this corridor. Around 4000 BC, these ethnic groups moved along the route separating Loja from Zamora, crossing the basins of the Cenepa, Santiago, and Morona rivers, adjacent to the Cordillera del Cóndor. It is possible that during this migratory movement, they converged with isolated groups of Arawaks who were coming up from the Marañón River, leading to intermarriage. This new ethnic group was considerably influenced by older local peoples linked to the Puruhá-Mochica ethnolinguistic group, giving rise to the proto-Jíbaro ethnic group, which moved along the banks of the Marañón River and its main tributaries in search of food and vegetables.

By 2500 BC, the first Jíbaros were traveling upriver due to food shortages, at which point they adopted itinerant horticulture because the conditions were right for them to perfect their hunting and gathering techniques, allowing them to stay longer in one place and observe the behavior of plants. This moment is described in the myth of Nunkui, a female figure, which could be indicative of the importance assigned to women in their relationship with fertility, but also a political recognition of their importance within the group. This culture would give rise to the Bracamoros civilization, which developed in this area uninterruptedly from that time until the arrival of the Spanish. It is worth mentioning that the relationship between the Bracamoros, who became a civilization, and the Aguaruna, Maina, Shuar, Achuar-Shiwiar, and Huambisa communities, which belong to the same macro-ethnic group and with whom they carried out intense productive and commercial activities, has yet to be defined in greater depth.

Another important group in the area is the Shawi, who, according to myths, share a common origin with the Shuar or Jibaros. However, they differ due to the influence of the Tupí-Guaraní and Pano ethnic groups of the upper Amazon and the Motilones and Chachapoyas. Similarly, this strategic position allowed them to trade with the Chachapoyas using the Lamas and Moyobamba routes in San Martín.

According to Nancy Ochoa (2016), the Cachi Yacu mines played a very important role in this process. Known as El Mo'topi yamorai, they are located at the source of the river of the same name, in the Yamorai basin, occupying a territory between the northeastern flank of the Subandina Belt (high zone) and the low jungle (low zone). Nancy Ochoa (2007) posits that the Shawi culture, which she calls Piyapi, was a conglomerate of different ethnic groups that settled there because of the salt mines and its strategic location.

In this regard, Santiago Rivas (2008) maintains that from 800 to 1000 AD, various ethnic groups settled in the Cachiyacu basin and practiced, among other activities, pottery, which was a result of the syncretism of three ceramic styles:

- ✓ Black-painted pottery decorated with geometric motifs in the form of ascending staircases characteristic of the Upano tradition of the Sangay Complex (Ecuadorian jungle).
- ✓ Corrugated pottery, characteristic of the Cumancaya Complex in the Ucayali basin.
- ✓ Kuelap Tosco-type pottery, which first appeared in the upper Utcubamba basin with the Chachapoyas culture.

Based on this observation, Santiago Riva (2003) hypothesizes that the original population of this region developed a new style of pottery due to cultural fusion. It can be deduced that this confluence had to do with the salt mines of Cachiyacu, as people came from various places to stock up on this commodity. This economic relationship and the geostrategic position of this community were important factors in the emergence not only of a new type of pottery, but also in the growth of the importance of Kumpanamá and the Shawi people.

Upon the arrival of the Spanish, the most developed peoples in this area were the Omagua in the low jungle, the Shawis of the upper Amazon, the Jibaros, and the Motilones, who were a transitional ethnic group in the transition from the low jungle to the jungle edge dominated by the Chachapoyas and Bracamoros.

THE RIVER ROUTE OF THE MADRE DE DIOS BASIN: Archaeological sites dating back more than 6,000 years have been found on the banks of the Madre de Dios River, which would prove the transit and occupation of the territory by communities in very early times. The petroglyphs of Quiaca in the jungle of Puno appear to be signs used to mark the route used to travel from the Amazon to the Andes.

In the petroglyphs of Pusharo, in Madre de Dios, anthropomorphic and zoomorphic representations have been found that reveal spiritual aspects of the communities that traveled between the Amazon and the Andes. These petroglyphs and rock art are believed to date back to the Amazonian Mesolithic period based on the type of representations observed.

