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Between Private Devotional Practices and Personalisation: An Unusual Inscribed Tool from the Borgia Collection

Silvana DI PAOLO – Lorenzo VERDERAME

This article is the first scientific publication of a stone hammer axe with a three-line inscription currently held in the USA and long belonged to the huge collection of antiquities assembled by the Borgia family. A third-millennium BCE text, engraved within a rectangular case, identifies the artefact as a private item, perhaps offered in honour to an obscure deity.

1. Premise

A banded chalcedony hammer axe with a three-line cuneiform inscription was part of the huge private collection of antiquities and ethnographical items owned by the Borgia family and acquired by gifting or purchase over a very long period from different regions of the world¹. The object is currently owned by William Larson, the President of Pala International based in San Diego county in California, a company long involved with mining of precious stones and mineral specimens². The history of its acquisition among the materials of the Borgia collection is open to discussion, but it could be one of the few ancient Near Eastern artefacts entered the *Museo BORGIANO* founded by Clemente Erminio (1640-1711) and, later, increased by Stefano Borgia. The authors, who did not have the opportunity to examine the object in person, had three photos made available by the current owner, which were later uploaded to the Pala International website (Figs. 1–3)³. Fig. 8d is a line drawing created using one of the published photos (Kunz 1905, pl. VI, 3).

¹ Chalcedony is here intended as the species name for cryptocrystalline quartzes, such as agate, jasper, carnelian, and onyx (Schumann 2013, 272). The failure to identify the material explains the adoption of this collective term. There are no permanent or archival records in the American Museum of Natural History (New York) where the object was kept for a long time, according to Jamie Newman, Senior Museum Specialist of the Earth & Planetary Science Department (email communication, February 4, 2021).

² Some information, although only very partially reliable, is presented on-line on the website of the company: <http://www.palagems.com/babylonian-axe-head> (accessed 2020/12/28).

³ Attached to two emails sent to Di Paolo and dated 5-6 May, 2015.

The hammer axe is a double tool or weapon usually made of metal (copper, bronze) or stone, such as diorite and basalt, with flattened top and base, and combining a cutting edge and one hammer face. A through hole is bored in the centre of the tool head or at some distance from it for fixing to a wooden handle. It is possible that in antiquity this instrument was also



Fig. 1: Borgia hammer axe. Side A with the inscription – © Pala International



Fig. 2: Borgia stone hammer axe. Flattened top with the hole bored centrally and side B (opposite to A) with a letter M or W incised (modern addition) – © Pala International



Fig. 3: Borgia stone hammer axe: Flattened base with the hole bored centrally and side A with the inscription – © Pala International

used as weapon although other functions seem more plausible: construction and carpentry, forestry, mining (Gernez 2007, 249). Such a specialised tool is known from many civilisations of the ancient Europe, Mediterranean and Near East: the earliest stone specimens date to the Neolithic period. The Borgia hammer axe imitates the shape and function of this specific tool but due to its material, dimensions, presence and type of inscription, it could instead be considered a votive object, or indicator of social status.

2. Building the Object Biography: Text vs Matter

There are no archival documents pertaining to the acquisition date and provenance of this hammer axe. It is only possible to reconstruct some ‘biographical’ data from events following the death of Cardinal Stefano Borgia, who was considered the first owner of the object (Novelli 1870, 7; Kunz 1905; 1913, 232; Prince–Lau 1905, 49). He began his personal antiquities collection in 1769 (Millin 1807a, 279; Baraldi 1830, 54), although an initial nucleus of objects, unfortunately looted in 1744, had been assembled by several members of the Borgia family, such as Clemente Erminio (1640-1711), Camillo (1681-1793), and Alessandro (1682-1764), who had begun to collect ancient artefacts in their family residence at Velletri (Fig. 4), a town in the metropolitan city of Rome on the Alban hills (Baraldi 1830, 54).

The inventories and documents listing the individual pieces from the famous Museo Borgiano described at that time as “uno de’ più importanti,



Fig. 4: No longer Borgia family residence at Velletri. Early 20th century (<http://velletrilife.blogspot.com/>)

che siano nel mondo pel merito de' pezzi che contiene" (Millin 1807b, 46) do not allow any clear identification of the artefact presented here. These lists are inconsistent and the descriptions of the objects are, in most cases, generic and brief. For written characters and some other ancient Near Eastern object which are recognisable in the inventories despite their very concise description⁴, the hammer axe should have been part of the 7th Class of the Museo Borgiano consisting of monuments and artefacts with Arabic inscriptions.

This category, variously indicated as *Arabica* (Paolino di S. Bartolomeo 1805, 41–42), *Monumens Arabes* (Millin 1807b, 18–19) and *Monumenti Arabi* (Baraldi 1830, 56) also contained items inscribed in cuneiform wrongly identified as Kufic or Naskh script, two old calligraphic forms of Arabic writing (Michel 2020, 41). Unfortunately, no object seems to match the features of the hammer axe. It is also absent from the 6th Class of the *Monumenti arabici e cufici* drawn up between 1804 (the year of Cardinal Borgia's death) and Åkerblad–Visconti 1808, Biblioteca Comunale di Velletri, Fondo Antico, mss. VII, 5, 26. It does not appear in the *Museum Cuficum Borgianum Velitris* published in 1782–1792 by the German theologian and oriental scholar J. G. C. Adler, but this work was a scientific study of coins and seals engraved in the Arabic script (Adler 1782–1792). The same object was not recognised among the artefacts of the 8th Class *Monumenti arabico-cufici* of the inventory drawn up on the occasion of the sale of the collection kept in the Museo Borgiano to Joachim-Napoléon Murat in 1814 (Fiorelli 1878, 313–314; see *infra*).

This anomaly may have several explanations, but unfortunately none are conclusive. It is unlikely that the hammer axe was listed in another class of monuments (from the 1st to 10th), or in a different group of objects, such as the metal items. No hand tool or implement is mentioned in one of the ten categories of objects of the Museo Borgiano; the same applies for metal artefacts in whose section the hammer axe may have been included, given what was stated by F. Lenormant (*'hache de bronze'*) in the *editio princeps* of the cuneiform inscription (Lenormant 1873, 166 "hache de bronze"; see Fig. 5). We preferred to avoid attempts to identify the hammer axe among the Borgia objects until further data become available.

