A Multi-disciplinary Perspective on An Ethiopian Cross at the Museo Nazionale del Bargello

Deresse Ayenachew Woldetsadik, Matteo Salvadore, Ainslie Harrison, Jacopo Gnisci

Jacopo Gnisci, University College London: <u>j.gnisci@ucl.ac.uk</u> +39-335701248

6 Keywords: Ethiopian; Cross; Bargello; Technical analysis

A Multi-disciplinary Perspective on An Ethiopian Cross at the Museo Nazionale del Bargello

Deresse Ayenachew Woldetsadik, Matteo Salvadore, Ainslie Harrison, Jacopo Gnisci

1. Introduction

To date, there has been limited interdisciplinary dialogue between scholars working on Ethiopian crosses and equally little scientific analysis has been carried out to improve our understanding of the materials and processes involved in their production. Our aim in this contribution is to bring, for the first time, a wide range of perspectives to bear on a fifteenth-century Ethiopian processional cross kept at the Bargello Museum in Florence, where it is currently on display in the Capella della Maddalena (Fig. XXX.1), and to bridge the disciplinary divide between scientific, historical, philological and art historical approaches to this type of artefact. Our shared interests in this object were kindled by the organization of a workshop on its history held at I Tatti, Florence, in 2023, which provided us with an initial platform for reassessing its history and significance. What follows constitutes an outcome of this conversation.

We argue that, despite being the subject of several papers, the Bargello cross remains something of an enigmatic artefact. It has a complex stratigraphy, and it conveys tantalizing if vague information about the patronage of the emperors of Ethiopia and the devotion of local Christian communities within the territories they sought to control. In visual terms, the cross displays different formulas for representing the human figure that can be taken as evidence of the movement of objects and visual ideas between Ethiopia and Europe at the time of its making, such features encourage us to destabilize those national categories that often continue to be used, for lack of better alternatives, to describe Ethiopia's material heritage. As an artefact that certainly reached Europe before the colonial period, when the material heritage of Africa was often forcefully removed from the continent to be incorporated into Western institutions, the cross turns our attention to those moments in history when the exchange or gifting of objects between these territories could occur on more equitable grounds. From a material perspective, the features of the Bargello cross manifest dynamics of continuity and discontinuity with previous practices. For these and other reasons, the cross continues to elicit interest and to elude interpretation. With this background in mind, our aim here is to share how our reading of the Bargello cross was affected by our different backgrounds.

2. Description

The Bargello cross measures ca. 61 cm x 41 cm x 4,7 mm. It is exquisitely engraved across most of its surface and has arms of near equal length that are slightly wider at the end. The square formed by their intersection features a representation of the Virgin and Child on Face A (Fig. XXX.1), and of the Crucifixion on Face B (Fig. XXX.2). Small Greek crosslets are attached to the upper and side arms of the cross and each of these features a standing angel with a cross in its right hand. The uppermost angel on Face B is flanked by two additional figures: one has wings, while the other has not. The crosslets, in

¹ Harrison 2022

² 'The Museo Bargello's Ethiopian Processional Cross' held on 20 Februrary 2023 with the support of the Getty Foundation's *Connecting Art Histories* initiative. We extend our gratitude towards the I Tatti Director, Alina Payne, and to Ingrid Greenfield for the organization of the event.

turn, are embellished with circular finials at the extremities that are not attached to the main body of the cross. Each circle has a dove engraved at its centre with the exception of the one at the top which is decorated with a Greek cross inscribed within a double circle. The lower arm of the cross is attached to a shaft, which is polygonal in cross-section and is widest at the bottom. The shaft narrows towards the top, terminating in a point partway up the lower arm. Its hollow cavity would have made it possible to insert the cross onto a pole in order to carry it in procession and use it for liturgical and devotional activities.

All four arms of the cross are decorated with panels filled with interlace with angular knots that form honeycomb shapes. These panels are framed by concentric rectangular frames of varying widths. Some are left unadorned, most feature various types interlace patterns, and one, on the upper arm of Face B, features a sequence of saltires and triple lines. Finally, two twisted strands of interlace outline the perimeter of the cross on both sides. The strands on Face A are decorated with a single line at their centre.

3. Inscriptions

The Bargello cross is also extensively inscribed. These inscriptions, which were probably executed by at least two, if not three, different individuals and at different points in time, have been translated and commented upon by several authors. The first translation was provided by Giuseppe Sapeto in 1856. Subsequently Ferdinand de Lasteyrie showed the inscriptions to one of the d'Abbadie brothers and to the orientalist Hermann Zotenberg whose joint translation he published in 1874. In 1991 Salvatore Tedeschi offered up a third translation in his in-depth study of the cross. Moreover, the cross has been cited in several publications dealing with the history of the Ethiopian Empire during the fifteenth century.³

The inscriptions on Face A are are as follows:

The inscriptions on Face B are located as follows:

³ E.g. Lusini 2016, 163–64; Mercier 2021, 173–74

- 2. Above the Crucifixion scene : ስዕለ ስቅለት The image of the crucifixion

This cross is donated by Bä'ədä Maryam, the king, whose name of the throne is Dawit, to the Amhara for (their) daily prayer to the (land) of Gärägäre on Friday and Wednesday. From the king when he was in Amhara. Do not take any treasure (of the church) and don't take out this cross from the church except for the special prayer and (never) take out (it) unless for the special prayer. (Any) messenger takes away any treasure from the Amhara, (he shall) be excommunicated by the mouth of the Father, the Son and the Holy Spirit. Amen. And (he shall) be cursed who take this cross out.

4. Comment on the inscriptions

At least two hands seem to have worked on the inscriptions of the cross using different tools. The first hand is responsible for all the inscriptions on Face A (A1, A2) and two of the inscriptions on Face B (B1, B2). The second executed the longest inscription on Face B (B3) which, in addition to providing us with a likely terminus *ante quem* for the making of the cross by mentioning the Ethiopian Emperor Bä'ədä Maryam (r. 1468–1478), describes the donor and destination of this cross. The letters of latter hand are smaller and more rectangular than those of the former, which are bigger and rounder. The smaller letters have some features in common with a land charter in a manuscript kept at Bərbər Maryam (Figs. XXX.3 and XXX.4).

While it is admittedly difficult to use palaeography to date letters incised in metal, given that the cross must have reached Europe before the eighteenth century, it seems unlikely that B3 was executed after the reign Bä'ədä Maryam.⁵ The text also identifies the sovereign by his throne name Dawit, which he

Commented [GJ1]: Letter missing in Deresse's transcription, please double check

Commented [GJ2]: Double check spelling

Commented [GJ3]: 九?

Commented [GJ4]: P?

Commented [GJ5]: ውጵ?

Commented [GJ6]: More info about this? A reference? What type of mss is it?

Commented [GJ7R6]: Thus, , the recto piles up with in small spaces and the writings so close to one another to keep the flow of the message on the same side. The unusual character of the verso text is used twice the Amharic syllabus of 'Šo'/ħ instead of 'So/h.' It employs ΦħΛ (Mošlä) in place of ΦħΛ (image) and ħሬ+ (Śoretä) instead of ħሬ+ (redemption). It does not seem an error of the writer within this short statement. It might be a dialect of the Amḥara province.

Commented [GJ8R6]: I wonder if this was not just a way for the writer to distinguish h with an upper stroke, given how hard it is to make characters on metal?

⁴ To be taken as a reference to be seven Archangles recognized by the Ethiopian Orthodox Church are Michael, Gabriel, Rufael, Fanuael, Raguael, Urael, and Qurael. ADD REFERENCE?

