FURTHER NOTES ON ANCHOR AXES

by

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The purpose of the present notes is to make known nine previously unpublished anchor axes deposited in three European museums. This, as well as an earlier paper (Simons 1965/66) was written during research undertaken as part of a project concerned with anchor-shaped axes, their origin, cultural contexts, and distribution in the New World. In the first study, anchor axes and their distribution in Brazil were discussed in some detail. Their distribution comprises various areas which are known to be or to have been occupied by the Gê Indians as well as other parts of that country. However, axes of a similar shape — in stone or metal — have been found in other areas of South America including Br. Guiana, Ecuador, Peru, Argentina, and Bolivia. Furthermore, they are known from the Lesser Antilles, Central America, Mesoamerica, and the United States. Finally it should perhaps be added that anchor axes were also a recognized shape in the Old World.

Our concern, however, is with America. Since it is possible as regards certain areas of that continent that anchor axes are indicators of migratory movement or other forms of cultural contact, more distributional and typological data may throw light on such questions. When a sufficient sample of anchor axes from the various regions of their distribution have been

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examined, an attempt will be made to subject data on attributes coded on key sort cards to descriptive and comparative statistical analysis.

All the axes described in the following are of stone. Eight specimens are from Brazil, one from Argentina.

Description of Anchor Axes.

For the purpose of description in this paper it was found convenient to adopt the following terminology: that part of the axe-head which lies between the blade and the butt will be termed the stem. The butt is that part of the stem which lies diametrically opposite to the cutting edge, i.e. the convex edge of the blade. “Crescent-shaped” will be used to describe the blade, when its shape is similar to that of the moon in its first or last quarter. The latter is distinct from “semilunar-shaped”, which refers to a shape more similar to the moon when only half is illuminated. Measurements of the axe-heads when unhafted were taken for total height, width of the blade, height and width of the stem, and maximum thickness.

I. BRAZIL

1. Nationalmuseet, Copenhagen. No. O.D.I. 44. Fig. 1.

![Anchor axe from the State of Minas Gerais](image)
Provenance: Brazil. The specimen was acquired by the Museum in 1830 through exchange with Det kgl. naturhistoriske Museum, Copenhagen. It may conceivably have originated in the collections made by Dr. Peter Wilhelm Lund during his first stay in Brazil between 1825 and 1829.

Material: not yet identified.

Description: semilunar-shaped blade, stem contracting towards the butt. Surfaces are fully polished. Chipped areas on the edge of the blade are not recent, and may evidence use. Cutting edge is sharp, posterior edges of the blade flattened. Lateral edges of the stem are flat, the butt straight with a flattened edge. Transverse section of the stem is tabular.

Total height is 12.0 cm., maximum width at blade 11.6 cm. Stem is 5.1 cm. high, and 5.6 — 8.2 cm. wide. Maximum thickness, approximately at the centre of the stem, is 1.9 cm.

2. Nationalmuseet, Copenhagen. No. O.D.I. a2. Fig. 2.

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FIGURE 2. Anchor axe from Brazil.

Provenance: probably the State of Minas Gerais. This specimen was presented to the Museum in 1841 by Dr. Peter Wilhelm Lund, and may come from the Lagoa Santa region or elsewhere where he worked. It is noted in the Museum catalogue that this type of axe is believed by the common people
to possess the same qualities as the so-called "coriscos" (lightning stones).

Material: limestone, according to the Museum catalogue.

Description: crescent-shaped blade with stem expanding from the blade. Fully ground with a shine at the blade end. Striations on both surfaces evidence the smoothing process. Chipped areas on one arm are probably recent. The cutting edge is not sharp, but it was thinned, rounded, about 0,2 — 0,3 cm. thick, and polished to a gloss. The posterior edges of the blade are rounded. Lateral edges of the stem are rounded, the butt is convex with a flattened edge. Transverse section of the stem is ovaloid. Two shallow grooves on each side and on both surfaces separate the blade from the stem.

Total height is 15,2 cm., maximum width at blade 15,5 cm. Stem is 8,4 cm. high, and 4,3 — 6,4 cm. wide. Maximum thickness, at butt, is 2,4 cm.

Comment: several anchor axes have been illustrated from the State of Minas Gerais (Rydén 1937: fig. 1, I,P,U,Y; Walter 1958: fig. 15, d, e), a number of which show characteristics similar to the specimen described here.