If the tradition of attributing ownership of the unprovenanced tool to the Cardinal Borgia could be an indication of the reliability of the information, it cannot be excluded that the fame of the Borgia collection may have pushed antiquarians to include the tool in the huge Borgia assemblage after the death of its alleged owner in order, for example, to increase its monetary value or

⁴The museum certainly included, at least, two other objects with cuneiform inscription on which we will return in another occasion.

emphasise its importance. Despite this, in my opinion the authenticity of the hardstone tool is not questioned. It is unlikely that the inscription, discussed by Lorenzo Verderame (§ 4), was copied from another object. It is difficult to explain the unparalleled personal and divine names engraved on an object acquired in the 18th century or, at the latest, in the mid-19th century, when the cuneiform had not yet been deciphered.

Writing and related graphical modes as forms of material culture constituted the primary concern in inscribed objects from the second half of the 18th century onwards. Priority was clearly not given to the linguistic meaning of the cuneiform signs which were, at that time, yet undeciphered but to their material aspects: the engraving of a sequence of partially ‘obscure’ marks on stone developed a serious appeal for the complexity of graphical cultures and the people who created and attributed meaning and value to them (Di Paolo 2017, 4–5). Moreover, the Borgia’s studies on epigraphy and numismatics were well represented in his personal library, which included more than 300 volumes classified as *Antiquitates et monumenta historica*, linked to his interest on the nexus between territory and people, as well as between ancient civilisations and concrete interactions with the past such as monuments and artefacts (Granata 2010, 207).

The arrival in Europe of the first inscribed items from the ancient Near East⁵ posed some questions to scholars about the use of the writing on supports which were not initially conceived for impressing characters (stone tools and mudbricks, for example). As emphasised by K. E. Piquette, the materiality of the object is active in the construction of meanings, because it allows the observer to see writing through the substance of its expression and activates the spirit of enquiry about cultural norms and how they are reproduced. Writing represents not only a source about the past but also an integral part of a cultural practice and an active constituent of the past (Piquette 2012, 1–13). Following the death of Stefano Borgia, the agate hammer axe travelled from hand to hand: these passages profoundly changed the social meaning of the object.

Recapturing the physical qualities of the material, the new collectors privileged an aesthetic experience above all others (Di Paolo 2017, 4–5). In this paper, we want to reconstruct this story and try to determine the typology, function, provenance area and chronology of the Borgia hammer axe.

Throughout his life, Stefano Borgia formed a huge collection of manuscripts, books, antiques, ethnographical and liturgical objects, maps, and

⁵ See fn. 27.

all sort of memorabilia⁶. His first collecting activity was focused on the family palace at Velletri (no longer existing), which was transformed into a house-museum known as Borgiano Museum which hosted one of the few existing archaeological collection in Europe, containing Egyptian, Greek, Etruscan, and Roman antiquities⁷. Another important nucleus of items was held in the Borgia apartment in Altemps Palace, the Roman residence of the cardinal. Stefano Borgia was appointed Secretary of the *Sacra Congregatio de Propaganda Fide* (Sacred Congregation for the Propagation of the Faith) in 1770, a post he held until 1789. Later, he was Pro-prefect (1789-1800) and Prefect (1802-1804) of the same Congregation until his death⁸. These positions facilitated his collecting with artefacts from Catholic missions in the Eastern Christians within the Ottoman and Safavid empires, the *Propaganda Fide*'s primary areas of concern. It is possible that Stefano Borgia received the object by some missionary, but the circumstances of this acquisition unfortunately remain uncertain, as noted above.

We know for sure that, as stated in his last will, Cardinal Borgia bequeathed the “Museo Borgiano esistente nella Casa di Velletri a mio fratello Pio Paolo Cavalier Borgia, ed alli suoi discendenti primogeniti” (Archivio della Congregazione De Propaganda Fide, Ms. Stato temporale Eredità Borgia, IB04-1848, T.V., f. 648). The Sacred Congregation of *Propaganda Fide* was instead named as universal heir to everything within and without Rome, both patrimonial and acquired assets (Orsatti 1996, 36–37): this also led to a controversy between the Borgia family and the Dicastery of *Propaganda Fide* which was decided in the latter's favour in 1809⁹.

⁶For a biography of Stefano Borgia, see Bonavita (2014). Nocca (2001) edited the proceedings of a two-day conference dedicated to this huge collection; Germano–Nocca (2001) curated a large exhibition of the Borgia collection. There has been a great deal of studies on the Borgia collection. We have considered only what is strictly relevant to the subject in question.

⁷The Borgia collection was a rarity at that time, arousing the curiosity of many writers and scholars such as J. W. Goethe, G. Zoëga, F. Münter and becoming an important stop of the *Grand Tour* (Paschini 1937, 1234; Mammucari 1995, 51–52).

⁸This congregation of the Roman Curia of the Catholic Church in Rome is responsible for missionary work and related activities. It was founded by Pope Gregory XV in 1622. With the reorganisation of the Roman Curia by Pope Paul VI, its name was changed to the current Congregation for the Evangelisation of Peoples: https://www.vatican.va/roman_curia/congregations/cevang/documents/rc_con_cevang_20100524_profile_en.html.

⁹Precise knowledge of all the assets inherited by the Propaganda Fide is lacking. In particular, the inventory of objects inherited by the *Propaganda Fide* is not a detailed list with a description of pieces. Currently, the most part of this section of the Borgia collection including codexes, printed texts, coins and other antique material are kept in the Ethnological Museum *Anima Mundi*, a section of the Vatican Museums (<http://m.museivaticani.va/content/museivaticani-mobile/it/collezioni/musei/museo-etnologico/museo-etnologico.html>). On the museum's formation and the transfer of the Borgia collection from the headquarters of the *Propaganda Fide*, see Cimino 1982, 97–104.