According to Rainer Hostnig (2021), Pusharo is the most emblematic rock art site in the southern Amazon of Peru, which served as inspiration for adventurers in search of Paititi. The petroglyphs of Pusharo also attracted the attention of several researchers such as Guiseppe Orefici (1984), Kauffmann Doig (1970, 1983), Vega Centeno (1996, 2003), Hostnig and Carreño (2006).

In the jungle of Puno, there are petroglyphs that were unknown to archaeology until the first decade of this century. In 2006, the first reports came in of a group of rocks with engravings on the right bank of the Chaquimayo River, near its confluence with the Inambari River. These remains were explored by Hostnig in 2008 and 2011, as well as by Salas and Cabrera in 2012. Boca Chaquimayo is currently the southernmost rock art site in the Peruvian Amazon. It is characterized by a markedly figurative style, with a profusion of zoomorphic, anthropomorphic, and anthropo-zoomorphic representations in semi-naturalistic forms, astronomical motifs, and some geometric designs.

The sites of Pusharo and Chaquimayo were probably part of the same route used by travelers who moved between the Amazon and the Andes, crossing the valleys of the Upper Madre de Dios and the Inabari River, while hunting and later practicing horticulture.

It is hypothesized that the Amazonian name Pusharo gave rise to the word pukina Poquera, the name of the ethnic group that gave rise to the Pukara culture, predecessor of Tiahuanaco. The translation of the word Poquera is "fortress," meaning that this term would have been exported from the Amazonian valleys to the Andes.

On the other hand, another phenomenon that confirms the early link between the Amazon and the highlands is that, according to linguistic studies, the Uro people, who currently inhabit Lake Titicaca, have their origins in an early Arawak migration. There are two hypotheses regarding this. The first maintains that they are descended from the Pusharo ethnic group that came from what is now Madre de Dios and initially settled on the shores of the lake. The second suggests that it was the Pusharo who expelled the Uros from the shores of the lake and forced them to build floating islands to survive. Finally, the Pusharo people gave rise to the Pukará.

This relationship grew during the Neolithic period with the development of trade, exchanging original products from the Amazon, such as coca, gold, bird feathers, hallucinogenic and medicinal plants, for Andean products such as quinoa, quiwicha, maca, and camelids, as well as stone and copper tools.

CROSS ROUTES:

The main cross-cutting routes of occupation in the Peruvian Amazon were those of Marañón and Urubamba. These allowed ethnic groups from the north and center of the Amazon to penetrate the Peruvian Amazon.

THE ROAD TO MARAÑÓN:

According to Alex Pinzón, Ricardo Alva Cruz, and Duany Gómez Inga (2019), this route has been traveled for 10,000 years by primitive peoples who left a large number of petroglyphs and rock art in this area. It can be argued that there were permanent migratory flows to both sides of the mountain ranges. Cardich (1958) suggested that this relationship between the Amazon and the Andes led to cultural development in which both participated. This same position is supported by Rodríguez (2006) in the case of the Department of San Martín, where there are also a large number of petroglyphs and rock art.

Some important remains on this northeastern route are the Chan Paintings, Pollorua circles of eternity, Wanglic Paintings, The Hunters of Yamón, Calpón Paintings, Limones Sector Paintings, Tablarume Sector Paintings, Zapatalgo Petroglyph, Idulo Paintings, Carachupa Petroglyphs, Cerro Cuaco Paintings, Putquerurko Petroglyphs in Lonya Grande, and Chachapotas.

Based on the study of prehistoric archaeological remains, Alex Pinzón, Ricardo Alva Cruz, and Duany Gómez Inga (2019) established a sequence of transit and settlement in this area dating back 8,000 years BC. The oldest indigenous communities were dedicated to hunting, fishing, and gathering due to the environmental characteristics of the region.

According to Roberto Sánchez (2012), these early migrations were caused by natural phenomena linked to the melting of the Andean glaciers and, later, by climate stabilization. These primitive ethnic groups probably had a Paleolithic culture of their own, dedicated to hunting, fishing, and gathering. The movement of these communities in this region was facilitated by the low altitude of the Peruvian Andes in the northeastern part. Researchers such as Yamamoto (2012) even trace routes that went from Bagua to the Peruvian coast.