3. Nationalmuseet, Copenhagen. No. O.D.I. a3. Fig. 3.

FIGURE 3. Anchor axe from the State of Minas Gerais.
Provenance: as above.

Material: granite, according to the Museum catalogue.

Description: shape is similar to that of fig. 2. The specimen is well polished, but traces of trimming were left at one corner of the stem. One corner of the base of the stem was broken. All edges of the blade are sharpened. Lateral edges of the stem are sharpened, the butt is convex with a thinned and flattened edge. Transverse section of the stem is biconvex.

Total height is 15,0 cm., maximum width at blade 17,8 cm. Stem is 8,0 cm. high, and 6,0 — 8,5 cm. wide. Maximum thickness, approximately, at the centre of the stem, is 3,4 cm.


Provenance: the Apinaye, a Gê-speaking people, living in the northern part of the State of Goiás, between the Lower Araguaya River and the Tocatins. This axe was collected by Curt Nimuendaju, and was acquired by the Museum in 1928.

Material (of axe-head): not yet identified.

Description: anchor axe with a relatively small, semilunar-shaped blade and a small or "rudimentary" wooden haft. The haft is polished, 26,5 cm. long with a diameter of about 2,0 cm. It turns backwards at one end. The axe-head is attached to the haft in a plane parallel to the cutting edge with resin-coated cotton string, which — without the resin covering — is also wound around the entire haft. A carrying-strap of plaited, bast-like fibres is attached by cotton string at both ends of the haft. Attached to one end of the haft is a ca. 67,0 cm. long tassel consisting of lengths of cotton string. Into each of the lower ends of the latter are strung four or five cylindrical beads of some kind of hard seed as well as of dark brown, white and grayish glass. Perforations are cylindrical. The beads vary in diameter between 0,9 — 0,1 cm., and 0,1 — 0,6 cm. in height. At the termination of each length are two knots to which yellow and yellow-red feathers are attached. At the opposite extreme of the haft, near the bent, is attached a shorter tassel, 12,0 — 14,0 cm. in length. To the individual lengths of the latter are fastened small, red feathers and dark and white beads similar to those described above.

The axe-blade is fully polished. It measures 6,4 cm. in width, and is 2,7 cm. high. A raised edge separates the blade
from the stem, i.e. apparently maximum thickness of 1.1 cm. is at the blade. The cutting edge is sharp, the posterior straight edges flattened. The stem is 3.0 cm. wide with rounded lateral edges. No use marks are visible.

Comment: this axe is very similar to others illustrated by for instance Rydén (Op. cit., fig. 5) from the Apinayé. The raised edge or "offset" separating the blade and the stem, the latter author (Op. cit., 80) considered a characteristic feature of anchor axes from northern Brazil. It appears to be more common in the north east of Brazil, and is known from the States of Bahia, Piauí, Ceará, Maranhão, northern Goiás, eastern Pará (Simons 1965/66: 350), and Sergipe (see No. 5 in this paper). However, this feature was also found on a specimen from the south, in São Paulo State (Op. cit., 325-26).

The shape of the haft, the way the axe-head is attached, and the cotton-string cover are almost identical to that shown by Rydén (Op. cit., fig. 5, E) on an axe from the Apinayé, which was also collected by Nimuendajú.

5. Museum für Völkerkunde, Basle. No. IV c 6483. Fig. 4.

FIGURE 4. Anchor axe from the State of Sergipe.

Provenance: Sergipe. This specimen was presented to the Museum in 1877 together with two T-shaped axes from the same area.
Material: not yet identified.

Description: crescent-shaped blade with stem contracting slightly towards the butt. Fully polished except at butt end. Small chipped areas at the cutting edge. The cutting edge is sharp, the posterior edges of the blade flattened. Lateral edges of the stem are rounded, the butt is straight with a flattened edge. Transverse section of the stem is ovaloid. A raised edge separates the blade from the stem.

Total height is 7,1 cm., maximum width at blade 13,0 cm. Stem is 3,6 cm. high, and 6,0 — 6,7 cm. wide. Thickness ranges from 2,5 cm. at the offset to 1,0 cm. at the butt.

Comment: to our knowledge no finds of anchor axes have previously been published from the State of Sergipe. However, they are known from the surrounding areas (see above). The only Indians remaining in the Sergipe region are the now integrated Xokó, who are possibly Kariri (Malcher 1964: 264).

In historical times the area included in the Sergipe State was inhabited by Tupí along the coast and Kariri and others groups in the interior (Nimuendajú 1946).


