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An old-European metal object found at the confluence of the Caurés and Negro rivers, NW Amazonia

During a survey performed from 15 to 22 July 2004, along the Lower and Middle Negro river, a metal object of probable European origin was found at the confluence of the Caurés and Negro rivers (NW Amazonia) near an Indian archaeological site. The 44 x 30 mm piece shows a figure in high-relief that appears to represent a medieval artisan at work.

This metal object is considered here as new evidence of exchange between Europeans and Amerindians in the Middle Negro river during the 17th and 18th centuries. It is suggested that Indian- and European-mediated plant dispersal could have been enhanced by an extensive network of exchange in north-west Amazonia, especially at the confluences of the Negro, Caurés, Branco, Jauaperi and Unini rivers.

Key words: Amazonian history, Amerindians, European colonisers, exchange, trade, Rio Negro, plant dispersal.

Durant un estudi de reconeixement portat a terme entre el 15 i el 22 de juliol de 2005, al llarg del curs baix i mitjà del riu Negro, un objecte metàl·lic de probable origen europeu va ser trobat en la confluència dels rius Caurés i Negro (nord-oest de l'Amazònia) a prop d'un jaciment arqueològic amerindi. La peça trobada (dimensions: 44 x 30 mm) presenta una figura en alt relleu que sembla representar un artesà medieval treballant.

Aquest objecte és interpretat, en el present treball, com una nova evidència de l'intercanvi establert entre europeus i amerindis en el curs mitjà del riu Negro, durant els segles XVII i XVIII. Se suggereix que la dispersió de plantes promoguda pels indígenes i els europeus podria haver estat incrementada per una xarxa extensiva d'intercanvi en el nord-oest de l'Amazònia, especialment en la zona de confluència dels rius Negro, Caurés, Branco, Jauaperi i Unini.

Paraules clau: història de l'Amazònia, amerindis, colonitzadors europeus, intercanvi, comerç, riu Negro, dispersió de plantes.

Introduction

There is evidence of long-term contacts, exchange and trade relationships between Indians and the Dutch in the region of the Middle Negro river system (NW Amazonia), during the 17th and the early 18th century (see RAMIREZ 2001 and references therein). Nevertheless, few remains of European origin have been found in Indian archaeological sites that corroborate former trade connections in the region.

Here I describe a metal object found on the right margin of the Caurés river, just where it joins the Negro river, near an Indian archaeological site. Possible contexts of this finding are assessed and the importance of the region of the Middle Negro river system as pre- and post-Columbian exchange network of plant species is discussed.

Study area

During a survey performed on fleshy fruiting plants and frugivorous animals in Lower and Middle Negro river, from 15 to 22 July 2004, new remains of Indian pottery were found on the right margin of the Caurés river, just where it joins the Negro river (GUIX 2005).

This archaeological site is about 30 km from the village of Carvoeiro, between Igarapé Peixe-Boi and Igarapé Gregório, at a place referred to by local Caboclos as Apoloaca (1º 19' 44.9" S, 62º 13' 27.9" W; UTM DATUM European 1979: 20S, X = 0586283, Y = 9853076, Altitude: 31 m; fig. 1).

Apoloaca is a plain composed of sedimentary sandy soils of 27,130±200 ^{14}C yr B.P. (geologically classified as deposits Q2) (ROSSETTI *et al*. 2005).

The Middle and Lower Negro river basin form a low-density drainage system dominated by oligotrophic blackwater rivers (nutrient-poor), and composed of hundreds of islands and river margins that remain flooded for almost six months every year. Nevertheless, some eutrophic whitewater rivers (nutrient-rich), such as the Branco river, were also found.

The climate is equatorial humid, with an average annual temperature above 26º C. Annual rainfall exceeds 2,000 mm and precipitations are more abundant between December and May.

The main vegetation formations are: a- the *igapó* forests (tall floodable forests found on river margins and some islands), b- the *terra firme* forests (tall rainforests not subjected to periodic flooding), c- the *campinarana* forest (Amazonian *"caatinga"* forest), and d- the *campina* (Amazonian *"caatinga"* shrubland), usually found on sandy soils; see HUECK 1972, VICENTINI 2004).

Description of the metal piece

The 44 x 30 mm object is made of bronze, with evident remains of copper oxide on the surface. It is drop-shaped and concave. One side is smooth and polished. The borders of the piece as symmetric and there is a figure inside the concavity, which is partially worn.

The figure is in high-relief and depicts an artisan at work (possibly a metalsmith or a potter). Some characteristics of the figure, such as the hat, a shoe and the shoulder, suggest that it has a medieval European origin or that it was inspired in medieval motifs (fig. 2).