⁵ There are some instances where inscriptions on metal objects mention kings that reigned at a much earlier date than that in which the object was produced. A crown, attributed to Emperor XXX

received, according to his chronicler, out of a lot of three names. Nevertheless, Bä'ədä Maryam may not have been the original sponsor of the cross. As first pointed out by Jacques Mercier and David Appleyard in two different publications that appeared in 2022, an area of the inscription A1 shows clear signs of abrasion between the words A777447 and Lhff. No letters are currently visible, but in his view, it is unlikely that Bä'ədä Maryam would have had his father Zär'a Ya'əqob's name removed from the cross. In view of some of the stylistic features of the cross, discussed in more detail below, Mercier convincingly argues that the missing name must have belonged to one of the four rulers that preceded his rule between 1430 and 1434. To this we may add that, taking the length of the previous letters as a rough indicator, the abrasion occupies enough space for about eight characters. This would rule out Yəshaq (r. 1414–29/30) and his son ∃ndrəyas (r. ca. 1430) as possible sponsors for the Bargello cross, leaving Täklä Maryam (r. 1430–33) and his two sons as the most likely candidates. This would mean that inscription B3 refers to a second donation and that the cross may have originally been destined to a different site from the one mentioned in this inscription.

Another aspect of the B3 inscription that deserves is the mention of a place name Gärägäre 7∠7ሬ (Fig. XXX.3). Sapeto misread Gärägäre 7∠7ሬ as Gorgora 7ℂ7ሬ. Lefebvre and Tedeschi followed this misreading in their translation. Consequently, Tedeschi argued that the cross would have been given to the church of Däbrä Sina on Gorgora, which was established during the reign of king Amdä Səyon (r. 1314–44). Their identification is not supported by a close examination of the inscription nor by the reference to the Amhara, since Gorgora is located on the northern shore of Lake Tana in the province of Begä Mədr. Gorgora was little known prior to the sixteenth century when the Christian royal court retreated to the region during the Jihadist insurgence (1529–43) and subsequent Oromo pastoral expansion since 1520s.

Two related place names, Gärägäre 1/21/2 and Gärägära 1/21/2, are located in north Wollo, medieval Angot, a territory which was located north of the medieval Amhara bordered by Bäšəlo River gorge. Both have the same meaning which mean the age of a cliff. In particular, a site known as Gärägäre Giyorgis (located in Wollo) was known as a market place for one of the great caravan trade routes in the nineteenth century. Another possible place name that might be linked to the Bargello cross is the church of Qärqäre (ΦζΦΔ) Maryam (now Wäybla Maryam) in the district of Wärrä-Illu in South Wollo in the hinterland of medieval Amhara. Qärqäre Maryam is in fact listed among the royal churches built between the fifteenth and the early sixteenth century. According to oral tradition, the church was built by the son of king Bä'ədä Maryam, Emperor ∃skənder (r. 1478 –94). In this regard, Mengesha Retie has collected collected a story of an unidentified cross was taken to this church by an unknown priest from Mäkanä Sealsse – a church in Amhara founded by Ləbnä Dəngəl in 1521 – in the early sixteenth century.

5. Narrowing the date of the second donation

Since inscription B3 states that the Bargello cross was given to the Amḥara, it is possible that the donation took place when Bā'ədā Maryam was in this region. In this respect, his chronicles indicate that the Emperor visited the area at least twice between 1468 and 1470. First, after celebrating the feast of the Cross in Däbrä Bərhan on 28 September1468, he arrived in Amḥara at the Däbrä Nägwädgwad

Commented [GJ9]: Reference missing

Commented [GJ10]: Reference?

Commented [GJ11]: Reference?

Commented [GJ12]: Where is this oral tradition related?

⁶ J. Perruchon 1893, 124

 $^{^7}$ Mercier 2021, 173–74; Appleyard is acknowledged as author of the partial translation of A1 included in Esche-Ramshorn 2022, 205, n 4

⁸ Tedeschi 1991a, 170.

⁹ Tedeschi 1991a, 177.

¹⁰ Gäbrä Śəllase Wäldä Arägay 1959, 232.

¹¹ Mengesha Retie 2011, 71–73.

church on October 19, 1468 for the 40th commemoration day of the death of his father, King Zär'a Ya'eqob.¹² Second, after a visit to the neighboring district of Mänz in around 1470, where he resided for six months establishing the church of Məshalä Maryam, he returned to Atronsä Maryam in Amḥara in the second part of the year, when he summoned the regional lords to pay their annual tributes between July and August in 1470. The Emperor subsequently travelled to other regions to engage in warfare.¹³ It thus seems likely that the second donation of the cross took place between 1468 and 1470.

6. The Figures and Interlace Patterns

Scholars who have worked on the Bargello cross concur that it was engraved and chased by at least two different artists: one was responsible for the archangels and the interlace patterns; another for the Crucifixion and the Virgin and Child. For example, Lasteyrie argued that the first artist was an Ethiopian and but that the second individual came from Renaissance Italy. The Frenchmen praises the latter's work and derides the former's stating that "il y a de délicatesse de trait, de gracieuse naïveté, dans le tableau central de la crucifixion, autant on remarque de lourdeur, d'inhabileté, de barbarie même, dans les dessins d'ornements, dans les entrelacs sans nombre, dans les figures d'anges ou d'oiseaux qui complètent la decoration." His remarks typify some of those Eurocentric and racist attitudes towards Africa that negatively affected, with increasing frequency between the second half of the nineteenth and first decades of the twentieth centuries, Western discourses about the continent's tangible and intangible past. 15

Referring to the interlace pattern – which he assumes, on purely ideological grounds, to be the work of an Ethiopian – Lasteryie goes on to state that this is a type of ornament "qu'on rencontre dans les pays les plus divers, chez presque tous les peuples barbares ou naissant à peine à la civilisation, chez les Scandinaves comme chez les Francs mérovingiens, chez les Abyssiniens comme chez les Anglo-Saxons." Lasterye, like many of his contemporaries, had a clear preference for post-medieval European art and was inclined to view its history as an evolutionary and teleological process. Thus, the continuous use of such motifs in the context of fourteenth and fifteenth century Ethiopia is taken by him as evidence of the "primitive" character of Ethiopian art. 17

One can only conclude, in this respect, that for Lasterye the use of non-figurative and non-naturalistic modes in fifteenth century Ethiopia was a sign that the country was less civilized than its European counterpart. His approach this situates in a timeframe that is not coeval with, but related to, that of Europe. This relegation of Ethiopia to an asynchronous past reproduces a strand in Western writing about Africa that continued to retain its hegemonic discursive power well into the 1980s, when Roland Oliver published a book that situated Africa's "Middle Ages" in the period going from 1400 to 1800, that is almost up to the period that preceded Europe's colonial expansion in the continent. Such approaches towards Ethiopia's past remain influential and largely unchallenged. For instance, in 1991 Tedeschi cited the above-mentioned passage by Lasteyrie without condemning it, even though he

 $^{^{12}\} J.$ Perruchon 1893, 131–132, 150.

¹³Deresse Ayenachew, 2009, pp. 295-313.

¹⁴ Lasteyrie 1874, 256.

¹⁵ Gnisci 2020a, Forthcoming.

¹⁶ Lasteyrie 1874, 258.

¹⁷ Lasteyrie 1874, 258. For a critique of the of description of the heritage or people of Africa as primitive, see Dozier 1955; Adams 1989, 59; Barkan 1992; Clifford 1994, 189–214; Shiner 1994.

¹⁸ For a recent criticism of this approach, in the context of studying Africa's pre-modern past, see Fauvelle 2018, 10–11, but the practice of employing allochronic mechanism in writings about non-European contexts was already convincingly rejected in the 1980s, most notably in Fabian 1983.

adopted a far more nuanced approach in his reading of the cross's designs and, more recently, Esche-Ramshorn has described the images by the first hand as characterized by "primitive simplicity." ¹⁹

Here we do not pursue the question of the geographic origin of the artists that worked on the Bargello cross. Such attempts rest on weak assumptions, such as that an Ethiopian artist could not master a manner of image making that characterized the work of non-Ethiopian individuals during this period, or that a European artist residing in Ethiopia might not modify his style to better suit local taste. Even an analysis of the toolmarks could not lead to definitive answers, as different artists might share the same tools or the same artist might use different tools for executing different decorations. What we do attempt to establish, however, is a chronology of the object's appearance. With this aim in mind, in order to better discern the stratigraphy of the cross and to test our belief that at least two different artists worked on the object, we employed a Dinolite microscope to document and measure the toolmarks on the cross. This was combined with in-person examination under magnification and digital photography.