The first mention of the hammer axe indicated that it was a rarity. It dates to 1870 and is found in a booklet by Ettore Novelli, a librarian and historian from Velletri. From the object description, it can be assumed that the author probably saw it, thanks to his friendship with Ettore Borgia, the last direct descendant of the Borgias (Novelli 1870, 7). This curiosity about the local heritage gives us some relevant information. It is evident that, like many other items, the hammer axe was at that time still owned by a family member despite the Borgia antique collection no longer existing¹⁰. In fact, many other antiquities of the same collection (including those already present in the family collection and inherited by Stefano Borgia) had been sold in 1814 by Camillo Borgia, the first-born of Giovanni Paolo who had inherited the Borgiano Museum, to Joachim-Napoléon Murat, king of Naples and brother-in-law of Napoleon Bonaparte and later ended up in the National Archaeological Museum of Naples where they still are. The hammer axe, however, had not been offered for sale and was, in 1870, still owned by Borgias: this seems confirmed by its absence from the detailed inventory of the Borgiano Museum drawn up on the occasion of the sale of the collection in 1814 (Fiorelli 1878, 275–427). These events suggest, moreover, that the hammer axe had been part of the Borgiano Museum collection inherited by the descendants of Stefano Borgia and, kept, therefore, originally at the family residence at Velletri (Fig. 4).

Regardless, the means by which Stefano Borgia obtained the object remain obscure. It is known that some objects were temporarily transferred from Rome to Velletri due to the presence of enemy French troops in the papal seat (Archivio della Congregazione *De Propaganda Fide*, Ms. Stato temporale Eredità Borgia, IB04-1848, T.V., ff. 521 v., 522). It is therefore possible that, for some reason, the inscribed agate was kept in the family residence despite the cardinal receiving it during his tenure at the *Propaganda Fide* in Rome, perhaps due to its rarity.

In 1873, François Lenormant, a newly-minted Assyriologist, presented a group of unpublished or little known Akkadian texts from Babylonian tablets and objects largely kept in the British Museum. In addition to them, Lenormant published the inscription engraved on our hammer axe, wrongly and inexplicably described as “une hache de bronze”. He had received the text from A. H. Sayce who had copied the engraved inscription from the object ‘held in the hands of an individual in Rome’, to be identified with its owner, Ettore Borgia (Lenormant 1873, 166, no. 71; Fig. 5). Later, he revised his positions about the material of which the object was made, then identified as

¹⁰More than 300 objects were still owned by the Borgias, including coins and weights: see Di Paolo 2012, 27.

agate and about the language written with cuneiform signs, identified by him as Sumerian (Lenormant 1879, 20–26, pl. VI,1).

The scientific interest of the three-lines inscription was at that time strictly linked to the use of cuneiform to express an archaic language of Mesopotamia (possibly Sumerian) before the developments in the Assyrian period. The relationship between the graphical systems and technological achievements of the civilisations speaking those languages through the production of different kinds of stone tools remained unclear. By the second half of the 19th century, the Borgia hammer axe was accounted within the first scientific debate about the adoption of a three-age system (developed by C. J. Thomsen for European contexts), and also for the classification of ancient Near Eastern artefacts that had by then begun to emerge: a simple object such as it was could easily be ordered into a recognisable chronology (Stone Age), although the presence of writing signs raised serious doubts on this (Cartailhac 1880, 315–330; Maspero 1895, 755, fns. 4–5).

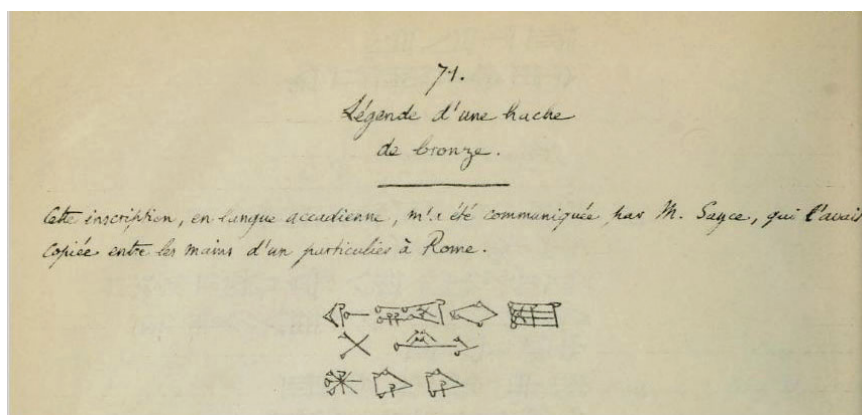


Fig. 5: Firsthand copy of the inscription published in 1873 (Lenormant 1873, 166).

In Italy in particular, the growing interest in the historical value of this tool resulted in the first public display of it on the occasion of the *III Congresso Internazionale degli Orientalisti*, held in Florence in 1878 (Amari–De Gubernatis 1878-1882, 158). It was aimed to emphasise the role of Italian scholars within Orientalist disciplines and to underline the international relationships of which the recently unified Italy could boast and further improve (Vicente 2012, 53–57). To complete this initiative, the *Esposizione Orientale* was organised to emphasise the development of the knowledge and a classification intent in the field of archaeology, philology and anthropology.

All participants, authorities and diplomats were invited to co-operate by

providing objects and artefacts from Italian museums and private collections to be exhibited temporarily in the Medici Ricciardi Palace (Vicente 2012, 75 and fn. 121; see Fig. 6). More than 1000 items, including ethnographical objects, archaeological artefacts, books, codexes, and so on, were included in a catalogue, unfortunately not illustrated. Through the intermediary of the Italian orientalist Ignazio Guidi¹¹, the Borgia hammer axe, shortly described as “martello con cuneiforme” and included among the *Monumenti epigrafici*, was offered for the temporary exhibition by the “Contessa Cumbo Borgia” who could be identified as Alcmena, sister of Ettore Borgia and wife of the Sicilian Count Diego Cumbo (Catalogo dell’Esposizione Orientale 1878-1882, 233, no. 138).



Fig. 6: Esposizione Orientale – Luca Giordano Hall, Medici Ricciardi Palace, Florence; *Illustrazione Italiana*, no. 40 (October 6, 1878), p. 212 (courtesy of the Library of Archaeology and Art History, Rome).