A Caboclo settlement, now composed of three families, was established at this site in the 1930's. This metal piece was first found by Antonio de Oliveira Bitencur near Indian pottery remains when the first Caboclos settled in Apoloaca (Antonio de Oliveira Bitencur**,** pers. comm.). Two polished stones (semi-precious) were also found in Apoloaca.

Pottery fragments (see below), the metal object and the polished stones found in Apoloaca were photographed and drawn *in situ*. All the archaeological material was left where it was found.

Indian pottery at Apoloaca and in neighbouring areas

Several fragments of Indian pottery were found on the surface of a sandy soil that was eroded by the water of the Caurés, in Apoloaca (fig. 1). Some

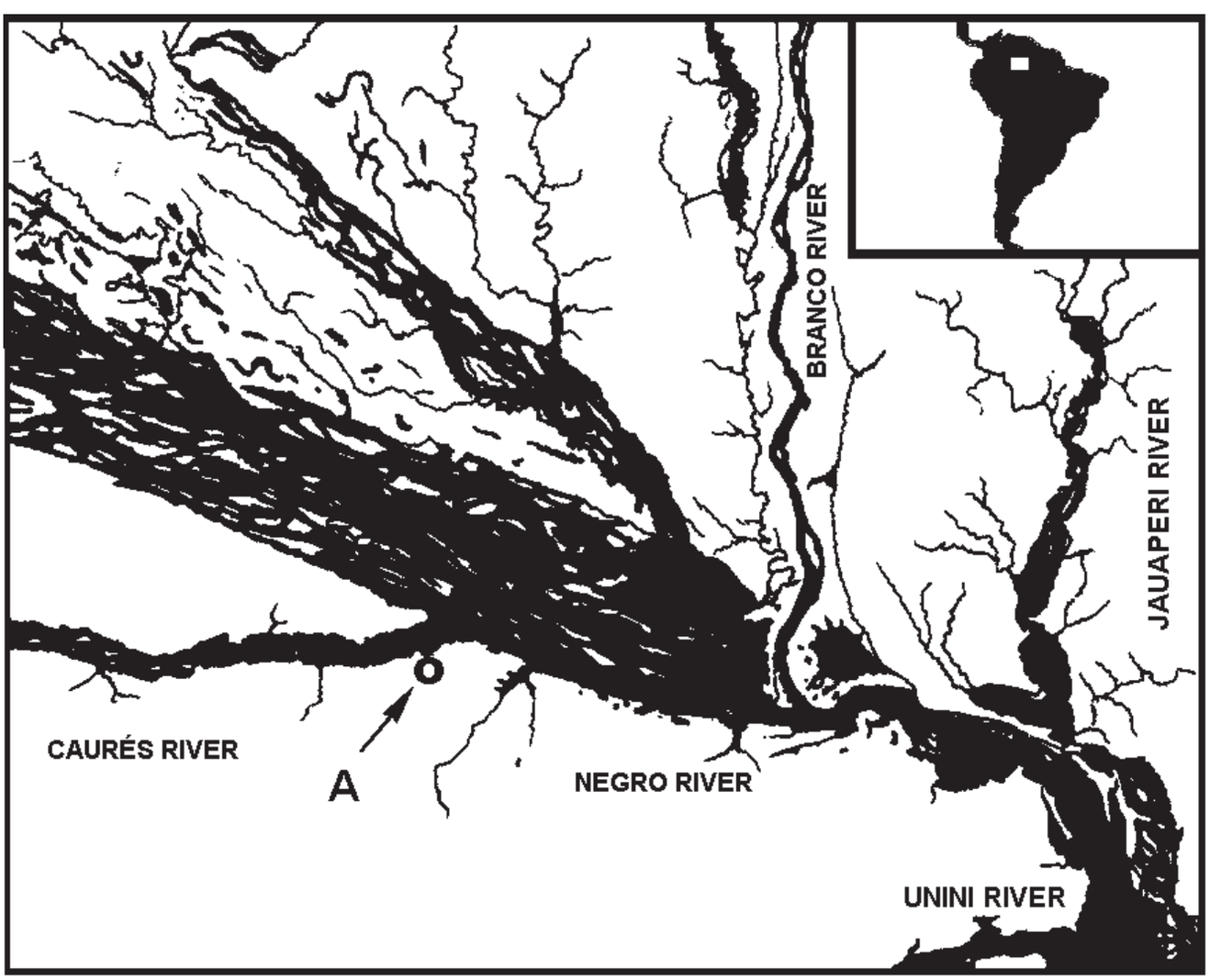

Figure 1. Map of the confluence of the Caurés river with the Negro river, in the Middle Negro river system, Northwest Amazonia. The site where the metal object was found is located in Apoloaca (A), near the Igarapé Peixe-Boi.

ceramic fragments showed geometric figures on the surface, such as concentric rectangles, made in bas-relief (fig. 3). Three-layered fragments of ceramics suggest the effect of a combination of a reducing atmosphere (oxygen-poor air) followed by an oxidizing flame (oxygen-rich air), in the clay firing process (GUIX, 2005).