Provenance: the Apaniekrä (Canela), a Gê-speaking tribe living in the region of R. Porquinhos, State of Maranhão. This axe was collected by Curt Nimuendajú, and acquired by the Museum in 1928.

Material (of axe-head): not yet identified.

Description: anchor axe with a semilunar blade and a relatively small haft of polished wood. The haft measures 25,1 cm. in length, and 2,3 cm. in diameter at one extremity. It is turned backwards at one end. The axe-head is attached to the haft in a plane parallel to the cutting edge with a winding of cotton string covered by a resin-like substance. The haft is entirely covered with string. A carrying-strap of plaited cotton string is attached to both ends of the haft. At the bent edge there is a ca. 4,0 cm. long tassel of cotton strings. Close to the latter, the carrying-strap is separated to form two bands which are tied around the haft. To each of the ends of the strap is attached a tassel of cotton, which is 18,0 cm. long. The latter are decorated with glass beads in two shades of blue and in white, as well as with yellow-green feathers. The beads are spherical
and cylindrical in shape. Diameters range between 0,3 — 0,6 cm., and the cylindrical beads (dark blue and white) are about 0,2 cm. high. At that extreme edge of the haft, which is diametrically opposite the bent end, is attached a 1,15 cm. long tassel, into the individual lengths of which are also strung blue and white glass beads and red-yellow-green feathers. The cotton string has been dyed in parts to a brownish red colour, possibly with urukú.

The axe-blade is polished. It is 8,5 cm. high, and has a maximum width of 22,0 cm. Maximum thickness is 2,0 cm. The cutting edge is sharpened, the posterior straight edges flattened. A raised edge separates the blade from the stem. No signs of use, but traces of trimming.

Comment: The shape of the haft, the way the axe-head is attached, and the cotton string cover are almost identical to that shown by Rydén (Op. cit., fig. 6, F) on an axe from the Ramkokamekrá (Canela), which belongs to the Dresden Museum. It is also very similar in manufacture and details of decoration to others illustrated by the same author (Op. cit., 68-70, fig. 6, A,G), reported to come from “the mouth region of Rio Xingu”, and the Kayapó, Rio Araguaya, respectively. According to Rydén (Op. cit., 68), no axes with a similar type of hafting existed in Europe prior to 1800, and they are considered to be relatively recent and purely ceremonial in character (Op. cit., 67).


Provenance: Island of Marajó, State of Pará. This specimen belongs to the Berringer Collection acquired by the Museum in 1931.

Material: not yet identified.

Description: axe-head with T-shaped butt, short stem, and a semi-circular blade. Fully polished except at the edge of the butt, where pecking marks are visible. The cutting edge is sharp, lateral edges of the stem rounded, and the edges of the butt flattened. Total height is 9,6 cm., height of stem and butt 2,2 and 2,3 cm. respectively. Maximum width at blade is 10,4 cm., at stem 9,4 cm., and at butt 13,6 cm. Maximum thickness is 3,2 cm.
Comment: in spite of relatively extensive excavations on the island, by e.g. Meggers and Evans (1957), no axes of a similar shape have to our knowledge appeared from there in publication. It should perhaps not be classified as an “anchor axe”, as the proportions of blade and stem are different from those generally found in axes of that type. It bears a certain similarity to some notched as well as T-shaped axes. The T-shaped butt is not uncommon in anchor axes. A specimen very similar to ours, which has a longer stem with concave sides, was published by Verneau and Rivet (1912-22, fig. 29). It was found at Cotocallao, Ecuador, and was described as T-shaped (hache à oreilles) with a triangular cutting edge (Op. cit., 151).


Provenance: eastern Brazil. This axe was presented to the Museum together with two objects from Amazonas in 1940 by Frau E. Loesser. It is mentioned in the catalogue of the Museum that this specimen may come from the region of the Lower Araguaya, but the evidence for the latter statement is unknown.

Material (axe-head): not yet identified.