It is possible that the public display of this object, combined with its growing fame, was perhaps aimed at increasing of its monetary value for the purpose of a sale. A few years later Ettore Borgia tried to offer it to the British Museum but his proposal was rejected. He instead found a buyer in the Polish-Lithuanian Count Michel Tyszkiewicz, a collector of antiquities and archaeologist who lived in Rome where he founded a private museum for the

¹¹He was among the founders of the *Scuola Orientale* and *Rivista degli Studi Orientali* at the Sapienza University of Rome. On this figure, see, among others, Levi Della Vida 1959, 232–249; Soravia 2005, 271–289.

exhibition of his collection (Kunz 1905, 37; Kazimierczak 2012, 419). The Borgia item combined two specific interests of the “Conte polacco” (as he was called in Rome). As an engraved stone, it had the characteristics of gems and cylinder seals, a category of objects the Polish collector owned in large numbers. As one of the inscribed artefacts purchased by him, the hammer axe and its cuneiform text was an important source of historical knowledge that the Count Tyszkiewicz tried to learn, either as self-taught or by consulting specialists (Kazimierczak 2006, 192, 196). The acquisition of the Borgia item took place after the *Esposizione Orientale* (1878) and maybe a few years earlier the death of Tyszkiewicz in 1897 (Kunz 1905, 37). Shortly after this event, the Tyszkiewicz antiquities were auctioned in Paris on June 8-10th, 1898. The catalogue, curated by W. Froehner, included 312 artefacts: our object, described as “marteau chaldéen en sardonix”, was listed among the cylinder seals, probably because the material (a semiprecious stone) and the presence of a cuneiform inscription (Collection Tyszkiewicz 1898, 30, no. 252).

On this occasion or shortly after, the hammer axe was purchased by George F. Kunz, an American mineralogist, gemologist and Vice President of the Tiffany & Co., the jewellery and silverware company. After the acquisition of a first collection of gems from North America assembled by Tiffany & Co. for the World’s Fair Exhibition in Paris in 1889 and in part funded by the banker, businessman and collector of antiquities J. P. Morgan with the sum of \$ 15,000, G. F. Kunz was commissioned to constitute a second collection of more than 2000 specimens of gems and precious stones from around the world for the American Museum of Natural History, New York. J. P. Morgan, deeply interested in the natural sciences, served on the board from the museum’s opening in 1869 until his death in 1913 (Strouse 2014, 272). On April 16, 1902 the hammer axe entered the Earth & Planetary Science collection of the American Museum of Natural History (Kunz 1905, 37; Prince–Lau 1905, 49; Kunz 1913, 232–233). Unfortunately, the museum records hold no more information about it¹², having perhaps transferred the dossier to the next owner. In the 1970s, in fact, the artefact was traded by the American museum (exchanged for other gems or minerals) and given to William Larson, the current owner and President of Pala International¹³.

¹²Email by Jamie Newman, Senior Museum Specialist in Earth & Planetary Science (February 4, 2021).

¹³For information concerning this transfer, we would like to thank Jamie Newman, Department of Earth and Planetary Sciences, and Kristen Mable, Senior Registrar for Archives & Loans, Division of Anthropology, of the American Museum of Natural History (email dated 2014/05/14).

3. Material Conversion and Devotional Practices in Third Millennium Mesopotamia

The hammer axe is 13.7 cm long and 3 cm wide (over the handle perforation); hole diameter 0.9 cm (Fig. 8d). The material has been a matter of discussion. It can be identified as a chalcedony (a mixture of microcrystalline or cryptocrystalline quartz and moganite)¹⁴. Before the autoptical analysis by G. F. Kunz, a gemmologist for Tiffany & Co., the stone was indicated as sardonyx in the Tyszkiewicz antiquities auction catalogue (Collection Tyszkiewicz 1898, no. 252). Kunz initially identified the material as agate (Kunz 1905, 37), and then as onyx due to the disposition of the parallel layers (Kunz 1913, 233). Unfortunately, the material was not identified with certainty by measuring or distinguishing its optical and physical properties, until now. The stone, a translucent banded variety, is brown-yellow in colour with white streaks (Fig. 2), although it is only partially visible due to an opaque white patina covering most of its surface. A hypothesis is that this form of white discoloration, which appears on high-quality silicates such as varieties of chalcedony, generally forms during desilicification, when the surface is dissolved by aqueous solutions. The pH of stream or river water ranges from 6.5 to 8.5 and all-natural water has salts of some kind. Therefore, dissolved silica in freshwater reacts with the mineral, creating a patina growing (Geib–Huffman–Spurr 1999, 98–112). The banding of the stone, both with parallel strips of different colour and other arrangements of bands, is probably the most significant feature of the material used, although the surface formation prevents us from understanding how the stone was cut down and, therefore, what the final appearance should have been.

In ancient Mesopotamia, the banded stones, which were not available locally, played a symbolic role by representing the nexus between rarity, colour, pattern and religiosity (Potts 2007, 124, 130). Due to its structure formed by the deposition of distinct layers of quartz crystals, banded agate, for instance, was used for the so-called ‘eyestones’, circular discs imitating both the front visible part of the eye (organ) and its ability to process the visual details (function), embodying divine power (Knott 2019, 105). These worked gemstones were votive objects usually offered to deities by kings according to the inscribed dedications (Clayden 2009; Knott 2019). Other types of inscribed artefacts made from banded stones, such as agate, onyx and similar varieties of chalcedony, had a similar function, among which are found beads, cylinder seals, and so on (Potts 2007, 131).

For the typology of the inscription and the adoption of a semi-precious stone,

¹⁴For the term chalcedony, see fn. 1.

the hammer axe now in the USA could be a votive object offered to a deity within a temple, although its unknown provenance and some doubts about the reading of the text call for caution about its inclusion in the typical Mesopotamian dedicatory practices, which are well-known since the Early Dynastic period.

Based on the typology, the Borgia item belongs to the category of the hammer axes which, based on extant specimens, are instruments made of metal or stone with a central haft hole and combining two active parts, although the flat side could also be intended as a counterweight to balance the axe (Gernez 2007, 249). A massive rectangular blade (square in section) is intended for chipping, splitting, and piercing. It is opposite to a flat or rounded head hammer, a compact mass that can deliver blows to the intended target without itself deforming. The perforation never includes a portion of handle, which is added instead in the same or another material (metal, wood).