Indian pottery found in Apoloaca (2004 survey), indicates the existence of old settlements of Amerindians, some of them probably pre-Columbian. Composition, colour, texture and geometric patterns of some of the ceramics fragments found suggest they may be as old as 2500-2000 B.P. This type of pottery would be attributable to ethnics groups closely related to the Arawak culture, such as the Baniwa of the Upper Negro river (Eduardo Góes Neves, pers. comm; see also NEVES 2001, RAMIREZ 2001, ZUCCHI 2002). Also, pottery fragments were attributed to the pre-Columbian Polychrome tradition (Guarita subtradition) in the area (cf. M.F. Simões; A.L. Machado & A.L. Maroja in IPHAN-1997, AM-BL-8: Puluaca).

In addition, during the 2004 survey, pottery remains (probably post-Columbian) were found in Apoloaca, suggesting long-term or successive episodes of Indian occupancy of this area.

In the Parque Nacional do Jaú (located 130 km downstream from Apoloaca, on the right margin of the Negro river), archaeological surveys found pottery fragments attributable to the Polychrome tradition (Guarita) from the Middle and Low Negro River, that could be as old as 1070-390 B.P. (M. HECKENBERGER in FVA, 1998).

Other pottery findings from upper tributaries of the Negro River, which could be as old as 3500 B.P., were recently attributed to Arawak groups (ZUCCHI 2002).

Arawak communities of the Negro river basin reached a higher stage of technical development when compared with other neighbouring cultures. This conclusion is supported by elaborated pottery, weaving work, community buildings and agriculture (RIBEIRO 1996; HECKENBERGER 2002). Horticultural and agricultural practices developed by Arawak groups probably induced changes in the ecological succession of plant communities of the forest, when they abandoned their settlements following the European colonisation of the 17th century. Ecological and archaeological evidence suggests that pre- and post-Columbian settlers at the confluence of the Caurés and Negro rivers managed at least some of the forests and influenced their floristic composition (GUIX 2005).

Figure 2. Metal object found in Apoloaca, located on the right margin of the Caurés river, between Igarapé Peixe-Boi and Igarapé Gregório. Measurements: 44 x 30 mm.

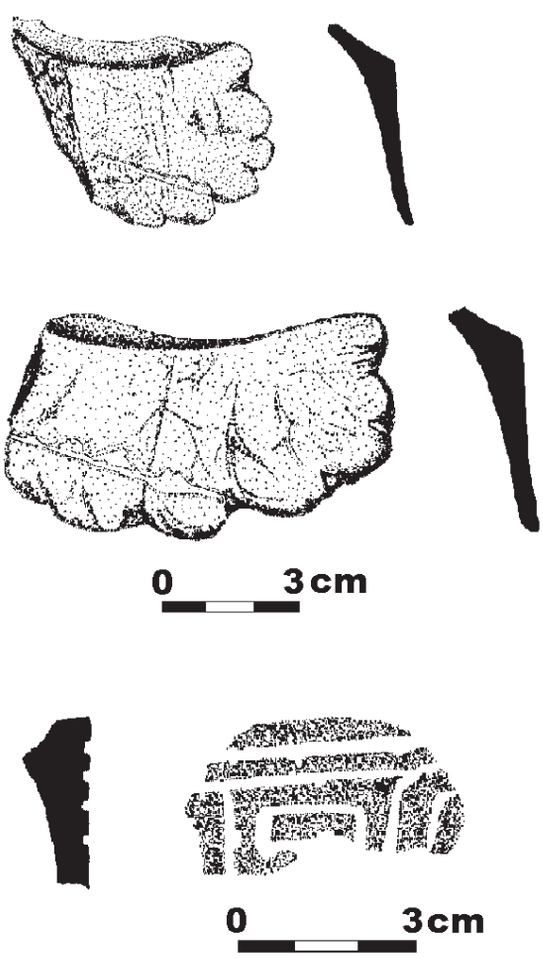

Figure 3. Some fragments of Indian pottery found on the surface of a sandy soil of Apoloaca.

A possible context for the metal object found at the Apoloaca site

The site is located in a zone of high confluence of large rivers, such as the Negro, Caurés, Branco, Jauaperi and Unini rivers. Some of these rivers communicate extensive regions along a latitudinal axis (e.g. the Branco and the Jauaperi rivers from the Northern Amazonia, and the Unini from the South-west), while others communicate regions on a longitudinal axis (e.g. the Negro river from the north-west to the south-east and the Urariquera river from the west to the east). Furthermore, the Upper River Basins of the Branco and the Negro (in the large Amazon basin) are important fluvial corridors that communicate with areas of the Upper Orinoco basin. Similarly, the Jauaperi river forms a corridor that communicate the Negro river basin with the Esequibo river basin of the Guyana.