According to Olivera (2012), the oldest and best-dated archaeological remains from the Mesolithic and Archaic Neolithic periods in the Amazon are located in the lower Utcubamba basin, which are evidence of a cultural development that began in 3400 BC and continued until 1650 BC. This includes knowledge of agriculture, mounds, and circular religious structures. These discoveries provide archaeological support for Julio C. Tello's theory of the Amazonian origin of Peruvian culture.

This second wave of migration to the area is linked to the Amazonian civilization of the Tutishcainyo, whose pottery style had a definite influence on the Chavín culture, reinforcing the theory that pottery and the agricultural revolution spread from the Amazon to the Andes. The archaic Tutishcainyo civilization originated in the Ucayali basin, but was able to expand rapidly along the tributaries of rivers that converge with other basins in the Amazon, as this is an efficient means of communication, thus becoming a natural route for intercultural exchange.

Studies carried out in the Chambira and Zapotal areas are also of interest in this region. According to Daniel Morales (1998), the former developed around 2000 BC, while the latter dates back to 1000 AD, although this is a conservative estimate and it may be older. However, both cultural traditions reflect an early and continuous occupation of the territory.

The archaeological remains of the Chambira culture are located on the border with the district of Yurimaguas in the department of Loreto. According to Vazolini (1973) and Cardich (1980), the origin of this culture is associated with large migratory movements that occurred in the Amazon as a result of droughts that created large savannas. This explains the large number of bottles found in the human settlements of this culture, which are thought to have been used to transport and store water. However, these bottles may also have had another function, namely the storage of chicha or masato, which are widely consumed in the Amazon. In this case, further studies are needed on the contents of these bottles, as was done in the case of the Bracamoro culture, where studies have led to the discovery of cocoa remains older than those found in Central America.

However, the ethnic origin of its inhabitants cannot be determined from the ceramic patterns. Daniel Morales establishes two periods for this culture: Early Chambira and Siamba. The first is characterized by ceramics that are original in their paste, shape, and decorations, while the second seems to have been influenced by other cultures, as the ceramics are black. Lathrap associates these ceramics with the Barracoide del Orinoco, but they could also have been influenced by Tutishcainyo, as black ceramics were also one of their characteristics.

In the case of Zapotal, located in the current Pacaya-Samiria reserve, Parinari District, province and department of Loreto, Daniel Morales (2019) argues that this site is evidence of early settlement in the Amazon. The age of the archaeological settlement is estimated at 1000 AD, but it is also established that the area was settled much earlier, as evidenced by the enormous accumulation of terra petra do indio, which are distributed in the form of restringas, which were used by Amazonian settlers for agroforestry, agricultural, and wildlife management purposes.

An important aspect of this settlement is that, according to Daniel Morales (2002), in the case of Zapotal, we can identify the coexistence of peoples of Pano and Tupi Guaraní origin. There are two positions regarding the origin of both macro-ethnic groups in the region that are important to know:

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In my opinion, it is more likely that both groups migrated from the south of the continent as a result of population growth and climatic phenomena. Both ethnic groups could have entered the Peruvian Amazon via the Madre de Dios River and then continued on to the Ucayali, Huallaga, and Marañón rivers, as all these rivers are interconnected.

This is supported by the fact that the Pano languages, studied by Olive Shell (1975) in the south-central Amazon, which she calls reconstructed Pano or proto-Pano, are believed to be the original and oldest languages. Later, Erikson (1992) proposed the existence of a northern branch of the Pano family, with distinct characteristics due to the intercultural processes it underwent. This group, which Erikson calls “mayoruna,” is composed of the Matsés, Matis, Korubo, and Kulina languages.

Theoretically, it can be argued that Zapotal was the northern frontier of the Pano expansion and may have been where the language reached its most evolved form in contact with the Tupí Guaraní and other non-forest ethnic groups that entered the Amazon. Later, both groups had to face the arrival of the Arawak, who would give rise to other ethnic groups in this cultural corridor, such as the Jibaros, Shawis, and Motilones, who in more recent times would come into contact with the Bracamoros and Chachapoyas.