As noted above, the rugged structure of this type of artefact seems to favor its use as tool (forestry, mining, and carpentry), but a weapon function cannot be excluded. The hammer axe is an uncommon tool in the ancient Near East and the limited evidence does not allow researchers to trace an evolution in chronological and geographical terms. The evidence for metal specimens is rather scant. The few ancient Near Eastern specimens, almost exclusively distributed in Western Anatolia and the Caucasus area, are dated to between the end of 5th and the second half of the third millennium BCE, as showed in our Fig. 7 (Gernez 2007, 249–255; Keskin 2019, 70–99, fig. 6).

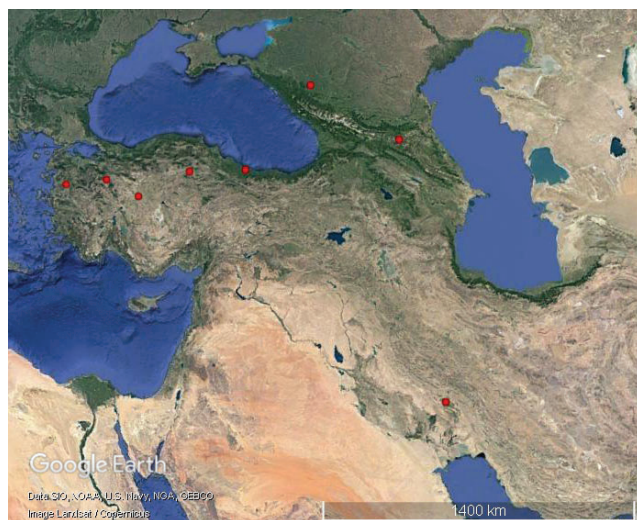


Fig. 7: Distribution of metal hammer axes in the ancient Near East (after Gernez 2007, vol. IIA, Carte 39; modified by S. Di Paolo).

A group of hammer axes made from stone and clay was recovered in southern and northern Mesopotamia: at Ur, Uruk, Tell Uqair, Tello (Tallon 1987, 98), and Tepe Gawra (Speiser 1935, 88, 195, pl. XLII:5; Rothmann 2002, 69, Table 4.1). The stone from northern Mesopotamia has a more compact aspect apart from the thinned blade. Other stone specimens, also part of the funerary equipment in burial contexts, have been found in the south- and central-western Iran: Susa (de Morgan 1912, 19, fig. 86), Dum Gar Parchinah and Hakalan in the Luristan region (Vanden Berghe 1987, 118, 120, fig. 14; Haerinck–Overlaet 1996, 21, 36, figs. 34, 36, 58: 1-5, 66, 68, 75, 87: 8-10, pl. 53: 1-4, 78: 2; see our Fig. 8).

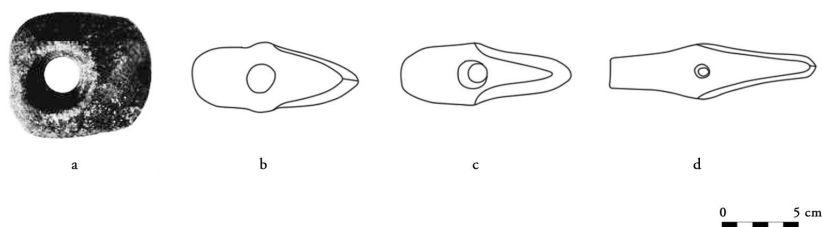


Fig. 8: Specimens of stone hammer axes with the blade on the right side: a) Tepe Gawra; b) Dum Gar Parchinah, Tomb 60; c) Hakalan, Tomb 23; d) unprovenanced, formerly Borgia Collection (Speiser 1935, pl. XLII: 5; Haerinck–Overlaet 1996, figs. 58: 5; 66: 7; Kunz 1905, pl. VI, 3 modified by S. Di Paolo).

Unfortunately, in other cases the context is uncertain (Tepe Gawra). All known examples are dated to the Chalcolithic period, between the 5th and the first half of the 4th millennium BCE (Tallon 1987, 98; Dellovin 2011, 117; Rothmann 2002, 3). This dating is, in some cases, based on comparisons with metal types made only from copper alloys (Gernez 2007, 255). The materials used for these stone counterparts range from extremely hard rocks such as basalt and diorite, which were certainly manufactured for utilitarian purposes, difficult to carve but result in a durable and highly polished finished object, to gemstones of medium hardness, which were rarer and characterised by fine colours. The use of jade for Iranian tools (perhaps locally sourced as nephrite) and agate for the Borgia specimen suggests that hardstones were common materials for the workmanship of more valuable replicas (Keene 2012, 323–325). Relying on the few specimens known and the existence of local varieties, it is not possible to establish whether the metal tools were imitations of stone types or viceversa. From the technical point of view, both options are possible (Gernez 2007, 252) but the common chronological horizon and the complex relationship between material and manufacture suggest that their evolution could be independent even if interrelated.

Among the object types dedicated to the gods, metal weapons are documented, although probably underrepresented because fragile or looted in antiquity (Gries 2019, 140). In the second half the third millennium BCE, a total of six weapons, equalling the number of cylinder seals, is attested in the Early Dynastic-Sargonic period (Andersson 2016, 52). This practice continues later: a group of bronze weapons and tools from Luristan (daggers, arrowheads, axes) dated to the 10th-8th centuries BCE are also inscribed with the names of Babylonian kings, parallel to contemporary similar objects offered by private individuals (Brinkman 1968, 9, 11). Metal hoards also including weapons and tools are known in the Mesopotamian temple contexts (Gries 2019, 144 and fn. 20).