With regard to the chronology of the images of the Bargello cross, Lasterye believed that an Ethiopian and an Italian worked on it at different point in times: the former, during the reign of Dawit II (r. ca. 1379/80 –1413), the latter in 1440s during the reign of Zär'a Ya'əqob (r. 1434–68) when, according to Lasteyrie, the cross reached Italy with the Ethiopian delegation to the Council of Florence. Tedeschi disagreed with Lasteyrie's analysis of the chronology of the cross, since he believed that it was a commission of Bä'ədä Maryam I (r. 1468 –78), but he also believed that an Ethiopian and a European artist active in Ethiopia had worked jointly on the object during this ruler's reign. More recently, Mercier has argued that the cross was "certainly produced between 1414 and 1468" and has tentatively suggested that the figures at the centre of the cross may have been engraved by a European artist that had reached Ethiopia in the first half of the fifteenth century.²⁰

The differences between the images at the centre and on the arms of the cross are quite evident and warrant the conclusion that at least two engravers worked on its decoration: the bodies of the archangels are bulkier and less naturalistically defined than those of the figures in the two central panels; their hands and noses are larger; and the folds of their vestments are rendered in a more abstract manner. Whether these stylistic differences indicate some temporal distance in the making of the images is difficult to ascertain. Admittedly, the angels' design, as noted by Mercier, as well as some of the features of the cross, recall metal objects that have been attributed to the reign of Emperor Yəshaq (r. 1414–29/30), such as the large processional cross owned by the Church of St. Mary of Zion in Aksum and an example in the Museum Fünf Kontinente.²¹ In contrast, the scenes of the Crucifixion and Virgin and Child bring to mind images produced or acquired in the context of artistic exchanges with the West. The Crucifixion, in particular, is comparable with images assigned to a period between the late fifteenth and early sixteenth centuries, such as the one found in a booklet of miniatures assigned to Nicolò Brancaleon – an Italian artist who arrived in Ethiopia in the 1480s and worked there for over four decades.²²

To add to this picture, we may note that the inscription that identifies the archangels (B1), appears to have been written by a different hand from that which wrote the inscriptions that identify the figurative panels at the centre of the cross. This is particularly evident when looking at the letter the which has rounded loops in inscriptions A1, A2, B2, but is rendered with two roughly triangular shapes in B1. The lines in the latter inscription are also steadier than those of the former and were probably executed with a different type of tool. Microscopic examination indicates that tools used for B2 was carried out using

¹⁹ Tedeschi 1991a, 179; Esche-Ramshorn 2022, 205

²⁰ Mercier 2021, 173–74

²¹ Mercier 2021, 147–48, 173, figs. 150–52. For a reproduction of the Museum Fünf Kontinente cross, see Gnisci and Abate Gobena Forthcoming, 226, cat. 138.

²² See the examples reproduced and discussed in Chojnacki 1983, 385, 389–91, figs. 175c 177, 182a, 183b. A number of Ethiopian artists appear to have embraced some of the artistic choices and methods of the Italian, as exemplified by an icon discussed in Chojnacki 1999, 30, figs. 18–19 which also features a Crucifixion.

a tool with a much narrower and shorter tip than that used for B1. Yet another tool was also used for inscription B3. This inscription was carried out with a tool that has a wider (thicker) tip than that used for the other inscriptions on face B.

Another interesting feature of the decoration is found on the halos of the archangels on the crosslets and of the figures at the centre of the cross, which feature punched circles that were likely executed with the same rounded tool as the circles are identical in diameter. This is a feature that, like the style of the Crucifixion and Virgin and Child, is probably linked to the connections between Ethiopia the Mediterranean world that existed in the fifteenth century. In fact, while some Ethiopian crosses attributed to the period before the fifteenth century were decorated with circular punching tools, the motif is not typically found on halos in Christian Ethiopian images of holy figures. Punched motifs are, on the other hand, found on the halos of Christ and the angels in a late-fourteenth century icon attributed to an Italian artist who, on the basis of this icon alone, is believed to have been active in Ethiopia in this period.²³ Punching tools are also visible in some Veneto-Cretan icons imported into Ethiopia between the late fifteenth and first half of the sixteenth centuries.²⁴

The above suggests that the punches were executed by the artist who created the scenes at the centre of the cross. This hypothesis is also supported by the fact that the same punching tool was used also to represent the nails that pin Jesus to the cross and his belly button on Face B and for decorating the maphorion of Mary on Face A. In other words, the punches are an integral part of the designs of the scenes at the centre of the cross and must have been added at the time of their engraving. This observation, alongside the stylistic considerations noted above, strongly suggests that these scenes were added *after* the seven archangels on the crosslets. If this is the case, the artist who created these images may have opted to use the same tools to decorate the halos of the archangels in order to improve the visual uniformity of the cross's engravings.

All of this information clearly shows that the cross has an extremely complex stratigraphy and strongly suggests that its decorations and inscriptions may have been executed by at least three individuals. First one individual executed the angels, inscription B1, and possibly the interlace patterns and frames. Based on stylistic grounds and on the consideration that Bä'ədä Maryam would not have had the name of his father removed, this stage of manufacture probably occurred between the reigns of Yəshaq and 'Amdä Iyäsus (r. 1433–34). A second metalworker decorated the panels at the centre of the cross, used his tools on the halos of the archangels and probably added inscriptions A2 and B2 that refer to the images he/she created. Since inscription A1, which we believe mentioned one of Zär'a Ya'əqob's predecessors is written in the same hand of the captions A2 and B2, we can tentatively conclude that this phase of decoration must have been completed before 1434. Finally, a third individual must added inscription B3 between 1468–78, that is during the reign of Bā'ədā Maryam. The cross may have been subjected to a campaign of re-gilding at this stage, this might have been done shortly after the name of an emperor was removed from A1.

At least two significant conclusions can be drawn from this tentative chronology. First, the Bargello cross provides clear evidence that metalwork in Ethiopia, as other kinds of objects such as manuscripts and icons, could be subjected to multiple stages of production, that could be separated by several decades from one another. Bearing this point in mind, it is evident a single strand of evidence, such as an inscription, may not be sufficient evidence for dating Christian metal objects from Ethiopia. Second, it may be necessary to widen the dating range for several fifteenth-century Ethiopian crosses that feature representations of the Virgin and Child on one of their faces which have been typically attributed to a period coinciding with Zär'a Ya'əqob's reign. These attributions are based on the fact that the emperor mandated that all churches should keep and venerate such images.²⁵ While it stands to reason that the

²³ On this icon, see Mercier 2021, 124–28, fig. 131 the use of punched decorations in Italian panel painting, see Frinta 1965.

²⁴ See e.g. Heldman 2005, 133, fig. 16.

²⁵ E.g. Heldman 1994, 49–50; Mercier 2000, 76; Gnisci 2020b, 257.

number of crosses bearing this type of image probably increased as a result of Zär'a Ya'əqob's decree, the figurative panels on the Bargello cross may provide evidence that crosses with icon-like panels at their centre were circulating on Ethiopian crosses already before Zär'a Ya'əqob's reign and that the types of devotional activities associated to these crosses existed in some form prior to 1434. Both these observations encourage to revisit the current dating of Ethiopian crosses and to consider whether it is necessary to employ a broader chronological framework in our attributions.

7. Materials and Technique

Further evidence about the process of making the cross comes from an analysis of its materials and the techniques of production. The cross and shaft appear golden in colour with a reflective sheen, although there are several areas of dark brown matte surface along the high points of the shaft and on the outer edges of the secondary crosslets (fig.XXX.5). As gold and polished brass can appear quite similar, and different alloys of copper are also difficult to differentiate by eye when oxidized, elemental analysis was carried out to identify the materials used to make the cross. While the cross has been described variously in the literature and museum records as bronze, brass, gilded, or with traces of gilding, the current analysis revealed the cross to be made of bronze with a mostly intact layer of fire gilding, otherwise known as mercury gilding or amalgam gilding, covering most surfaces of the cross.

