

# SOURCEBOOK FOR THE SHAHI KINGDOMS\*

## Red Clay-based Buddhist Sculpture in the Śāhi Kingdoms: Material and Technical Considerations from the Kabul Valley to the Himalayan Foothills

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Clay-based Buddhist sculpture is found in the Śāhi territories extending from eastern Afghanistan across the northwest of the Indian subcontinent to the Himalayan foothills. During the Śāhi period (c. 7<sup>th</sup>-10<sup>th</sup> century CE), unfired clay<sup>1</sup> was the preferred medium to decorate Buddhist establishments in eastern Afghanistan.<sup>2</sup> A unique aesthetic and technical development was the use of red clay (and red clay surface treatments) which became popular from the 7<sup>th</sup> century CE, following a period of experimentation, for figural sculpture production<sup>3</sup> at sites in the Kabul Valley (Tepe Maranjan, Tepe Khazana, Tepe Narenj, Qol-i Tut, Shiwaki),<sup>4</sup> Logar (Mes Aynak), Ghazni (Tapa Sardār), and the Hindukush (Fondukistan). Red clay sculpture is only attributed (so far) to one other site in the Śāhi territories—the Buddhist monastery of Ambaran (better known as Akhnur) located in Jammu, India, at the eastern periphery of the kingdoms.

The widely dispersed trend toward red clays and red clay surface treatments for sculptures at Śāhi Buddhist sites is remarkable for the great variety of raw materials and manufacturing techniques used from one site to the next as well as between chronological phases at individual sites. The extraordinary technical detail and individualism of the many clay-based figures populating these sites present viewers with a captivating aesthetic that is simultaneously grounded by the tactile earthen material and lofty in the assemblages of divine Buddhist figures. Further intriguing is the geographic concentration of this late material phenomenon in the greater Kabul area, perhaps coinciding with the flourishing of its Buddhist establishments into the later period. It undoubtedly also reflects the more prolific archaeological work conducted in the Kabul region.

This entry summarizes the presently known evidence for red clay sculpture production in the Śāhi territories. It offers a point of departure for understanding one category of the corpus of Śāhi material culture—clay-based sculpture—with regard to technical achievements and the mobility and transmission of objects and technologies. It considers three main questions:

- Where was red clay used?
- What techniques were used to produce red clay sculpture at these sites?

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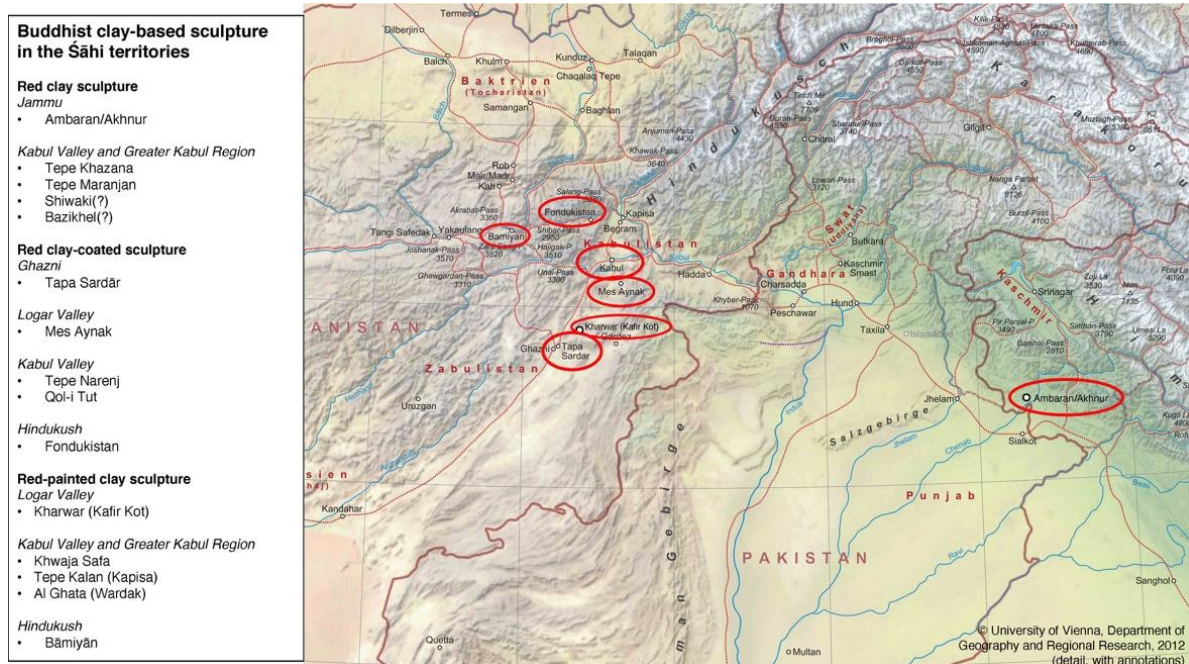
<sup>1</sup> Throughout this entry, I make use of the term ‘unfired clay’ to refer to objects that were sculpted of raw clay and not intended to be fired. Even if they were subsequently accidentally fired, they differ in technique from terracotta (literally ‘fired clay’) objects that were intentionally fired.