An incomplete breccia¹⁵ pick-head of a socketed type and with curved blades from Ur was interpreted by C. L. Woolley as a “ceremonial or votive offering” due to the material and context. It was discovered in the Room 11 of the Ganunmah, a building built by Ur-Namma in the Ur III period and serving over hundreds of years as a storage for objects belonging to the inventories of the temples of Nanna and Ningal. The dating of the uninscribed pick-head is uncertain, but it should match the chronological horizon of the inscribed items ranging from the later Early Dynastic until the Old Babylonian period with a peak in the Ur III period (Woolley 1974, 51, U. 195, BM 116462; Schmitt 2019, 84–87, 103, fig. 16). In some cases, however, there is a process of material conversion as result of a ‘status change’ of objects made for everyday life or specific needs into items employed in an exchange with supernatural powers (Osborne 2004, 2). Some Kassite stone axe-blades replicating lapis lazuli and part of devotional practices are known from Tell Haddad and Nippur (Hilprecht 1893, 54, pl. XI, nos. 26-28). The availability of less costly votives imitating precious hardstones through the adoption of new technologies allowed the production of blue glass axes recovered in the area of the ziqqurat at Nippur. Based on the dedicatory inscriptions by the Babylonian kings in honour of, among others, Enlil, Ninlil and Ninurta, the objects are of mid to late Kassite date. The axes would have resembled lapis lazuli because the higher levels of copper and antimony oxide seem to suggest that the glass was made specifically to replicate the characteristics of the blue hardstone (Clayden 2011).

Whether fabricated in valuable materials or not, the use of tools and weapons was also rhetorical and social. They were offered on specific occa-

¹⁵Based on information taken from the British Museum website: https://www.britishmuseum.org/collection/object/W_1923-1110-49 (breccia is a rock consisting of angular stone fragments cemented by calcareous material). L. Woolley identified the material as “granite”, a very hard, granular and crystalline igneous rock consisting of quartz (1974, 51).

sions according to the choices of the supplicant. Like other votive artefacts, instruments were stored in the temples, hoarded or included in the cult of a specific deity (Vidal 2011, 248; Gries 2019, 146). If they were still used after their deposition in the sacred buildings, or integrated in specific practices or rituals, this is difficult to say. In general terms, tools made of metal, hard rock, or ornamental stone share some features: shape and size. The metal specimens of hammer axes range from 13 to 16cm (Gernez 2007, 253; Keskin 2019, 74–75, 77), the stone versions are between 9.5 and 17cm (Speiser 1935, 195; Woolley 1974, 51), and the semi-precious Borgia tool is 13.7cm long. In this case, the dedicated objects do not differ from those of human beings (Braun-Holzinger 1991, 5–6). The votive function is inferred or deduced from the material and context. In other cases, an engraved inscription identifies the intention of these objects. Compared to the royal dedications, votive offerings by private individuals are less common, although they are attested from the Early Dynastic I-II.

Whether the function of the Borgia hammer axe seems established due to the cuneiform inscription, it is impossible to know precisely how this tool was physically connected to the sacred world. The association between durable material (stone or metal) and text emphasises the eternal presence of the offering in front of the deity, becoming a memento of the donation (Andersson 2016, 50). Does the shape relate to the deity to whom it was dedicated? In the Gula temple at Isin, for instance, dog figurines were inscribed for the healing goddess Gula (Gries 2019, 152). It can also be hypothesised that this tool was mounted on a wooden haft and used to adorn a deity's statue or conceived and offered for a specific occasion. Was the material (agate) intended to imitate a metal such as copper in its colour?

Stones had also various magical meanings in the ancient Near East. In the Mesopotamian texts the *muššaru*-stone (Sumerian MUŠ.GÍR), described as a red or brown and white banded stone was used to calm various deities, against the *šimmatu* paralysis (affecting the lower extremities) or avoid various health problems (Schuster-Brandis 2008, 56–58, 433). It is known that banded agate was used for the so-called 'eyestones' but also for cylinder seals and beads that, according to written and archaeological sources, played an important role in temple inventories. The inscription engraved on the Borgia tool seems to date it to the second half of the third millennium BCE, a period characterised by the inclusion of different classes of objects in the dedicatory practices. But, unlike the third millennium BCE stone plaques characterised by inscriptions scattered throughout the engraved scene, the Borgia tool has a carefully set apart panel as the contemporary cylinder seals. Early Dynastic seal inscriptions consist of a name, alone or with the addition of a title or profession, whereas stone plaques may also include dedicatory texts to a deity (Pollock

2016, 284–285). From Ur texts it is known that *pašīšu*-priests performed dedication or that carnelian and agate were commonly offered under the aegis of a *pašīšu*-priest at the beginning of the 2nd millennium BCE (Maggio 2012, 79–80; Ead. 2019, 109). Through the personalisation of the object along with the use of a banded (magical) stone, the Borgia tool sets off the permanence of the written message and the indissoluble relationship between an individual (temple official) and deity.

4. The Inscription of Borgia hammer axe and Foroughi mace head

A three-line inscription is engraved on one side of the hammer axe next to the hole for the handle. The arrangement of the inscription is peculiar. In the third and early second millennia, the inscription is placed parallel to the vertical axe of the object and the lines are read from top to bottom and right to left (Fig. 9). On mace heads, the inscription runs parallel to the handle, read from right to left (Fig. 10).



Fig. 9: Fragment of Hammurabi's votive inscription (BM 22454, The British Museum, London).



Fig. 10: Mace head with inscription of Naram-Sin (BM 134905, The British Museum, London).

Here, the inscription is arranged horizontally, parallel to the upper border of the object and perpendicular to the handle (Fig. 11). Furthermore, if we accept that the axe head was mounted with the points bending down, then the inscription is read upside down. The position of the inscription can have a relationship with the original arrangement of the object, i.e. perhaps it was placed in a way that allowed to read the inscription properly. However, this hypothesis involves a series of assumptions – the certainty that the object was displayed, that its position was fixed and that the inscription was meant to be read – that are not so obvious for ancient Mesopotamian inscribed objects.

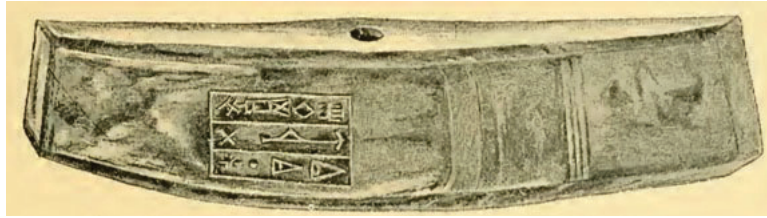


Fig. 11: Copy of the Borgia hammer axe (Maspero 1895: 755; modified by L. Verderame, in the original publication the design is published upside-down).