This hydrographical context would have been compatible with an extensive network of Indian exchange in the region located at the confluences of the Negro, Caurés, Branco, Jauaperi and Unini rivers, during pre-Columbian times (Guix 2005), which was probably used by the first Europeans settlers that colonised the region, during the 17th and 18th centuries, as an exchange connection.

The first Europeans explorers arrived in Northwest Amazonia between the 16th and 17th centuries. By this time Arawak-speaking Indians had established settlements along the Upper and Middle Negro river (Neves 2001, Ramirez 2001, Heckenberger 2002, Hornborg 2004).

Dutch colonisers established in the region of the present Guyana from 1581 to 1770. In 1616 they began the construction of sugar cane mills (Ramirez 2001) and by the 1640s the Dutch West India Company had introduced the first slaves from Africa. They were probably first Europeans to maintain long-term contacts and exchange with Arawak communities from the Middle Negro river, through the Branco river.

In 1669 the Portuguese constructed a military fortification (Forte São José da Barra do Rio Negro, which later became the village of Manaus) at the mouth of the Negro river, and in the late 17th century they began long-term contacts with Indian communities of the Middle Negro river (Ramirez 2001). In the first half of the 18th century Dutch and Portuguese disputed the European hegemony of the Middle Negro river, both attempting to forge alliances with different Arawak Indian communities.

In 1728 a Carmelite mission (Nossa Senhora da Conceição de Mariuá) was founded in the Indian settlement of Mariuá, located in the Middle Negro river, and in 1758 the Portuguese raised the category to *vila* (changing its name to Barcelos) and consolidating the control of the region. Between 1730 and 1758 the Portuguese also extended their influence and control of several territories located in the Upper Negro river, which were claimed by the Spanish Crown (cf. Pelayo-López 1990). Meanwhile, the British assumed control of the Guyana between the late 18th century and the early 19th century.

During the period of Dutch influence in the Branco river and the Middle Negro river, Arawak communities, such as the Manao, and the Dutch probably established exchange activities and trade of several products including metal artefacts (see Simon 1983).

One drawing of Wapixana Indians made in 1786 by Joaquim José Codina, one of the artists of the expedition headed by the naturalist Alexandre Rodrigues Ferreira along the Negro and Branco rivers, bears the following foot inscription: "*Representação dos Gentios Uapixanas, q. habitão as Serras da parte superior do Rio Branco, os quaes andão sempre pintados de Urucú, e uzão de Armas de fogo, e de Terçados, asim como as mulheres, de Tangas, e mais ornamentos de missanga q. comprão aos Holandezes de Suriname*" (i.e. "Description of Uapixanas Indians, which inhabit the mountain chains of the Upper Branco river, who are always painted with urucú –*Bixa orellana*-, and use firearms and machetes, while the women use tangas and other *missanga* ornaments that they buy from the Dutchmen of Surinam") (Ferreira 2002: fólio 16r).

The metal object found in Apoloaca could be inserted in the context of successive attempts of control and colonisation of the region, by different European nations, during the 17th and 18th centuries. This piece seems to be a personal object of medieval origin and it could be an insignia of an artisan guild. It might have been used during an exchange between Europeans (possibly Dutch) and Indians or it might have been apprehended during a fight.

Importance of the region for plant dispersal

Given the importance of the region of hydrographical confluence of the Middle Negro river to the history of Amerindians and Europeans in Amazonia, the region probably played a crucial role in plant dispersal in the Amazon basin.

By means of this interconnected hydrological system, several plant species that had more restricted distributions, were transported by humans to regions where they probably had not existed before. Indeed, pre-Columbian Arawak communities could have expanded the cultivation of several species and varieties of manioc (*Manihot* spp.; Euphorbiaceae) and cacao (*Theobroma* spp.; Sterculiaceae) in Western Amazonia (see Ramirez 2001, Guix 2005).

Seeds of plants used by the Indians, such as urucú (*Bixa orellana*), and several species of palm trees (Arecaceae) and large-fruited Sapotaceae, were probably dispersed by them in pre-Columbian times.

Also, alien plant species brought from overseas in post-Columbian times, such as species and varieties of bananas (*Musa* spp.; Musaceae) and mangos (*Mangifera indica*; Anacardiaceae) from Asia, and coffee (*Coffea* spp.; Rubiaceae) from Africa, were introduced by the Dutch, Portuguese and Spanish and widely dispersed into the North-west Amazonia by Europeans settlers, Indians and Caboclos.

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