<sup>2</sup> Unfired clay sculpture had already been produced since the 2<sup>nd</sup> century CE. Taddei (1999: 395) suggested that the early phase ranged from the 2<sup>nd</sup> to 6<sup>th</sup> century CE, while a later phase of unfired clay usage in Afghanistan spanned the 6<sup>th</sup> to the c. 10<sup>th</sup> century. See also Kimmert (forthcoming).

<sup>3</sup> Red clay was also used for building construction (floors, walls, plinths) at some sites, such as Qol-i Tut, but the topic goes beyond the focus of this short article. Refer to Paiman 2018; 2020.

<sup>4</sup> Other sites near Kabul that appear to have yielded red clay-based sculpture include Bazikhel and Al Ghata; the material and chronological parameters of the sites and their sculptural decoration require research to determine their relationship to the sculptural output of the Śāhi period.

- Why was red clay popular during the Śāhi period? Is there a meaningful connection between the use of red clay at different sites and technique, ideology, etc.?



Regions and sites that yielded red clay-based sculpture in the Śāhi territories. (Map: © University of Vienna, Department of Geography and Regional Research, 2012; detail, with annotations by author)

### State of Research and Limitations in Archaeological Data

The phenomenon of red clay sculpture in the Śāhi territories has been largely overlooked until now. Conspiring factors have contributed to scholars’ limited awareness of the use of red clay—the inaccessibility of archaeological sites and museums due to decades of conflict and political insecurity in the regions; the inadequate documentation of excavations and finds, many of which have not been published (e.g., Tepe Khazana; also Al Ghata, Bazikhel);<sup>5</sup> reliance on black and white photographs and photographs depicting only certain vantage points, which cannot adequately convey the wide variety of clays and techniques used;<sup>6</sup> and the fact that many sites using red clay have only recently been excavated (e.g., Mes Aynak, rescue excavations began 2009; Qol-i Tut, 2013-2019; Tepe Narenj, 2004-2013). The limited known quantity of red clay objects, particularly in present-day Pakistan and North India, is further related to the friable nature of clay and thus decay of many objects but also due to the historiographical issue of the inconsistent usage of terminology for clay-based objects beginning with nineteenth and early twentieth century excavation reports. These reports typically distinguish between ‘stone’ and ‘stucco’ sculpture, with the category of ‘stucco’ generically used to refer to a variety of clay-based media—unfired clay, terracotta (literally ‘fired clay’),<sup>7</sup> stucco, and combinations thereof.<sup>8</sup>

<sup>5</sup> In other cases, publications written in certain languages (e.g., Dari, Pashto, Japanese) and with limited print runs have proven more difficult to access by the wider academic community.

<sup>6</sup> However, some excavation reports featuring only black and white photographs give detailed descriptions of the varieties of clay and other materials used for objects, as for Tapa Sardar (Taddei 1968; Taddei and Verardi 1978).