An interesting factor on this route is the intercultural processes that take place, as in the case of the Shawis and Jibaros, who have traditions about their common and personal mythical origins, such as Apajui and Kumpanamá, who appear in both cultures but in different roles. Another important factor is the large number of petroglyphs throughout this area, salt mines, and stone axe workshops, which demonstrate not only the movement of people but also trade and cultural exchange.

Also towards the border area between Peru and Ecuador, we can find cultures such as the Chichimpe Mayo-Marañón, studied by Francisco Valdez (2013), where there is evidence of very important pre-ceramic cultural activity in the Napo area dating back 9,600 years BC and agricultural villages in Marañón dating back 3,000 years BC. This Amazonian

influence must have occurred simultaneously with the influence of the coastal model represented by Caral and had a great influence on the northeastern Peruvian axis, with significant cultural development in this Amazonian area from the Formative period to the development of the Bracamoro culture in the Late Horizon, which appears to be linked to the Jibaro ethnic group.

THE URUBAMBA ROUTE: Amazonian communities traveled through this basin toward the southern Andes. This route was used continuously in pre-Hispanic times, as evidenced by the rock art and petroglyphs found in the region, the first records of which were made by Luis Valcárcel and Luis Pardo. This work was later continued by Roger Ravines, among others. What is striking about the rock art and petroglyphs along this route is that those linked to the Paleolithic and Mesolithic periods are scarce, while those corresponding to the Late Intermediate and Late Horizon periods are abundant.

However, this reality is changing due to the construction of the Camisea gas pipeline. Abundant lithic remains dating back to more than 5000 BC are being discovered, which would prove a fairly ancient Paleolithic period in the area. There are also abundant lithic workshops for the production of stone axes and clubs with Upper Paleolithic technology.

According to Salcedo and Camacho (2012), the Mesolithic period in the Urubamba area occurred around 3050 BC, which, in my opinion, is consistent with the presence of Arawak groups in the area. On the other hand, Rainer Hostnig (2021) has also written and left information about a new discovery of petroglyphs in Kosñipata, in the middle basin of the Alto Carbón River. According to him, the rock with the engravings is located on the riverbank and must be submerged under water during flood seasons. Among the mainly abstract motifs, a rectangular human face stands out, with sharp teeth and round eyes, highlighted by squares very similar to those found in Pusharo in Puno. Furthermore, the same author maintains that of the twenty pilot motifs identified in the Brazilian Amazon (Dubelaar, 1986), eleven are found in the study area comprising the Upper and Lower Urubamba and Pantiacolla (Palotoa) river basins. This reinforces the idea of early east-west migrations.

Archaeological evidence confirms that the ancient civilizations that developed in this area of the Amazon date back to more than 1500 BC, during the formative period of Peruvian culture, and that there was constant interaction between the Amazon and the Andes, encompassing distant influences, as the Urubamba and Vilcanota rivers, which run through this extensive area, are well connected to the Ucayali River in the department of the same name, the Palcazú River in Huánuco, and also the Huallaga River, in such a way that very ancient and fruitful cultural contacts could have taken place there.These relationships developed through a complex commercial network. According to Bueno (1981), the sociocultural processes in pre-Inca Cusco were the result of constant relations between La Convención on the edge of the jungle and the Andes and, at the same time, with the rest of the Amazon. According to Myers (1981, 1985, 1986), the elements that stimulated this communication were the ecosystem, technological improvement, demographic growth, kinship relations that created roots among these communities, and bartering as an incipient form of trade.

Over time, this interaction produced qualitative changes in culture, starting in the Formative period, when there is already evidence of interregional exchange, not only in terms of ideological influence but also in terms of the exchange of goods, i.e., trade, which would already indicate the social division of labor, specialization, and the first class-based forms of social and political organization.

According to Salcedo and Molina (2012), the communities of La Convención specialized in the manufacture of stone tools and products such as flat, thin, and finely finished fulling blocks. Wooden spinning weights have also been found, proving the communities' knowledge of textile arts and their intensive practice.