The provenience of the object is unknown and so is the period. The ductus is that of inscriptions on hard material (stone, metal) of the third millennium (Fig. 12). The object could have been produced at any point during the second half of the third millennium. However, palaeographic and philological analysis seems to limit the time range to around the Old Akkadian period. Palaeography offers two clues here. The first is the sign *iš*, which appears mainly in non-Sumerian inscriptions. Almost unknown in Early Dynastic, *iš* is common in Akkadian inscriptions from the Old Akkadian period onward, as well as in names in Hurrian and Elamite. The second is the peculiar use of the dot instead of the *Winkelhacken* for the sign *u*. The small dot, used for the decimal (10), is frequently employed for the sign *u* in Old Akkadian inscriptions¹⁶. The inscription reads:

- | | |
|-------------------------|-----------------------------------|
| 1) Ha-ad-hi-iš | Hadhiš |
| 2) pa ₄ -šeš | pašeš |
| 3) ^d U-NI-NI | of the god/dess ... ¹⁷ |

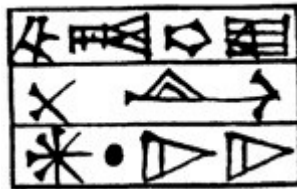


Fig. 12: Copy of the Borgia axe inscription (after Price 1905, 175).

¹⁶ See, for instance, several passages in the Bassetki Statue (= RIME 2.01.04.10), in the two door sockets (YBC 2164; AO 6782) bearing an inscription of Narām-Sîn (= RIME 2.01.04.09); in the Šarkališarri's alabaster tablet from the Schøyen collection (CUSAS 17, 11: ii 1') and door socket (RIME 2.01.05.01, ex. 01). Note the similar use of the big dot of the numeral 3600 for šar₂ (HI) as well as the three dots instead of three *Winkelhacken* for the sign KUR in Early Dynastic and Old Akkadian inscriptions.

¹⁷ For the reading of the divine name see below.

The personal name Ha-ad-hi-iš is documented only once, in an undated administrative document of the end of the third millennium (Lagaš II or Neo-Sumerian period)¹⁸. Regarding an Akkadian origin of the name, a relationship can be drawn between *hadû* “to be happy,” *haṭtu* “scepter, stick,” and *haṭṭû* “to be defective, criminal;” besides which, an Elamite origin can’t be excluded *a priori*¹⁹.

In discussing the Borgia hammer axe, a very similar object should be considered. This is a small rock crystal “mace head”²⁰ once held in the Foroughi’s collection in Teheran²¹. This object bears an inscription very similar in content and *ductus* to Borgia hammer axe (Fig. 13):

- | | |
|--|---------------------|
| 1) Ha-aṭ-ṭe ₄ -iš | Haddiš |
| 2) pa ₄ -šeš | <i>pašeš</i> |
| 3) ^d SU-lil ₂ -la ₂ | of the god/dess ... |

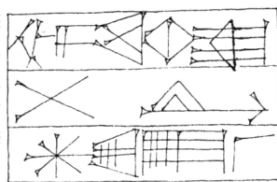


Fig. 13: Copy of the Foroughi “mace head” inscription (after Amiet–Lambert 1973, 159).

It should be noted that the second line with the title of the dedicant is identical in the two inscriptions. The only difference in the first lines is a vertical wedge that transforms the HI in Borgia inscription into a TE in the Foroughi’s. We may hypothesize that the HI in the Borgia inscription is an incomplete TE and therefore that the two names would in fact coincide. It seems remote to me that the sign in the two names should be DI. The name in Foroughi inscription was translated as Haṭṭeš by Lambert, who has given an

¹⁸MVN 6, 100: r. 2. The document comes from Ġirsu and records the issue of *nagga* (tin or lead) to three persons: Puzur-Dagan, “the man from Ebla” (lu₂ eb-1a), and Hadhiš. Zadok 1991, 234, reads the name Ha-aṭ-hi-iš (without comments) and relates it to Elamite.

¹⁹See fn. 22. For third millennium Akkadian personal names ending in -iš see *aš₂-du-bi₂-iš*, *hi-li-iš*, *i-qi₂-iš*, *ir₂-ri-iš*, *la-te-ni-iš*, *mi-it-ha-ri-iš*, *min-ni-iš*, *u₂-la-i₃-ni-iš*, etc. I am grateful to Alfredo Rizza for dispelling any doubt about a Hurrian origin for the name in the Borgia hammer axe as well as in the Foroughi mace head (see below).

²⁰The object measures 3,2 cm x 4,6 cm.

²¹Amiet–Lambert 1973, 158–159; Gelb–Kienast 1990, 398 Varia 21; Braun-Holzinger 1991, 51 K 38. The Borgia hammer axe and Foroughi mace head are erroneously recorded in CDLI as the same object (P212512). On Mohsen Foroughi and his collection see Frye 2000.

Akkadian as well as Elamite parallel to interpret the name²². No improvements have been done to Lambert's reading, which is followed in the successive editions of the text.

The title pa₄-šeš (Akk. *pašīšu*) is documented from the Early Dynastic period onward from Syria to Iran. It therefore provides no further insight on the date or provenance of the two objects. The god names in the third lines of the two objects, however, are not otherwise documented. The interpretation of the two names is quite difficult and none of the hypothesis advanced here are resolute. In both, the second part (NI-NI = i₃-li₂; li₂-la₂) leaves the discriminant for understanding the name to the first sign. In the Borgia hammer axe, without discarding *a priori* the reading u-ni-ni, maintaining the reading of the first sign as U the reading u-i₃-li₂ or u-li₂-li₂ can be advanced. The reading šu₄ for U, and thus šu₄-i₃-li₂ or šu₄-li₂-li₂, is possible but gives no sense as a divine name²³. In the Foroughi mace head inscription the interpretation of the second and third sign as li₂-la₂ is compelling. Su-li₂-la₂ is not documented as a divine or personal name. Various Sumerian terms are built with ... li₂-la₂, and su-li₂-la₂ may be one of them²⁴. I see no reason to consider ^dsu-li₂-la₂ as an error for ^den-li₂-la₂, as previously suggested by Gelb and Kienast (1990, 398)²⁵.