<sup>7</sup> Reedy (1992: 278) defines terracotta as ‘a red, brown, or yellow unglazed porous ceramic material fired at low temperatures (700°-900°C).’

<sup>8</sup> For instance, M. A. Stein’s photograph inventories from Sahri Bahlol only differentiate stone and stucco (see Falconer and Russell-Smith 2007: 116-27). See further discussion in Kimmitt (2022).

I reject the still prevalent identification in archaeological reports, scientific literature, and museum records of many of these sculptures as terracotta,<sup>9</sup> which neglects consideration of their production technique and functional context. The unfired red clay-based objects discussed in this entry come from sites that have experienced conflagrations, resulting in unintentional firing of many sculptures and thus subsequent misattributions. In the case of Ambaran, Charles Fabri (1955: 58-59) proposed that the heads were independently and deliberately fired, then attached to a vast mural of wet clay which was fired in situ. This rather unrealistic theory has been followed by subsequent scholars (e.g., Chandra 1973: 56), while the heads have also been identified as stucco, albeit less frequently (e.g., Deva 1988: 367; see K.M. Varma 1970: 115 for others). Notably, until Varma (1970) and even following his work, experts have often ignored the fact that unfired clay-based sculpture in Historical Northwest India was constructed with an internal wooden armature, which is not a technical feature characteristic of (intentional) terracotta.<sup>10</sup> Proper identification of the materials and techniques of Śāhi red clay sculpture was first introduced in the Tapa Sardār excavation reports of Taddei (1968) and Taddei and Verardi (1978) and has only recently re-emerged in scholarship (e.g., Klimburg-Salter 2010; Paiman 2018).

The challenges of the contemporary geopolitics of the Śāhi territories should not be neglected. The tremendous archaeological wealth of the region remains largely shrouded by the, often devastating, effects of conflict within and across the modern borders of Afghanistan, Pakistan, and North India (specifically, Jammu and Kashmir). Our picture of Buddhist material culture is thus skewed by limitations in data and knowledge. Much of Afghanistan's archaeological activities have been focused in the greater Kabul region, and to a lesser extent Bāmiyān, but the vast and agriculturally rich provinces of Wardak and Logar will yield further archaeological treasures if it is ever possible to safely excavate there. Similarly, further scientific exploration and excavations are needed in Pakistan and in Jammu and Kashmir to expand the fragmented picture of Buddhist sites with clay-based sculptural programs.

The limitations in information have so far allowed for only a general chronological framework for red clay sculpture. Taddei (1999) identified the production of unfired red clay sculpture in Afghanistan during the 5<sup>th</sup>/6<sup>th</sup> to 8<sup>th</sup> or 9<sup>th</sup> centuries, though recent excavations at Kabul Valley sites (Qol-i Tut, Tepe Narenj) may extend this period to as late as the 10<sup>th</sup> century.<sup>11</sup> Klimburg-Salter (2010: 177) and Paiman (2018: 118; 2020: 77) suggest that use of red clay in the south of Afghanistan emerged in the 7<sup>th</sup> century. In fact, Paiman has recently argued that traces of this clay are rarely found south of the Hindukush prior to the end of the 6<sup>th</sup> century and that from the 7<sup>th</sup> century, the Kabul Valley became the largest center in southern Afghanistan to use not only red but also green and yellow clays for sculpture production and architectural finishing<sup>12</sup> in Buddhist, Hindu, and Tantric contexts.<sup>13</sup> Unstudied red clay-based sculpture from Haḍḍa now in the collection of the Musée Guimet, Paris, could provide some

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<sup>9</sup> E.g., Barrett 1957: 57-58; see discussion in Varma 1970. In the case of Ambaran (Akhnur), this attribution began with the publications of Fabri (1939; 1955) and continues in most museum labels (see, for example, the online object records at the Ashmolean; Art Institute of Chicago; Los Angeles County Museum of Art; The Metropolitan Museum of Art).