Using a portable x-ray fluorescence spectrometer, several spots across the shaft and cross were analysed including areas appearing bright golden in colour, areas appearing brown and matte, and localized areas of grey and coppery coloration along a crack believed to be repairs.²⁶ Review of the spectra from areas without repairs revealed the presence of elements typical of bronze as well as elements associated with gilding. The areas appearing dark brown were found to be areas where the gilding is worn away and scratched. The variation in intensity of the elements present in areas of pristine gilding and areas of worn gilding allow us to confirm that the bulk metal underneath the gilding contains primarily copper and tin with small amounts of lead, iron, nickel, and possibly trace amounts of arsenic and zinc.²⁷

The analysis of the areas of worn gilding also detected gold, mercury, and silver, however, the proportion of these elements was much higher in areas where the gilding remains fully intact. The presence of mercury with gold at the surface of the cross is characteristic of fire gilding, a technique in which gold is mixed with mercury to form a paste, which is then applied to the cleaned surface of the object. The object is then heated to drive off the mercury, leaving a porous gold layer that is subsequently burnished to produce a smooth shiny surface. Fire gilding had long been the dominant technique for gilding metals throughout Europe, the Mediterranean, Middle East, and Asia since well before the 15th century. The presence of small amounts of silver in the gilding layer is likely due to the use of a gold-silver or a gold-silver-copper alloy as the source of gold for fire gilding, often in the form of thin leaf. Based on our current knowledge, this technique was not employed for Ethiopian crosses before the fifteenth century and it is possible that it was introduced to Ethiopia as a result of the

 $^{^{26}}$ X-ray fluorescence (XRF) analysis was conducted using a Bruker Tracer 5i portable XRF with X-ray tube and Rh target. Analyses were taken for 60 seconds each at 40 kV and 5.9 uA using the 25 μm Ti and 300 μm Al filter. The resulting spectra were examined and compared using Bruker ESPRIT Reveal software.

²⁷ As a non-destructive surface analysis technique, it is not possible to quantify the composition of multi-layered objects using portable XRF. Other methods of analysis that allow for depth profiling (e.g. PIXE), or else micro-destructive sampling/analysis, would be needed to characterize the bulk alloy and surface gilding more accurately.

²⁸ While mercury can also be used to apply gold foil to the surface of an object (Anheuser 1997, 58), the presence of a grainy gold surface in the recesses of the cross confirms the use of mercury amalgam in this case.

²⁹ Anheuser 1997, 58

exchanges between Ethiopia and Europe which also brought craftsmen to the country.³⁰ Thus, both in terms of techniques and iconography, the cross seem to embody the intensification of courtly exchanges between Ethiopia and Europe that occurred after the turn of the fifteenth century.³¹ The latter point, as well as the mention of an emperor's name, suggests that the Bargello cross was produced at the emperor's behest within a workshop linked to his court. Evidently, this cannot be confirmed, though, since later sources and indirect evidence indicate that a number of artists could be attached to the itinerant imperial court, it is reasonable to conclude that the cross was produced by individuals with links to the court.

The materials used to make the cross also provide us with some evidence for dating it. While both brass and bronze are copper alloys, brass is a mixture of copper with zinc while bronze is a mixture of copper with tin. The use of these different alloys for the fabrication of crosses in Ethiopia has varied over time, whether due to availability of materials, aesthetic preferences, or preferences for the different working properties of each alloy. Previous analysis of copper alloy crosses has found that many of the early crosses (twelfth–fourteenth centuries) were made from bronze while brass became more popular beginning in the fifteenth century.³² This observation further shores up the conclusion that the Bargello cross was fabricated during this transitional period at which time the selection of bronze was the more traditional choice of material.

The presence of casting flaws across the surface of the cross and shaft, ranging from small to large voids and areas of porosity, indicates the cross was fabricated by casting, almost certainly using the lost-wax technique, which there is a long tradition of in Ethiopia for crafting crosses and other metal objects (Figs. XXX.6).³³ The shaft and cross may have been cast together in one piece as the metal appears mostly continuous across the two sections with no visible evidence of a joining method (Fig. XXX.7). Additionally, the same elements were detected on the shaft and cross from XRF analysis, with roughly the same proportion of copper to tin and other minor elements from the bulk alloy. The possibility remains that the shaft was separately cast and soldered on, or else cast-on, and the subsequent layer of fire gilding has covered up the evidence of the join. Additional analysis, such as x-radiography and scanning XRF, would be helpful in confirming whether the entire cross was originally cast together or in two separate pieces.

8. Damage and Repairs

Damage and subsequent repairs on Ethiopian processional crosses are very common due to a few inherent weak points in their design as well as their frequent mounting on poles, which introduces the potential for impact damage from falls.³⁴ The Bargello cross, unsurprisingly, has several areas of damage, some of which appears to have been repaired. One of the circular finials on the top of a side arm of the Bargello cross, for example, is broken off, leaving a rough bronze surface where it was originally attached. Additionally, there is a long crack that extends from a corner of the central cross along the bottom border and up towards the centre (Fig.XXX.8). There are small circles of coppery and dark grey metal along the sides of this crack and some sections of the crack that appear filled with dark grey metal, which also extends over some of the surface of the edge at the lower corner. These different coloured areas of repair were found through XRF analysis to contain copper, zinc, and silver in varying

³⁰ Admittedly, however, there is limited little technical data available on this matter.

³¹ Krebs 2021, 18–39; Salvadore 2017a, 128–36.

³² Harrison 2022, 469.

³³ Moore 1989, 816.

³⁴ Moore 1989, 111.

proportions.³⁵ Copper-zinc-silver alloys have been used as solders since at least the Middle Ages, as the melting temperature of the copper/silver alloy is lowered through the addition of zinc, in the form of brass.³⁶ It is likely that the small circles bordering the crack were an earlier repair made by drilling holes and adding a mechanical fastener to prevent the crack from splitting further.³⁷ At some point, the mechanical attachments appear to have been removed and solder added to fill the holes and crack. While it is difficult to establish if when these repairs occurred, it seems likely that they were executed in Ethiopia rather than in Europe.

8. The Arrival of the Cross in Europe

Another intriguing question is that of the date and means of arrival of the cross in Europe. The earliest known reference to the cross's presence in Florence is a 1771 inventory of the Real Galleria degli Uffizi. The cross is listed along with various objects that were 'believed to merit to be transferred to the Real Galleria under their respective departments. "39 Under Duke Leopoldo II (1747–1765-1792), the gallery was undergoing major renovations, and had been opened to the public since 1769. "40 The catalog's 'Bronzi Antichi e Moderni' section lists the cross as object 906, and described as 'una Croce alla Greca di Bronzo dorato alta B:" uno bulinatovi da una parte Nostro Signore in Croce, e dall'altra la Madonna con altri santi con manico, e bastone, anzi cannone da inalzarla. An introductory note explains that object numbers were derived from the general inventory of Palazzo Vecchio, where the cross was held before its relocation. The cross is also listed, with the same description, in the 1784 and 1825 catalogues, but the latter also includes a much lengthier description added in 1856, the first to identify the cross as Ethiopian. "43"

It was commissioned by Arcangelo Michele Migliarini (1779–1865), antiquarian, archaeologist, and art critic of international fame who served the Galleria as 'Regio Antiquario.'⁴⁴ He must have run into the cross while compiling the catalogue of the Egyptian collection in 1855⁴⁵ and, based on his learnings and knowledge of oriental languages, realized that it was not Greek. He called upon the Lazarist missionary Giuseppe Sapeto (1811–95), who had just returned from exploratory activities in the Horn

Commented [MS13]: Technical translation; Ba uno? We need to check original together.

³⁵ The dark grey areas contain much higher amounts of zinc, while the coppery coloured areas contain higher amounts of silver

silver.