In the same vein, Salcedo and Molina (2012) argue that the Echarate civilization, located in the Cuzco jungle, stands out for its antiquity. This culture would have interacted with the Shillacoto and Kotosh civilizations in Huánuco, which is reflected in the pottery that uses black paint, similar to the Negro Pulido style. On the other hand, Jhon Rowe (1956) also identified influences from the Chanapata and Marcavalle styles. The aforementioned studies conclude that the Echarate culture of the jungle is older than the Marcavalle culture, located in the Cusco Andes. Echarate is believed to date back to 1700 BC, which proves the importance of this area and this culture in the formation of Andean culture. Although the authors do not believe that this culture has anything to do with the current Matshiguengas of Arawak origin, suggesting an influence from the Puno region, they seem to ignore the fact that Puno also received Arawak influence, as evidenced by the Uros. Therefore, this influence from Puno could be part of the Arawak expansion in the highlands, in such a way that the Amazonian influence could have arrived indirectly, making it less evident.

According to Roberto Sánchez (2012), the decorations on the petroglyphs and cave paintings along the route prove that there was flourishing commercial exchange between the Cuzco Amazon and the Andes at an early stage, which was important for the development of interculturalism. This importance is confirmed by the archaeological discovery of the

Lord of Wari, a prominent nobleman found in Espíritu Pampa, in the Cusco district of Vilcabamba, which reflects the importance of trade with the Amazon for this culture.

LONGITUDINAL ROUTES

The Ucayali and Huallaga rivers run longitudinally through the Peruvian Amazon, allowing river communication between different basins of the Peruvian Amazon. On the other hand, the Ucayali River connects the Marañón with the Urubamba (Vilcanota), serving as a link with the jungle and southern highlands, but one of the tributaries of the Ucayali, the Pichis River, comes very close to Huánuco, and the Pozuzo, Palcazú, and Pachitea rivers connect with the Ucayali. On the other hand, the Huallaga River crosses all the departments of San Martín and Huánuco before flowing into the Marañón. As we can see, these rivers are a formidable means of navigation and cultural influence.

THE UCAYALI ROUTE:

Along this occupation route, very early cultural influences from Cerezal, Chambira, and Zapotal have been found in the Ucayali region. These communities were associated with the development of horticulture and agriculture and are believed to date back approximately 4,500 years (2,500 BC).

Some researchers, such as Steward (1949) and initially Betty Megger (1954), did not believe that early, stable agricultural communities could have developed in the Peruvian jungle, assuming that the geographical environment was unsuitable for agriculture. However, it is now known that in 2000 BC, the Chambira culture occupied the then arid Amazonian plains, which had ideal rainfall for agricultural activity and forest areas whose fauna were used to supplement the community's diet.

This process could have been replicated or expanded along the Ucayali route. However, Laphrap's Western-centric view prioritized the idea of extensive and seasonal agriculture, but did not consider the planting of fruit trees or trees for timber and fiber within his model of civilization.

This early cultural development, which involved agricultural activity and adaptation to the specific climate, laid the foundations for an agroforestry model that gave rise to the Tutishcainyo, which can be considered the first civilization of the Amazon. It grew in the Amazonian varzea 2000 years BC, although it could be older, since the cultural progress it achieved required a long period of adaptation to the environment and the development of technological knowledge. Although Tutishcainyo is not as old as Caral, it is more remote than Chavin and Kotosh. However, even Rosa Fung (1983) has found elements typical of the Amazon, such as snails, gourds, transverse flutes with icons of monkeys and icons of Amazonian birds of prey.

Donal Lathrap (2010) assumes that the Tutishcainyo were unable to expand agriculture because the ecosystem was not suitable, and therefore population growth led to migration. However, hypothetically, it could also be the case that the Tutishcainyo migrated in search of areas to reproduce their agroforestry model, that is, a conscious migratory movement could have taken place.