<sup>10</sup> Reedy (1992: 278) has noted that large terracotta sculptures in India 'were modelled over an inner core of straw that would carbonise during firing, leaving a hollow centre and thus a much lighter piece.'

<sup>11</sup> See, for instance, Paiman and Alram 2013; Paiman 2018, 2020.

<sup>12</sup> These different clays have been used to plaster walls and floors (Qol-i Tut, terraces T2, T3, T4, T7, T10) and as mortar in stone foundations (Qol-i Tut, terraces T4 and T7; Gul Hamid Monastery at Mes Aynak). I am grateful to Zafar Paiman for sharing this information with me (personal communication, 24 October 2020).

<sup>13</sup> Paiman, personal communication, 24 October 2020.

of the earliest evidence for use of this material in Afghanistan or could indicate a possible late phase of sculptural production at this large and important site.<sup>14</sup>

During the Šāhi period, sculptures with a red appearance were highly valued by patrons and artisans, as evidenced by the important technical variations observed in red clay sculptures from different sites in the Kabul Valley and extended Šāhi domains. Notably, we can distinguish between sculptures made entirely of red clay (Ambaran, Tepe Khazana, possibly Tepe Maranjan) and ‘red clay-coated’ sculptures built up of layers of clay and finished with a red clay surface treatment such as an overlay of slip (or a type of lacquer) (Tapa Sardār’s late phase, Mes Aynak, Fondukistan, Tepe Narenj, Qol-i Tut). There are further technical differences within these categories (e.g., the modeling techniques at Ambaran and Tepe Khazana differ). Other clay sculptures in eastern Afghanistan have been finished with red paint—Khwaja Safa (Kabul Valley), Tepe Kalan (Kapisa),<sup>15</sup> Kharwar/Kafir Kot (Logar Valley), Bāmiyān (Hindukush)—to achieve this desired aesthetic.

### ‘RED CLAY-COATED’ SCULPTURE IN AFGHANISTAN

Most sculptures excavated so far in Afghanistan can be classified as ‘red clay-coated,’ a designation introduced by Taddei in his reports on Tapa Sardār.<sup>16</sup>

#### ***Tepe Narenj, Kabul Valley***

Site: *c. early 5<sup>th</sup> to late 10<sup>th</sup>/early 11<sup>th</sup> century*

Sculptural production (red clay-coated): *c. 7<sup>th</sup> to late 10<sup>th</sup> century*

Unfired red clay is used for sculpture produced during the later phases at Tepe Narenj, beginning in the *c. 7<sup>th</sup> century*, usually to coat the surface of an inner common (‘yellow’) clay core (Chapel 6, Chapel 8, Zone 14) (Paiman and Alram 2010/2012, 2013; Forgione 2014; 2019). Most of the heads known from the site are representative of earlier phases that used only yellow clay, covered in a thin layer of plaster (‘plaster-coated clay’). Forgione (2014; 2019: 132) has identified the use of red clay to make historical repairs to sculptures originally made of plaster-coated yellow clay (Zone 14). Comparative chemical-physical analyses conducted by the Italian Archaeological Mission in Afghanistan show that the red clay used at Tepe Narenj exhibits a ‘reduced plastic and cohesive capacity’ (Forgione 2019: 133). The red clay was, therefore, combined with plant and mineral additives as well as a vegetable glue to increase its adhesiveness (as well as the adhesiveness of finishing layers, like paint and gilding) (*ibid.*).<sup>17</sup> For instance, some sculptures bear a thin layer of a liquid red clay mixture (‘bolus’)

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<sup>14</sup> Notably artifacts like the head of a donor (MG 17283) from Tapa-i-Kafariha, which appears to have been burnt, and the head of a bodhisattva tentatively attributed to Tapa-i-Kafariha’s Chapel K33 (MG 172891), both excavated by the DAFA, Jules Barthoux mission in 1928 and identified as ‘3<sup>rd</sup>-4<sup>th</sup> century’ and ‘stucco’ on the wall labels, though the curator Pierre Cambon confirmed that this requires revision. These sculptures were observed during a research visit to the Musée Guimet by Kimmet, Klimburg-Salter, and Lenko, September 25-28, 2021 (financed by the FWF Shahi project). Tarzi (1986) contributes the only thorough technical study of the manufacture of clay-based sculpture at Haḍḍa, which is of value for comparison with sculptural production at other sites. He does not mention the use of red clay in this context. However, Paiman (2020: 77) encountered red clay sculpture at the monasteries of Tepe Shotor and Tapa-i-Kafariha during his Haḍḍa excavations.