36 Carroll 1981, 99. While there is a vague reference to zinc-based solder in the Mappae Clavicula, by the sixteenth century, it appears to be more commonly used and is mentioned in Cellini 1898, 11.

³⁷ See Mercier 2021, 147 for an example of this type of mechanical fastener on a 15th century processional cross.

^{38 &}quot;Bronzi antichi e Moderni, Pietre, Quadri, Libri e avori diversi, et altre cose naturali, che dalla Guardaroba Generale di Sua Altezza Reale sono passati alla Real Galleria in vigore di Rescritto de' 22 Dicember 1770," Filza di Galleria [FG] 1771, Archivio Storico Galleria degli Uffizi, 127r.

³⁹ FG 1771, 127v.

 $^{^{\}rm 40}$ Conforti and Funis 2018, 126

⁴¹ FG, 2r.

 $^{^{\}rm 42}$ "Inventario vegliante della Guardaroba Generale", FG 1771, 27
r.

⁴³ Manoscritto 113, Vol 2, 1784, Archivio Storico Galleria Uffizi, 229r-230v. 'Catalogo della Regia Galleria,' 7, Classe 3, 'Bronzi ed altri metalli, avori, cere, paste e legni sculti,' 110.b, Biblioteca Galleria Uffizi, Manoscritto177, 258. The cross is also listed in the printed catalogues, for example Campani 1884, 99; Supino 1898, 351. Incidentally, in the course of our research at the Uffizi, thanks to an indication by Dr. Massimo Boschi, who searched the museum's catalogue for Ethiopian material, we learned about the existence of four additional Ethiopian crosses, all donated by the explorer Giotto Dainelli (1878–1968). The four crosses are listed in the museum's catalog as objects 6734, 6738, 6750, and 6835 and can be dated to a period between the eighteenth and nineteenth centuries. One of them, a hand cross, is engraved with figures in the Second Gondarine style which he may well have acquired while visiting Gondar. The four crosses were part of a group of sixteen objects that Dainelli donated to the museum, "Donazione Prof. Giotto Dainelli", LEGATURA, ask archivist. On the explorer see 'Dainelli, Giotto', *EAe*, II (2005),71b (L. Ricci).

⁴⁴ Heyde 2003, 24–35; Nieri 1929.

⁴⁵ Nieri 1929, 39

of Africa. ⁴⁶ Sapeto wrote up a description of the Cross and translated the inscription, whose language he identified not as Gəʿəz, but as an 'Ethiopian dialect.' Given the missionary's extensive language knowledge, it is likely that the simplistic characterization was meant to be intelligible for non-specialists rather than being due to lack of knowledge. More importantly, he correctly identified Bäʾədā Maryam I (1448, 1468-1478) as the donor, and claimed that it was produced in the fifteenth century 'probably in Sciawa [Šäwa]'. Sapeto also identified the recipient community as that of "Gorgora," an erroneous reading that would be a-critically accepted by Lasteyrie and the Italian diplomat and Ethiopianist Salvatore Tedeschi.

The former, based on the inscription's reference to Bä'ədä Maryam royal name "Dawit", argued that the cross had been commissioned by Emperor Dawit I (1380-1412) and arrived in Florence with the Ethiopian delegation at the time of the eponymous council (1441). The thesis is unacceptable for multiple reasons: first, the cross was clearly bestowed to a church in Ethiopia by Bä'ədä Maryam. Second, the claim ultimately rests on an age-long misconception according to which the Ethiopian delegation had been sent by Emperor Zär'a Ya'əqob, whereas it hailed from the Ethiopian community in Jerusalem and had no official imperial investiture. Tedeschi knew better than to accept Lasteyrie's argument but left the question of its arrival in Florence to posterity.

Alas, neither the inscription nor the known catalogues offer any help on the timing and the circumstances of either the removal from Ethiopia or the arrival in Europe of the Bargello cross. In theory, the cross could have been taken to Europe at any point in time between the beginning of Bä'ədä Maryam I's reign (1468) and the first record of its presence in Florence (1771). In an attempt to restrict this vast time span, we conducted archival research in the Archivio di Stato di Firenze, hoping to find references in older catalogues.

First, we investigated the Imperiale e Real Corte collection, which comprises catalogues dating from the beginning of Leopoldo II's reign (1747–1792) as grand duke of Tuscany (1765–1790) to the region's incorporation into the Kingdom of Italy.⁵⁰ The only unknown source we found is an entry in a 1777 catalogue of the 'Gabinetto de' bronzi antichi', compiled by the Jesuit archaeologist and art historian Luigi Lanzi (1732–1810).⁵¹ In the introduction, he describes the composition of the *gabinetto*, indicating that it was made of fourteen *armadio*, divided according to religious, pagan, or secular object typologies. The very first listing in the last *armadio*, which was devoted to 'Strumenti di professioni e di cose diverse. Antichità Cristiane⁵²' is object 88. This is described as a 'Una Croce Greca con Sacre Immagini rozzamente lavorate a bulino e con antichi caratteri: va congiunta ad un'asta di bronzo [...] concava e adattabile ad altra di legno." Additional research in the Imperiale e Real Corte catalogues did not yield results, and it is unlikely that other catalogue references from this era would have been of any use. The known entries appear to have each been copied from the previous catalogue, and it is likely that the oldest known entry of 1771 was also lifted from an older catalogue which, even if extant, probably did not include additional information on its provenance. Further, the oldest catalogues in the

Commented [GJ14]: Already stated above

Commented [MS15]: Technical translation; word hard to

 $^{^{46}}$ 'Sapeto, Giuseppe', $\mathit{EAe}, \mathit{IV}$ (2010), 533 (F. Surdich).

⁴⁷ Manoscritto177, 258.

⁴⁸ J. F. C. ed Perruchon 1893, 124

⁴⁹ Lasteyrie 1874 On the Ethiopians at the Council of Florence: Cerulli 1933; Kelly 2016

⁵⁰ Giamblanco and Marchi 1997

⁵¹ Bronzi Antichi, I.R. Corte 5115, Archivio di Stato di Firenze.

⁵² Bronzi Antichi, I.R. Corte 5115, Archivio di Stato di Firenze, 221.

⁵³ Bronzi Antichi, I.R. Corte 5115, Archivio di Stato di Firenze, 238.

⁵⁴ In the Archivio di stato di Firenze, we consulted the following "inventari" because they are described as general inventories, inventories of bronze, silver, gold objects: 4553, 4554, 4557, 4627, 4628, 4629, 4630, 4631, 4632, 4668, 4790, 5116. For a description of each of these volumes see Giamblanco and Marchi 1997

collection date to the early eighteenth century and would have done little to change our *terminus ante quem*.

Given that the 1771 catalogue refers to a transfer from the Guardaroba Generale, we also consulted various catalogues in the Guardaroba di Palazzo Vecchio collection. We did not hope for a more articulate description, but for evidence that could have restricted our temporal window. Alas, in spite of the many volumes consulted, the search did not yield any result. 55 All we know is that cross was removed from Gärägäre, and found its way to Florence at some point between the late fifteenth and the late eighteenth centuries: this time span allows for a variety of speculative scenarios.

In the fifteenth and for much of the sixteenth centuries Ethiopian-European exchanges flourished: noteworthy is the arrival of Ethiopian delegations in Venice (1402), at Alfonso of Aragon's court in Valencia (1427) and Naples (1450), and at the Council of Florence and later in Rome (1441). ⁵⁶ However, given that Bä'ədä Maryam I's reign began in 1468, these dates can be ruled out.

Likewise, the exchanges of 1481–83—when an Ethiopian delegation hailing from Jerusalem reached Rome and, in response, two Franciscans visited Emperor ∃skəndər's (1471-1478-1494) court—seems also unlikely as a period for the cross's removal and relocation. ⁵⁷ Upon being recently donated to the community in Gärägäre, one imagines that the cross would have been kept there for at least a generation rather than being almost immediately turned into a diplomatic gift. Furthermore, the delegation originated in the Holy land, rather than in Ethiopia, and had no official endorsement by the Ethiopian emperor. Finally, the Franciscans who reached ∃skəndər's court were not well received and are unlikely to have been given such a remarkable object as a gift, even if it was in the emperor's care.