That is why it is significant that in his book El Alto Amazonas, Donald Lathrap (2010) points to a series of cultural traditions such as the Cobichaniqui (1500 BC), Pangotsi (1275 BC), and Nazareguilla (750 BC) have a clear Tutishcainyo influence that developed in Alto Pachitea (Huánuco), meaning that populations moved from Ucayali to Huallaga in environments that allowed for the reproduction of the agroforestry model.

This could have been the route of penetration of the Amazonian agroforestry communities into the Andes, which fostered the development of the agricultural revolution due to the Andes' environment being conducive to extensive agriculture and auquénido breeding, a process that was extremely important for the emergence of the first Andean civilizations. It is therefore no coincidence that this route was home to such important Formative Andean civilizations as Kotosh (Huanuco) and Chavin (Ancash).

This would prove that the Amazonian peoples did not develop an agricultural model due to a lack of knowledge of this technology, but rather because the natural conditions were not conducive, laying the foundations for an agroforestry and wildlife management model that was later developed by successive Amazonian civilizations.

The cultural progress of the Ucayali and its importance seem to be linked to the diversity of the migrant groups, as everything indicates that non-forest peoples migrating from the equatorial jungle under the influence of the Valdivia culture converged with the Pano and Tupiguaraní peoples arriving from the south and the Arawak migrating from the north-central Amazon. It should be noted that these migrations occurred in waves and at different times.Contrary to the view put forward by Jolkesky (2016), who argues that the Macro-Arawak culture was responsible for the development of civilization in Ucayali, Pablo Macera (1987) postulated that the Tutishcainyo, in their Shakimu evolution, were destroyed by the Arawak peoples 200 years BC, giving rise to the Barracoid culture. The question remains as to whether the Shakimu were Pano or Arawak. In my view, the Shakimu were Pano, who took refuge in the inter-river areas due to the invasions of the Barracoids, undergoing a process of archaization. These same Pano groups, due to population growth, emerged from the forest and destroyed the Barracoids in 300 AD (Shakimu revenge), imposing the Cumancaya or Yarinacocha culture at an approximate date estimated at 400 AD, thus laying the foundations for the Shipibo-Konibo ethnic groups of today. Later, in 700 AD, the Tupí Guaraní arrived in the area, which Lathrap (1970) associates with the so-called Caimito Culture.

On the other hand, Santos Gramero (2004) argues that the archaeological evidence presented by Lathrap indicates that the route followed by the proto-Yanesha, of Arawak origin, to migrate to where they are today, passed through the Ucayali-Pachitea-Palcazu axis due to pressure from the Pano communities. The oral and ethnographic history of the

Yanesha, collected by this author, coincides with Macera's (1987) assertion and would confirm that, upon the arrival of the Arawak, the Pano were already in the territory, therefore the Arawaks could not have been the founders of the Tutishcainyo settlement, which may have originated from the cultural fusion of proto-Pano peoples and non-forest peoples influenced by the Valdivia culture who arrived in Ucayali from the Napo.

According to Roberto Sánchez (2012), the cultural phenomenon caused by migration and cultural mixing determined demographic growth and trade, but also interethnic wars between communities with different levels of cultural development. This ultimately defined the cultural characteristics specific to the Amazon, mainly after the destruction of the Shakimu around 200 AD. This is expressed in Ucayali in the Shipibo-Conibo ethnic cultural tradition and, although they coexisted with the civilizations of the Andes, they maintained their particularities until the arrival of the Spanish. However, it should not be forgotten that the arrival of the latter also led to an archaization of these peoples, so their development could have been much greater than what is observed today.

THE HUALLAGA RIVER ROUTE:

This was very important from early times for contact and migration between Amazonian peoples and the Andes, and vice versa. Here we must distinguish between two stages.:

✓ **Prehistoric cultural developments:** These are associated with the migrations of primitive communities that moved transversally towards the mountains approximately 8,000 years BC. Although no such ancient sites have been discovered along this route in Amazonian territory, there are very ancient sites on the eastern flank of the mountain range bordering this road, which could hypothetically be linked to them.