<sup>15</sup> Not to be confused with the monastery of Tepe Kalan at Haḍḍa, where an impressive number of stucco-coated clay heads and other objects were found, many now in the National Museum of Afghanistan; see Tissot 2006: 359, 385-466.

<sup>16</sup> See Taddei 1968; Taddei and Verardi 1978; also Taddei 1993.

<sup>17</sup> Also at Tapa Sardār.

or resin<sup>18</sup> applied to strengthen the adhesiveness and visual effect of the gold leaf (ibid.: 133, 135). It also contributes to the strength or hardness of the outermost surface layer. Paiman (and Alram 2010/2012: 35) described the red clay used for a colossal bodhisattva figure in Zone 10<sup>19</sup> as ‘very difficult to sculpt, the use of which in the Kabul region was indeed documented for the first time.’



Left: Seated Buddhas (nos 5, 4), Tepe Narenj, Zone 14, Stucco-coated yellow clay with historical red clay repairs. Right: Feet of a colossal bodhisattva statue, Tepe Narenj, Terrace T7, Chapel 6, red clay-coated yellow clay core, h. 71 cm (not incl. rectangular stone pedestal). (Photos: © Zafar Paiman, 2013; courtesy of Zafar Paiman)

### ***Qol-i Tut, Kabul Valley***

Site: *c. early 6<sup>th</sup> to late 11<sup>th</sup> century*<sup>20</sup>

Sculptural production (red clay-coated): *c. 7<sup>th</sup> to 11<sup>th</sup> century*

Similar to Tepe Narenj, in his recent excavations at Qol-i Tut (2013-2019), Zafar Paiman (2018; also Paiman and Filigenzi 2019) identified the use of red clay beginning in the 7<sup>th</sup> century for the architectural structure (to bond stones, for floors) as well as for sculptures constructed of yellow clay, sometimes covered with a layer of red or green clay or ‘stucco.’<sup>21</sup> The sculptures have a wooden armature, and the monumental ones use wooden ties to fix them to the walls.

<sup>18</sup> Paiman prefers to call it a ‘resin layer’ (personal communication, 24 October 2020), and notes that this adhesive treatment is not unique to red clay sculpture but applied to sculptures of all clay varieties in Afghanistan. It is also not unique to specific sites as Tarzi (2011: 27) suggested to be the case for Mes Aynak, Haḍḍa, and Bāmiyān. For a very different artistic context, see Anthony Sigel’s (2012: 102-103) discussion of the use of a ‘bole’ layer on some of Bernini’s clay sculpture models.

<sup>19</sup> Paiman (and Alram 2010/2012: 35) identifies this figure in Zone XI; see also Paiman and Alram 2013; Paiman 2017: 103. The feet from another colossal red clay-coated figure with a yellow clay core were found in Zone X (Paiman 2017: 104).

<sup>20</sup> See Paiman (2018: 119) for a relative chronology for the site. He suggests the site could even extend to the mid-12<sup>th</sup> century. Also Paiman and Filigenzi 2019: 294.

<sup>21</sup> The French reads ‘sculptures en argile jaune séchée, recouverte dans certains cas d’une couche d’argile rouge et verte, parfois stucquée’ (Paiman 2018: 101).