Description: hafted anchor axe with a semilunar blade. The polished wooden haft is 1,42 m. long. It is nearly circular in section, and has a diameter of about 5,0 cm. at the distal edge (away from the blade), becomes thicker near the blade, and tapers to a diameter of about 4,0 cm. at the proximal end. The wood appears to have been covered with some black substance, and is polished to a gloss. At 40,0 cm. from the proximal edge and reaching about 86,5 cm. down the haft, it has a basketry cover of interwoven cane-like strips of pale yellow and dark brown to black respectively, which form a geometric pattern. The light-coloured strands running lengthwise and forming the warp are seen to be kept in place at one end by two lengths of light plant fibres, which run around the haft and alternately above and below the individual strips of the warp. Dark-coloured strips are wound around the haft and the light strips at the extreme edges of the cover. Between these dark bands, the cover shows at the proximal end a diagonal pattern in light and dark elements. The extreme proximal end of the haft shows a lighter colour than the remainder of the wood, and might
originally have been covered. The axe-head is socketed into the haft, the slit being placed at 8, 5 to 22,5 cm. from the proximal end. The wood has split lengthwise in several places near the slit. The stem of the axe-head is secured to the haft by some black, wax-like substance, which, however, appears to be recent. Under the wax-cover thin string can be seen to be wound around the stem.

The blade is polished. The cutting edge is not very sharp, the posterior edges are straight and flattened, and 1,2 cm. thick. There is no offset separating blade and stem.

Maximum width of the blade is 33,2 cm., height is 15,5 cm. Width of the stem is about 14,0 cm. The stem must have been less than 8,0 cm. long.

Comment: hafted anchor axes from Brazil are not uncommon but this specimen in view of the size of the haft is apparently unique. The earliest known anchor axes, according to Rydén (Op. cit., 65, 78), had a relatively large and “serviceable” haft, which may testify to their original use as battle-axes. In time, hafts became smaller and eventually “rudimentary”, and were often provided with a carrying-strap (Op. cit., 65). Following Rydén (Op. cit., 65), “the mere presence” of the latter feature “suffices to denote their ceremonial character”. Nimuendajú (1939: 126-128) pointed out that there were two categories of anchor axes: (1) large war axes, and (2) small ceremonial axes, the former type being eventually abandoned. From early ethnographical sources we learn that anchor axes functioned as weapons as well as ceremonial objects. Today, as among the Krahó for example, the function of such axes is purely ceremonial (Schultz 1965).

The specimen described in this section would appear to be most similar to two hafted anchor axes in Vienna published by Hochstetter (1885: pl. V, 1 and 2). Unfortunately their exact provenance is unknown. They are the oldest hafted anchor axes published, presumably dating from the 16th century (Op. cit., 65).

(2) This opinion was confirmed by a note in the Museum catalogue showing that the axe-head had at one time become separated from the haft. It is therefore probable that the original substance for fixing it would have come off, and it might have been substituted by some material similar in appearance to the original. This axe, in view of the size and weight of the blade, might originally also have had some kind of string securing the axe-head to the haft, especially if it was intended for or actually used as a weapon. As mentioned below, traces of thin string can be seen below the wax, but we do not know whether it was there originally.
One was said to have belonged to Montezuma in Mexico (Op. cit., 9, pl. V, 1). Hochstetter, however, is of the opinion that both specimens are from Brazil (Op. cit., 21). Rydén (Op. cit., 65) has described them as “the only existing battle-axes from that region (i.e. Brazil)”. The hafts of the latter axes are 95,0 cm. and 65,0 cm. long respectively (Hochstetter 1885: 20). The axe-heads are secured to the hafts with cotton string, and one is decorated with feathers and mosaics (Op. cit., 20; pl. V, 1 and 2). The crescent-shaped stone blades of these axes are considerably smaller than the semilunar-shaped blade of the axe described above.

With respect to other relatively early hafted anchor axes Rydén (Op. cit., fig. 3) published a number, most of which are from the 17th and 18th centuries. The hafts of the latter are, however, less than half the length of that in Hamburg. One has a cover of leaves secured by a winding of string (Op. cit., 60; fig. 3, A), another a cover of “thin slivers of reed” secured by string (Op. cit., 62; fig. 3, B), and a third specimen has a cover of “Rohrstreifen” (Op. cit., 63-64; fig. 3, G) — perhaps strips of cane or bamboo — which apparently was done in one colour only. All are from Brazil, but exact provenance is unknown.

Another anchor axe, already published by Rydén (Op. cit., fig. 7), which has a relatively long haft (56,0 cm.), is also in the Hamburg Museum (No. B. 854). It is purported to come from Rio Negro. The decoration of the wooden haft, however, consists of an incised pattern filled with white colour, i.e. not similar to the basketry cover of the specimen under discussion.