To the above, it should be noted that throughout the fifteenth and sixteenth centuries, Ethiopian diplomatic gifts were usually recorded and publicized, whereas there is no trace of the cross in any of the known sources pertaining to diplomatic arrivals in the fifteenth century. Nor is there any reference to it in the known documents pertaining to the first half of the sixteenth century, when exchanges were monopolized by Portuguese rulers with the Vatican's assent, and Ethiopian delegations and their gifts were celebrated for political reasons. See Bearing this in mind, it is worth paying close attention to the era of the Ethiopian-Adal War (1529–1543), as the cross may have been displaced from its church during this time of upheaval.

The Adali pillaged Ethiopian churches, including the church of NAME in Gärägäre. The involvement of Muslim agents in the cross removal can be excluded—they would have smelted the cross and recycled the metal. However, it is possible that the cross was pre-emptively moved from its church, along with other artefacts, to prevent its distruction. It could have been hidden nearby the church in the hopes of returning it to its rightful place after the conflict. It could also have been taken to Jerusalem during the conflict for safekeeping and, from there, found its way to Italy and finally Florence. Alternatively, it could have been brought to Emperor Lebnä Dengel's (r. 1508-1540) kätäma, who could have dispatched it to Latin Europe as part of a group of gifts sent in a desperate attempt to secure military aid. In this regard, Lebnä Dengel's dispatch of the Portuguese João Bermudes to Rome and Lisbon to plea for military support could provide us with a possible timeframe for its arrival in Italy, but none of the several documents left behind by the envoy and his acquaintances reference the donation

Commented [GJ17]: Don't think it would have been considered valuable for the standards of the time

Commented [MS18]: this needs to be confirmed by Deresse

Commented [GJ19R18]: With reference please

Commented [GJ16]: ?

⁵⁵ Based on the descriptions found in Vaccari 1997, we consulted the following *inventari*: 698 (151), 699 (1189), 700 (1269), 701 (1387), 983 (732bis), 990 (a.94), 987 (1090).

⁵⁶ Krebs 2021; Lefevre 1944, 1945, 1947; Salvadore 2010, 2017a

⁵⁷ Lefevre 1958; Salvadore 2017a, 66–76, Brocchi da Imola, Giovanni Battista, V:284-286. For an alternative view on the exchanges: Krebs 2021, 136–73

⁵⁸ See Krebs 2021; Lowe 2007; Salvadore 2017a

of a cross. The same is true for the letters exchanged between Emperor Gälawdewos (r. 1540-59) and the papacy between 1541 and 1556.59

In theory, Ethiopian pilgrims could have also been the agents behind its arrival in Florence, but they usually reached Italy with very limited means, after a long journey through the Nile Valley, a sojourn in Jerusalem, a sea passage to Venice and, from there, a transit to Rome through the Apennines. Here pilgrims joined, for both short and long stays, the Ethiopian community of Santo Stefano degli Abissini, a church and hospice behind the St. Peter's Basilica. ⁶⁰ It thus seems unlikely that would have brought such a cumbersome object with them, unless they planned to use it for liturgical reasons. Once the *carreira da Índia* was established in the early 16th century, some Ethiopian pilgrims began sailing from the Red Sea to Portuguese India, and from there to Portugal, eventually reaching the Italian peninsula—an equally perilous journey. ⁶¹ It is thus unlikely any of these pilgrims could have safely transported such a large and valuable object, and equally unlikely that its arrival in Italy would have gone unnoticed.

Another possible scenario is that the cross found its way to Florence during the period of the Jesuit missions to Ethiopia. Ignatius of Loyola (1491–1556) wrote the mission's instructions in 1554, and in 1556 the first Jesuits arrived in the kingdom. However, the fathers would successfully establish themselves at court only in the early seventeenth century, after decades of failed attempts. Their success and the eventual conversion of much of the nobility and Emperor Susənyos (r. 1607–32) led to a protracted civil war between Ethiopian traditionalists and Catholics, which deeply destabilize Ethiopia and finally resulted in the expulsion of the Jesuits first from court (1632), and later from the kingdom (1634).⁶² Like the Adali invasion, the Jesuit era offers an ideal context for the removal of the cross and its arrival in Europe.

Not only the religious conflict resulted in violence and displacement, but following Susenyos's abolition of the traditional faith, the Jesuits took over Ethiopia's ecclesiastical apparatus. They engaged in extensive iconoclasm, destroying *tabots* and any other religious object that did not conform with Catholic orthodoxy. The cross is unlikely to have been targeted, but could have been removed either by a monk along with other religious objects for preservation, or acquired by the Jesuits, who are known to have valued objects that appeared to have been made by Europeans. In both cases, it could have found its way to Europe through, respectively, the old pilgrim trail through the Holy Land, or through Portuguese Goa, where the Jesuit headquarters for East Africa and South Asia was located, and, from there, to Portugal via the *carreira*.

In addition, it should be mentioned that, in 1616, Emperor Susənyos wrote to various European sovereigns, including Duke Cosimo II de' Medici (1609–21), asking for support for the Catholic cause against Ethiopian traditionalists.⁶³ The letters do not mention a cross, but the emperor could well have sent it to Florence or elsewhere in Europe, along one of his letters, to elicit support. All in all, although while we remain in the realm of speculation, the Jesuit period could have provided a favourable milieu for the cross's removal.

In contrast, it is unlikely that the cross found its way out of Ethiopia in Jesuit hands after their expulsion. After being expelled from court in 1634, many fathers died in Ethiopia, and those who managed to leave for Portuguese Goa did so in difficult conditions. For example, Patriarch Afonso Mendes (1579–1659), who could have otherwise been considered as an agent involved in the cross's removal, was arrested and detained in Sawākin, and would reach India in complete dispossession. As for the Catholic

⁵⁹ Raineri 2005, 78–104

⁶⁰ Leonessa 1929

⁶¹ Salvadore 2017b

⁶² Martínez d'Alós-Moner 2015

^{63 &}quot;1616, Lettera del Pretejanni al Gran Duca," Mediceo del Principato 4274 A, Archivio di Stato di Firenze, 224-7. See Beccari 1903, 261–4: Carali 1936

Ethiopian-Portuguese community, in part the descendants of the Portuguese soldiers who had fought for Gälawdewos and settled in the kingdom, they were allowed to remain in the country until the enthroning of Emperor Yoḥannes (r. 1667–82), who expelled them to Sinnār, where they would leave traces of their presence until the late seventeenth century.⁶⁴

Following the Jesuit expulsion, Ethiopian-European relations reached a nadir. For the rest of the seventeenth and much of the eighteenth century, no Catholics were allowed into Ethiopia, and the few missionaries who attempted to reach the Ethiopian court were barred from Ethiopia or rapidly expelled. The movement of Ethiopians to Europe also saw a marked decline towards this period. Already in the mid-sixteenth century, the presence of Ethiopian pilgrims in Santo Stefano had declined and, for much of the seventeenth century, the church and its hospice were mostly uninhabited, while in the eighteenth century they mostly hosted Egyptian monks. The few Ethiopians who reached Santo Stefano in this period were unlikely to have any dealings with the cross, as they were mostly young Catholics hailing from Goa under the aegis of the Jesuit order. The same is true for the young Ethiopians who attended the Collegio Urbano in the same era, at the behest of the Congregation of Propaganda Fide.

Admittedly, some Europeans bypassed the barring of Ethiopia to Catholic visitors. Notable exceptions were the French physician Charles Jacques Poncet in 1699–1700, who was welcomed at court because of his skills, the Bohemian Franciscan Remedius Prutky in 1751-3, and the Scottish explorer James Bruce in 1769–72.68 However, not only is there no mention of the cross in any of the relevant sources pertaining to their visits and return to Europe, but all three were rather removed from Florence. More importantly, had the cross reached Italy in their hands, it is very unlikely that it would have been catalogued as a "Greek cross" rather than Ethiopian, though this may have been initially intended as a reference to its morphology rather than its provenance.