The personal name Hatteš is not otherwise attested. Lambert believed that this was “une marque d’authenticité” (Amiet–Lambert 1973, 159). However, Gelb and Kienast argued that this and the alleged error of su-li₂-la₂ for en-li₂-la₂ “an eine Fälschung denken lässt” (Gelb–Kienast 1990, 398). As for the god name, Lambert states that “la graphie est si parfaite qu’on n’ose corriger *su* en *en* pour lire ^den-lil-lá” (Amiet–Lambert 1973, 159).

Two questions arise from the evidence above discussed: are Ha-AD-HI-iš (or Ha-AD-DI'-iš) and Ha-AD-TE-iš the same person? Are the two

²²“Ce nom rappelle, de l’époque d’Agadé, un *ha-ti-i-li-šu* classé par Gelb [*MAD* 3] sous *hadâwum*. Pour des temps plus récents, il fait songer à des noms du secteur élamite : *ha-ti-lakus-um* et *ha-ti-in-ni-ba-ni* sans lien probable avec lui. Aussi, en définitive, lisons-nous comme il est indiqué, rapportant ce nom à l’un ou l’autre des *hattu* et *hattû* mentionnés par von Soden” Amiet–Lambert 1973, 159.

²³Compare the divine names from the Old Akkadian period ^dšu₄-hal-e-si (CUSAS 13, 118: o. 6, 119: o. 6) and ^dšu₄-gan in the personal name ur-^dšu₄-gan from a Neo-Sumerian administrative text (Michael C. Carlos Museum, P433126; collated from the picture). For the readings šu₄-li₂-li₂ and šu₁₁-li₂-la₂ of the divine name in these two inscriptions see below.

²⁴See terms in lexical lists such as amaš-li₂-la₂, an-bar₇-li₂-la₂, e-li₂-la₂, e₂-li₂-la₂, edin-li₂-la₂, ga₂-li₂-la₂, lu₂-li₂-la₂, tug₂-li₂-la₂, ub-li₂-la₂. The li₂-la₂ of some of these compound names is equated to the dream god Ziqīqu in the Akkadian section of the list. The term ub-li₂-la₂, Akk. *ibratu* “cultic niche,” is divinised in *An* = *Anum* IV 165 in the section of Inanna and one wonder if su-li₂-la₂ may be another divinised item.

²⁵Resort to the scribal error argument would of course justify also the divine name in the Borgia hammer axe inscription, which could then be read as ^dbe²(u)-li₂-li₂; but, again, I see no reason why an error should be considered.

objects fake? Starting with the latter question, proving with strong arguments that an object is a fake or not is always difficult with these unique exemplars, as the divergent opinions on the Foroughi mace head of Lambert versus Gelb and Kienast show. The presence of an inscription is hugely helpful when identifying fakes. It is almost impossible for a counterfeiter with no competence in cuneiform writing or the specific language, whether Sumerian, Akkadian, or others, to create an original, meaningful, inscription²⁶. The easiest way is reproduction, i.e. a replica or copy inspired by existing inscriptions, which is a method often employed when faking cuneiform tablets. “Original” fake inscriptions usually have signs with incorrect tracts and/or that are meaningless. In this perspective, the two inscriptions here discussed show to be original and I concur with Lambert’s opinion, to which can be added some more arguments. The earliest known forgeries are those collected by C. J. Rich in the 1820s, now exhibited in the British Museum. The Borgia piece entered the cardinal’s collection before the 1804 at the latest, and therefore before the beginning of the widespread dissemination of forgeries. At that time, cuneiform was as yet undeciphered; furthermore, third millennium inscriptions were few and scarcely known²⁷. To my knowledge, only two other pa₄-šeš’ inscriptions are known. Both comes from twenty century regular excavations²⁸ and could not have been an inspiration for the Borgia inscription. Before the 20th century, the sequence and title pa₄-šeš in epigraphs was thus documented only in the Borgia inscription and could not therefore have been copied from elsewhere²⁹. The sequence of the personal name(s) Ha-AD-hi-iš and Ha-AD-TE-iš is written according to the logic of cuneiform writing and it is impossible that a forger invented them ex-nihilo prior to the decipherment of cuneiform. Thus, it is hard to believe that a forger copied, inspired himself, or created ex-novo these two inscriptions. The fact that the personal and divine names are without parallel and inexplicable is not evidence of forgery.

As for the identity of the dedicant of the Foroughi mace head and Borgia hammer axe, I conclude that Ha-AD-hi-iš and Ha-AD-TE-iš are the same person. The difference between the two names may be due to a scribal error or different spelling of the same name from an alleged root **hT*’. The

²⁶ See, in general, Michel 2020, with previous bibliography.

²⁷ See Verderame 2020. *Pace* Michel 2020, 39, objects inscribed with cuneiform circulated in Europe from ancient times long before the arrive of the Michaux Stone (1786); see Verderame 2020, 225–226 and fn. 63.

²⁸ One is the inscription of Šālim from Mari (Gelb–Kienast 1990, 17–18 MP 23) and the other is the inscription of Ur-kisal from Tutub / Khafadja (Steible 1982, 210–211 AnHaf 8). Both are engraved on statuettes and dated to the Early Dynastic period.

²⁹ Of course, the remote possibility of an ancient unknown and now lost inscription could be considered, but, in this case, we would have a replica of an original inscription and the arguments of Gelb–Kienast 1990, 398, fall regardless.

problem of the two different divine names, however, remains. If we assume that the god or goddess of the two inscriptions is the same, then we would have different phonetic renderings of the same divine name; in this case the readings šu₄-li₂-li₂ (Borgia) and šu₁₁-li₂-la₂ (Foroughi) are closer to each other. On the contrary, assuming that we are dealing with the same person who dedicated two objects to different divinities, we must accept that Ha-AD-HI/TE-iš was pa₄-šeš of two different gods. We know very few about this cultic figure and it could be supposed that Ha-AD-HI/TE-iš was pa₄-šeš of both gods at the same or in different times.

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