✓ **Development of the first civilizations:** The roads used in prehistoric times in the Amazon region were able to withstand the passage of time and were used for common purposes related to cultural transit from the Mesolithic to the Neolithic periods in the Amazon and Andean regions. On the other hand, as Vega Centeno (2017: 100) argues, in the easternmost part, the Upper Huallaga, contemporary to these stages, a macro-regional framework was projected, with a large number of areas and localities that developed their own progress during that period, which allowed the emergence of proto-ethnic groups and archaic civilizations.

With regard to the prehistoric cultures along this route, the most important petroglyphs and rock art are found in the department of San Martín. Research into the petroglyphs was initiated by art historian Maritza Rodríguez (2004a,b; 2006a,b; 2011, 2020), whose university thesis focuses on the representations of three sets of engraved rocks and a site with rock paintings (Aucapata). Recently (Rodríguez, 2020), she documented the petroglyphs in the district of Shunte in Tocache and published an extensive analysis of this rock art complex, filling an important gap in rock art research in this Amazonian region. She concludes, among other things, that the engravings are associated with "early trade networks with the high Andean area."".

Regarding the stage of the first civilizations, we have already mentioned how archaeological sites indicate the influence of the Tutishcainyo culture in Alto Pachitea, but also in the vicinity of Tingo María (Huánuco), pottery has been found in the so-called "Cueva de las Lechuzas" (Owl Cave) that bears a strong resemblance to Tutishcainyo and to the pottery of Wayra jirca de Kotosh (Huánuco)..

This site is of great importance because it is located at a geographical crossroads between the Amazon and the Andes, indicating a probable route for the transit of people and the exchange of ceramics. Kotosh could be considered a consequence of this ancient Amazonian-Andean contact, with the sanctuary of the crossed hands discovered by Julio C. Tello in 1935 being the most notable feature of this site. The Kotosh civilization had excellent textiles and ceramics, also becoming a center of religious influence.

According to Jorge Silva (2007), the Andean civilization of Kotosh was influenced by Tutishcainyo, both in the Kotosh-Mito stage and in Kotosh Wayra-jirca. The pottery remains found in the Cave of the Owls are similar to those of Tutishcainyo and date back to 1830 and 1850 BC. This would be proof of this influence.

Although research into architecture has not yielded conclusive results, Jorge Silva (2007) argues that the architectural model of construction with a central hearth, which remained the dominant style in the Waira-jirca phase, is similar to late Tutishcainyo and early Shakimu in Ucayali. On the other hand, the crossed hands could represent the antecedent of the principle of duality and complementary contrast that was so relevant in the pre-Hispanic Andean world. A Valdivia influence in Kotosh is also suggested, which could have also arrived via Tutishcainyo and other Amazonian peoples who had previously been in contact with it.

Other important remains are those of Cerro Central, dating back to approximately 1800 BC, located in Juanjuí on the banks of the Huallaga River, which also had Tutishcainyo influence. In addition to evidencing the migratory movement, this is relevant given the proximity of this town to the Conchucho Valley, where the Chavín civilization developed.
In August 2012, archaeologist Kauffmann Doig and art historian Alba Choque Porras inspected the petroglyphs in Chontayacu, Uchiza. The study of the iconography of the petroglyphs highlighted the existence of representations with Chavín features, which, according to their conclusions, would evidence a "rich exchange of cultural goods between the inhabitants of the mountains and the jungle, confirming this process of back-and-forth intercultural relations between the Amazon and the Andes.

IN CONCLUSION:

Based on the description of the settlement processes in pre-Hispanic Amazonia, we can draw the following conclusions:

✓ The settlement of the Amazon is a process that began early, as evidenced by archaeological remains at Pedra Furada in Brazil, Taima Taima in Venezuela, and Tequendama in Colombia, which date back between 18,000 and 11,000 years BP. In other words, these archaeological remains found in the Amazon are much older than those of Clovis. Therefore, it can be argued that the Amazonian Paleolithic, in general, comprises a very early period. In the case of the Peruvian Amazon, no such ancient archaeological remains have yet been found, so this is still a theoretical stage.