In sum, it seems more likely that the cross reached Florence in the sixteenth or seventeenth centuries, and that after some time in Palazzo Vecchio or somewhere else in Florence, knowledge of its origin was lost. The cross's inscription and the known archival sources do not allow us to narrow the chronological range for its arrival in Florence to a particular century. However, if we take into consider the religious and political context of early modern Ethiopia, then the Adal-Ethiopian War (or the last decades of the Jesuit mission to Ethiopia seem like the most likely windows of opportunity for the cross's arrival in Europe. Likewise, the eighteenth century catalogue descriptions, and the limited exchanges between Ethiopia and Eritrea after the expulsion of the Jesuits, suggest that the cross's arrival in Florence occurred before the eighteenth century. This means that cross must have have reached Italy when the balance of power between Europe and Ethiopia remained stable and suggests that its removal from its context of origin was not determined by a forceful event, but was rather the result of the political and religious manoeuvrings that took place between these regions in the fifteenth to seventeenth centuries.

9. Conclusions

Commented [GJ20]: Greek probalby initially referred to its shape not its provenance

Commented [GJ21]: Might not coincide with arrival in Europe

⁶⁴ Martínez d'Alós-Moner 2015, 315–321

⁶⁵ Carobbio da Nembro 1971

⁶⁶ Leonessa 1929, 269–292

⁶⁷ Among them were Ludolf's informant and collaborator's: Andrade, António de, EAE, 1:259-60, and Gorgoryos, EAE, 2:855-7

⁶⁸ Prutky 1991; Tedeschi 1966; Ullendorff 1953

This study set out to present the results of a cross-disciplinary dialogue between researchers that specialize in different fields but share a common interest in Ethiopia's material past. The type of collaborative interaction adopted here, which has not often been pursued for the study of Ethiopian crosses, has helped to raise new research questions which we sought to address from different angles. On the one hand, this exchange helped shed new light on the history of the Bargello cross: we excluded the church of Däbrä Sina on Gorgora as a possible repository for this object and proposed some alternative possible sites; we attempted to narrow down its chronology; we have provided a more detailed analysis of its material features and its repairs than was hitherto available that we used as evidence to shore up our chronology; and, finally, we have tackled in greater depth than before the question of its arrival in Europe. We have also convincingly shown that narrow dating ranges, which assume that a cross was not modified after its initial manufacture, may require careful revision.

Admittedly, in the course of our conversation, we also came to recognize the existence of significant gaps and limitations in our understanding of the cross' history. We have been forthcoming about the limitations of our paper as we believe that they point towards new avenues of investigation. For instance, additional research may help identify other Ethiopian sources that mention the site of Gärägäre and improve our understand of its significance for the Ethiopian Empire during the fifteenth century. More extensive work on the donations of Emperor Bä'ədä Maryam, may shed light on the evolution of gifting practices during his reign and on the reemployment of other types of artefacts for political or religious ends. Careful reframing of the study of the style of Ethiopian art may contribute to less Eurocentric readings of its history. An increase in technical analysis of the materials and tools used to produce metalwork in the Ethiopian Empire could provide data that might allow us to associate tools and objects to a particular individual, workshop, period, or geographical context. And, finally, further research into Italian archives may provide us with more clues for reconstructing the journey of this enigmatic artefact from Ethiopia to Europe.

Bibliography

- Adams, M. 1989. 'African Visual Arts from an Art Historical Perspective', *African Studies Review*, 32/2 (1989), 55–103.
- Anheuser, K. 1997. 'The practice and characterization of historic fire gilding techniques', *JOM*, 49/11 (1997), 58–62.
- Barkan, E. 1992. 'Rethinking orientalism: Representations of "primitives" in Western culture at the turn of the century', *History of European Ideas*, 15/4–6 (1992), 759–765.
- Beccari, C. 1903. Notizia e saggi di opere e documenti inediti riguardanti la storia di Etiopia durante i secoli XVI, XVII e XVIII. (Roma: Casa Editrice Italiana, 1903).
- Campani, A. 1884. Guida per il visitatore del R. Museo Nazionale nell'antico palazzo del potestà di Firenze (Firenze: Tip. Bencini, 1884).
- Carali, P. 1936. 'Lettera di Sagad II imperatore di Etiopia a Cosimo II Granduca di Toscana (1816)(sic) in Annali del R', *Istituto Superiore Orientale di Napoli, VIII*, 3 (1936), 105–110.
- Carobbio da Nembro, M. 1971. 'Martirio ed espulsione in Etiopia', in J. Metzler, ed., Sacrae Congregationis Propaganda Fide Memoria Rerum 350 anni a servizio delle Missioni. 1622–1972, 1st (Freiburg: Herder, 1971), 624–649.

- Carroll, D. L. 1981. 'Antique Metal-Joining Formulas in the "Mappae Clavicula", Proceedings of the American Philosophical Society, 125/2 (1981), 91–103.
- Cellini, B. 1898. The treatises of Benvenuto Cellini on goldsmithing and sculpture. (London: Edward Arnold, 1898).
- Cerulli, E. 1933. 'Eugenio IV e gli Etiopi al Concilio di Firenze nel 1441', *Rendiconti della Reale Accademia dei Lincei. Classe di scienze morali*, 6/IX (1933), 347–368.
- Chojnacki, S. 1983. Major Themes in Ethiopian Painting: Indigenous Developments, the Influence of Foreign Models, and Their Adaptation from the 13th to the 19th Century, Äthiopistische Forschungen, 10 (Wiesbaden: Franz Steiner Verlag GmbH, 1983).
- Chojnacki, S. 1999. 'The Discovery of a 15th-Century Painting and the Brancaleon Enigma', Rassegna di Studi Etiopici, 43 (1999), 15–42.
- Clifford, M. L. 1994. *An Examination of the Methods Used in the Study of Ethiopian Art*, Michigan State University. Department of Art (1994).
- La costruzione degli Uffizi. Conforti, C. and F. Funis 2018. La costruzione degli Uffizi: nascita di una galleria (WriteUp Site, 2018).
- Dozier, E. P. 1955. 'The Concepts of "Primitive" and "Native" in Anthropology', *Yearbook of Anthropology*, (1955), 187–202.
- East-West Artistic Transfer through Rome, Armenia and the Silk Road. Esche-Ramshorn, C. 2022. East-West Artistic Transfer through Rome, Armenia and the Silk Road: Sharing St. Peter's (London: Routledge, 2022).
- Time and the Other. Fabian, J. 1983. *Time and the Other: How Anthropology Makes Its Object* (New York, NY: Columbia University Press, 1983).
- The Golden Rhinoceros. Fauvelle, F.-X. 2018. *The Golden Rhinoceros: Histories of the African Middle Ages / François-Xavier Fauvelle.* (Princeton, NJ: Princeton University Press, 2018).
- Frinta, M. 1965. 'An Investigation of the Punched Decoraton of Mediaeval Italian and Non-Italian Panel Paintings', *The Art Bulletin*, 47/2 (1965), 261–265.
- Gäbrä Śəllase Wäldä Arägay 1959. ナムカ Hや3 H 名ののや デえおか 37か オパルナ H九ナや糸9 (Tarik Zämän Zä Dagmawi Mənilək Nəgus Nägäśt Zä–Ityo □ya) (Addis Ababa: Bərhanənna Sälam mattämiya bet, 1959).
- Giamblanco, C. and P. Marchi 1997. *Imperiale e real corte* (Roma: Ministero per i Beni Culturali e Ambientali, Ufficio Centrale per i Beni Archivistici, 1997).
- Gnisci, J. 2020a. 'Constructing Kingship in Early Solomonic Ethiopia: The David and Solomon Portraits in the Juel-Jensen Psalter', *The Art Bulletin*, 102/4 (2020), 7–36.
- Gnisci, J. 2020b. 'Christian Metalwork in Early Solomonic Ethiopia: Production, Function, and Symbolism', in S. Cooksey, ed., *Peace, Power, and Prestige: Metal Arts in Africa* (Gainesville, FL: Samuel P. Harn Museum of Art, 2020), 254–65.
- Gnisci, J. Forthcoming. 'Ethiopia and Byzantium', in A. Achi, ed., Africa and Byzantium (New York, NY: The Metropolitan Museum of Art, Forthcoming).