The only anchor axes which to our knowledge have a cover of basketry with motifs in elements of light and dark colours decorating part of the haft are those with miniature or “rudimentary” hafts illustrated by for example Hochstetter (Op. cit., fig. V, 3) and Rydén (Op. cit., fig. 6, C-E), from the Poracracaran, the Gaviões, “Rio Tocantins”, the Canelas of Middle Rio Tocantins, and the Krahó i.e., Gê Indians. Also larger objects from some Gê tribes, such as clubs, have a similarly woven cover. However, so do those of other Indian tribes. Our present knowledge of details of patterns and designs used in basketry by individual Indian tribes is too poor to enable us to determine the provenance of the axe under discussion through a comparative analysis of such features. Also, the pattern is relatively simple.

The axe under study may well have been made by one of the Gê tribes. There is no doubt that in ethnographical times
anchor axes had become an important element among the Gê, who also manufactured them. At present, however, we nothing about the antiquity of this element in Gê culture, nor whether it was invented by the latter or arrived from elsewhere. The existence of a large amount of so-called archaeological anchor axes, recovered over an extensive area of Brazil, offers little help towards solving the many problems which still confront us with regard to this type of axe. Generally, the chronological position and cultural association of archaeological specimens are unknown.

As far as the age of the axe under review is concerned, it remains entirely a matter of speculation. With regard to axe-heads, it is difficult to judge their antiquity. We do not know which types are more ancient, and Kissenberth has mentioned, for instance, that the Mekubengokra-Kayapó “stored up their anchor axes buried in the ground” (Rydén 1937: 67). Consequently they might have been re-hafted and used through a long period of time.

If Rydén was right, and anchor axes with large and “serviceable” hafts are older than the other types, this specimen could be of a considerable antiquity. It is well-preserved. The cover is in a good condition. If it is very old, it was carefully looked after during the years before 1940, when it arrived in the Museum in Hamburg.

II. ARGENTINA

9. Nationalmuseet, Copenhagen. No. 0.33.1043. Pl. II.

Provenance: Rodeo Colorado, Tilcara, Dept. of Iruga-Salta, North West Argentina. Presented to the Museum in 1958 by Mr. Erling Petersen. No other information is known.

Material: not yet identified.

Description: coarsely flaked anchor-shaped axe-head with crescent-shaped blade, and stem contracting towards the base. The convex edge of the blade is thinned but not sharp, posterior edges likewise thinned. Lateral edges of the stem are rounded, the butt is convex. Transverse section of the stem is roughly elliptical. The specimen is bifacially worked and peripherally retouched, with smoothed areas on stem and blade.

Total height is 16,0 cm., maximum width at the blade 25,5 cm. Stem is 9,2 cm. high, width ranges between 1,1 — 5,4 cm. Maximum thickness, at stem near the blade, is 2,1 cm.
Comment: anchor axes in stone have been reported from Argentina as for instance by Ambrosetti (1898: fig. 146) and Mayntzhusen (1912: 464). Presumed ceremonial axes in polished stone with semilunar blades and anthropomorphic or zoomorphic figures on the hilt found in the Catamarca region are believed to represent Andean influences (Gonzalez 1961: 402, 418; fig. 19). Stone artifacts possessing blades of a similar shape but lacking the elaborate hilt ornament have been found in the region of Puna de Jujuy (Rosén 1924: 25, 132; figs. 24, 214; Boman 1908: 619, 646-647; fig. 139, d, i-l). They were presumably hafted, and are believed to be hoeblades or axe-heads. The latter as far as workmanship is concerned are similar to the specimen under review. With regard to shape of the blade, however, the axe described here closely resembles anchor axes of stone from Ecuador and Brazil for example.

Due to the special character of anchor axes, their occurrence in various regions of the New World leads us to ask whether they represent some kind of cultural contact between the areas where they are found. Naturally, anchor axes cannot be studied in isolation on a regional or continental basis, but only in relation to the cultures of which they formed part. We should not assume a connection between traits in different cultures unless we can prove that the traits are formally and functionally identical, and can demonstrate chronological and geographical possibilities of connection. However, the discussion of the problems involved, questions of typology, function, chronology, and the processes of diffusion which may be entailed, we shall postpone to some later time.
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Axe from the Island of Marajó. (Courtesy Hamburgisches Museum für Völkerkunde und Vorgeschichte, Hamburg).

Anchor axe from Eastern Braz'l. (Courtesy Hamburgisches Museum für Völkerkunde und Vorgeschichte, Hamburg).
Anchor axe from North West Argentina. (Courtesy Nationalmuseet, Copenhagen).