✓ Donal Lathrap and Betty Magger argued that, during periods of drought, savannah corridors and forest refuges (which he calls parks) formed in the prehistoric Amazon, which forest-dwelling communities used as a retreat where they could maintain their way of life. However, these archaeologists study this phenomenon in the Amazonian plains without considering the connection between these processes and those that occur in the high jungle, the jungle edge, and the Andes, where Amazonian groups could also migrate and take refuge, bringing their ancestral cultural knowledge and adapting it to the new ecological conditions. This knowledge was the basis of the Andean Paleolithic cultures, whose oldest remains are found precisely on the eastern side of the Andes, very close to the Amazon.

✓ Hypothetically, due to the wealth and biodiversity of the Amazon, the Amazonian peoples may have become sedentary before discovering agriculture, generating a different path of civilizational development linked to the richness of the ecosystem and not to the scarcity of resources marked by more defined and extreme seasonal conditions.

✓ Current studies on Amazonian archaeology have refuted arguments about the impossibility of developing complex societies in the Peruvian Amazon, which were based on a deterministic environmental approach. New approaches based on anthropological research have confirmed the technologies developed by Amazonian peoples to adapt to different environments, including technological products and forms of organization that allowed for better interaction with the environment.

✓ In the cultural and civilizational development of the Peruvian Amazon, the rivers of the Amazon basin played a fundamental role, both in normal times and during droughts. In normal times, they were formidable waterways, while in times of drought, the populations were able to travel through the grasslands that developed in the riverbeds, which were natural refuges for the flora and fauna that served as sustenance for groups of hunters, fishermen, and gatherers.

✓ Around these routes, phenomena of adaptation, miscegenation, and interculturality developed among the communities that occupied the territory, which we have called the Amazonization of the Andes and the Andeanization of the Amazon. Obviously, the Amazonization processes would have been earlier because this territory was populated before the Andes. The early Andeanization processes of the Amazon were developed by Amazonian populations who had settled in the Andes or intermarried with groups from the coast.

✓ These processes took place in different periods, including the Paleolithic, Mesolithic, and Andean-Amazonian Neolithic. In other words, the telluric force of the Andes, a term we use to refer to the greatness of Andean culture, would actually be the result of the movement of other Amazonian and coastal cultural plates that gave rise to the cultural synthesis found by the Spanish.

✓ Early migrations to the Andes were initially caused by climatic phenomena, mainly floods and droughts. Later, due to adaptation and improved living conditions, migrations occurred due to population growth, demonstrating a greater process of adaptation.

✓ The movement of people and goods for migratory or ritualistic purposes began early, as evidenced by the large number of rock art sites and petroglyphs that exist in the Amazon and in the current boundaries between the Amazon and the highlands. Another element to consider is that there are marked similarities between the representations and symbols of the petroglyphs found in Brazil and in the Peruvian Amazon and in the foothills of the Andes.

✓ The diagonal routes were important because they were used by non-Amazonian peoples from the coast and the equatorial Andes, probably influenced by the Valdivia culture, while the Madre de Dios River allowed Pano and Tupi Guaraní groups to enter.

✓ The transverse routes were important because they were used by Amazonian peoples who had undergone a long process of adaptation in the Amazon, such as the Arawak, Caribbean, and more recently evolved Tupi Guaraní.

✓ Based on the existence of a Tutishcainyo tradition in much of the Amazon, it is possible to suggest that this expansion, associated with population growth, did not occur spontaneously but rather in an organized manner, allowing for the reproduction of the agroforestry model and wildlife management that characterized the pre-Hispanic Amazon.

✓ Internal trade in the Amazon was early and intense, which means that the productive capacity of Amazonian communities was significant, since trade presupposes the existence of a surplus. But this trade also reached the highlands, as evidenced by the Tutishcainyo influence found in Chavín and Kotosh.

✓ Pable Macera and Kauffmann Doig use the concepts of selvatización and serranización to describe the influence between the two cultural areas. However, we propose that the most relevant concepts are those of Amazonization of the highlands and Andinization of the jungle, the former being earlier, while Andinization developed in the Early Intermediate and Middle Horizon periods due to the need for the Andean states to extend their agricultural frontier.

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