- Gnisci, J. and Abate Gobena Forthcoming. 'Ethiopian Crosses: Art in Motion', in A. Achi, ed., *Africa and Byzantium* (New York, NY: The Metropolitan Museum of Art, Forthcoming).
- Harrison, A. 2022. 'Technical Study of Ethiopian Copper Alloy Processional Crosses Using Non-Destructive Analysis', *Studies in Conservation*, 67/7 (2022), 459–471.
- Marian Icons. Heldman, M. E. 1994. *The Marian Icons of the Painter Frē Şeyon: A Study in Fifteenth-century Ethiopian Art, Patronage, and Spirituality*, Orientalia Biblica et Christiana, 6 (Wiesbaden: Harrassowitz Verlag, 1994).
- Heldman, M. E. 2005. 'St. Luke as Painter: Post-Byzantine Icons in Early-Sixteenth-Century Ethiopia', *Gesta*, 44/2 (2005), 125–148.
- Heyde, A. A. der 2003. 'Arcangelo Michele Migliarini (1779-1865): formazione artistica, divagazioni critiche e rapporti con il collezionismo di un antiquario ottocentesco', *Annali Scuola Normale Superiore Classe Di Lettere E Filosofia*, (2003), 263–20.
- Kelly, S. 2016. 'Ewostateans at the Council of Florence (1441): Diplomatic Implications between Ethiopia, Europe, Jerusalem and Cairo', *Afriques. Débats, méthodes et terrains d'histoire*, (2016).
- Krebs, V. 2021. Medieval Ethiopian Kingship, Craft, and Diplomacy with Latin Europe (Cham: Palgrave Macmillan, 2021).
- Lasteyrie, F. de 1874. 'Notice sur une ancienne croix éthiopienne conservée à Florence, par M.F. de Lasteyrie', *Mémoires de l'Institut national de France*, 28/1 (1874), 237–262.
- Lefevre, R. 1944. 'Riflessi etiopici nella cultura europea del Medioevo e del Rinascimento Parte Prima', *Annali Lateranensi*, VIII (1944), 9–89.
- Lefevre, R. 1945. 'Riflessi etiopici nella cultura europea del Medioevo e del Rinascimento Parte Seconda', *Annali Lateranensi*, IX (1945), 331–444.
- Lefevre, R. 1947. 'Riflessi etiopici nella cultura europea del Medioevo e del Rinascimento Parte Terza', *Annali Lateranensi*, XI (1947), 254–342.
- Lefevre, R. 1958. 'Ricerche sull'imolese G. B. De Brocchi: viaggiatore in Etiopia e curiale pontificio (sec. XV-XVI)', *Archivio della società romana di storia patria*, 3, 12/1–4 (1958), 55–118.
- Leonessa, M. da 1929. Santo Stefano Maggiore degli Abissini e le relazioni romano-etiopiche (Città del Vaticano: Tipografia Poliglotta Vaticana, 1929).
- Lowe, K. 2007. "Representing" Africa: Ambassadors and Princes from Christian Africa to Renaissance Italy and Portugal, 1402–1608', Transactions of the Royal Historical Society (Sixth Series), 6, 17/1 (2007), 101–128.
- Lusini, G. 2016. 'Dinamiche identitarie nell'Etiopia antica e medievale', in I. Micheli, ed., Materiality and Identity. Selected papers from the proceedings of the ATrA Conferences of Naples and Turin 2015 (Trieste: Edizioni Università di Trieste, 2016), 157–68.
- Envoys of a human God. Martínez d'Alós-Moner, A. 2015. Envoys of a human God: the Jesuit mission to Christian Ethiopia, 1557–1632 (Leiden: Brill, 2015).
- Mengesha Retie 2011. Rethinking Amhara through Heritage in Ethiopia: A Focus on the Patrimonial Sites of Bétä-Amhara in Wasil (1270 1559) (Riga: VDM Verlag Dr. Müller., 2011).

- Mercier, J., ed., 2000. L'arche éthiopienne: Art chrétien d'Éthiopie (Paris: Paris musées, 2000).
- Mercier, J. 2021. Art of Ethiopia: From the Origins to the Golden Century (Paris: Éditions Place des Victoires, 2021).
- Moore, E. 1989. 'Ethiopian Crosses from the 12th to the 16th Century', in *Proceedings of the First International Conference on the History of Ethiopian Art: Held at the Warburg Institute of the University of London, October 21 and 22, 1986* (London: Pindar Press, 1989), 110–14.
- Arcangelo Michele Migliarini i suoi tempi, i suoi amici. Nieri, N. 1929. Arcangelo Michele Migliarini i suoi tempi, i suoi amici: contributo alla storia dell'Archeologia in Toscana, nel secolo XIX (Tipografia Enrico Ariani, 1929).
- Perruchon, J. 1893. Les Chroniques de Zâr'â Yâ'eqôb et de B'aeda Mâryâm, rois d'Éthiopie de 1434 à 1478, Bibliothèque de l'École pratique des hautes études, Sciences philologiques et historiques, 93 (Paris: Émile Bouillon, Éditeur, 1893).
- Perruchon, J. F. C. ed 1893. Les chroniques de Zar'a Yâ eqôb et de Ba'eda Mâryâm, rois d'Éthiope de 1434 à 1478 (Paris: É. Bouillon, 1893).
- Prutky, R. 1991. *Prutky's travels in Ethiopia and other countries*, ed. R. Pankhurst, Works issued by the Hakluyt Society,; 2nd ser., no. 174; (London: Hakluyt Society, 1991).
- Raineri, O. 2005. Lettere tra i pontefici romani e i principi etiopici, sec. XII-XX Versioni e integrazioni (Città del Vaticano: Biblioteca apostolica Vaticana, 2005).
- Salvadore, M. 2010. 'The Ethiopian Age of Exploration: Prester John's discovery of Europe, 1306–1458', *The Journal of World History*, 21/4 (2010), 593–627.
- Salvadore, M. 2017a. The African Prester John and the Birth of Ethiopian-European Relations 1402–1555 (New York: Routledge, 2017).
- Salvadore, M. 2017b. 'African Cosmopolitanism in the Early Modern Mediterranean: The Diasporic Life of Yohannes, the Ethiopian Pilgrim Who Became a Counter-Reformation Bishop', *The Journal of African History*, 58/1 (2017), 61–83.
- Shiner, L. 1994. "Primitive Fakes," "Tourist Art," and the Ideology of Authenticity', *The Journal of Aesthetics and Art Criticism*, 52/2 (1994), 225–234.
- Supino, I. B. 1898. Catalogo del R. Museo Nazionale di Firenze (Palazzo del potestà) (Roma: Unione Cooperativa, 1898).
- Tedeschi, S. 1966. 'Poncet et son voyage en Ethiopie', *Journal of Ethiopian Studies*, 4/2 (1966), 99–126.
- Tedeschi, S. 1991a. 'Una storica croce processionale etiopica conservata in Italia', *Africa: Rivista trimestrale di studi e documentazione dell'Istituto italiano per l'Africa e l'Oriente*, 46/2 (1991), 163–183.
- Tedeschi, S. 1991b. 'Una storica croce processionale etiopica conservata in Italia.', *Africa.*, 46 (1991), 163–183.
- Ullendorff, E. 1953. 'James Bruce of Kinnaird', *The Scottish Historical Review*, 32/114 (1953), 128–143.

Vaccari, M. G. 1997. La guardaroba medicea dell'Archivio di Stato di Firenze (Firenze: Regione Toscana, 1997).	