Female figure, possibly a donor, Qol-i Tut, Chapel 16, Yellow clay covered with a fine layer of resin, then layer of red clay, with red paint, h. 57 cm. (Photo: after Paiman 2018: 115, fig. 16; courtesy of Zafar Paiman)

### ***Fondukistan, Hindukush***

Sculptural production (red clay-coated): *early 8<sup>th</sup> century*<sup>22</sup>

The early 8<sup>th</sup>-century unfired red clay-coated sculptures of Fondukistan, as shown by Susanne Novotny's research, were constructed of an internal wooden armature held together and wrapped in vegetal fibers, then covered in layers of clay—an inner core of yellow clay containing animal hair and straw additives, several coats of increasingly refined red clay (thin and thick), and an exterior layer of thin clay or slip that is remarkably delicate and durable like ceramics (Novotny 2009: 142; also Klimburg-Salter 1989: 177). The quality of the surface may be the result of a special varnish (or lacquer) but requires further analysis. The sculptures were finished with paint (notably blue<sup>23</sup> on the hair and under the eyes) and, occasionally, gilding; decorative details were separately molded and affixed to the wet clay. Figures were placed in niches atop pedestals and small wooden dowels were used to attach them to the mud brick walls (Novotny 2009: 143).



Head of devata, Fondukistan, Niche D, early 8<sup>th</sup> century, yellow clay core coated with layers of red clay and pigment, National Museum of Afghanistan. (Photos: Novotny, 2005, WHAV)

<sup>22</sup> Klimburg-Salter (1989: 195) attributed the decoration of the monastery to the early eighth century. A *terminus post quem* is provided by the find of several coins in a funerary urn beneath the 'princely couple' sculpture in Niche E, one being a Sasanian coin with an Arab countermark dated by Robert Göbl to 689 CE. See also Novotny 2007, 2009.

<sup>23</sup> The blue was obtained from lapis lazuli as confirmed by electron microscope scans (Novotny 2009: 143).

### ***Tapa Sardār, Ghazni***

Site: *c. 2<sup>nd</sup>/3<sup>rd</sup> to 9<sup>th</sup> century*<sup>24</sup>

Sculptural production (red clay-coated): *c. 7<sup>th</sup>-8<sup>th</sup> century*

Taddei (1999: 393) has attributed the red clay production at Tapa Sardār to between the 5<sup>th</sup>/6<sup>th</sup> and 8<sup>th</sup> century but likely closer to the 7<sup>th</sup> or 8<sup>th</sup> century because the red clay-coated sculptures with their red clay appliqué elements are mostly of the ‘Fondukistan [stylistic] type.’ Taddei (1968: 123) identifies the technique found at Tapa Sardār in which ‘the surface finishing of images and clay monuments is obtained by using a peculiar red clay, whereas the core is of common (yellow) clay mixed with straw. Wooden sticks were used for fixing images to walls and limbs or heads to trunks. Whenever fire has reached the clay monuments—and this is the case with many of the minor *stūpas* and thrones—it has turned them into more or less blackened terracotta. This has of course favored their preservation but has completely destroyed their colour finishing.’



Head of Durga, Tapa Sardār, Chapel 23, TS 1145, red-coated clay with pigment, H. approx. 0.64 m, National Museum of Afghanistan (current location unknown). (Photo: Novotny, 2005, WHAV)

Novotny’s examination of Tapa Sardār and Fondukistan sculptures in the collection of the National Museum of Afghanistan has revealed that ‘the fine surface we encounter in the Fondukistan pieces is not found in those from Tapa Sardār. In contrast, they are rather rough-textured and subject to chipping. Similar observations were made when looking at fragments from Tepe Khazana in the Kabul Museum’ (Novotny 2009: 142). Italian technical analysis of

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<sup>24</sup> Archaeological evidence indicates that the fortified Buddhist site was active from the *c. 2<sup>nd</sup>/3<sup>rd</sup> to 9<sup>th</sup> century* (Taddei and Verardi 1978: 134). For discussion of the chronology of Tapa Sardār, see Taddei 1999; Verardi and Paparatti 2005; Klimburg-Salter 2010; Verardi 2010. While Taddei’s periodization extends from the 3<sup>rd</sup> to 8<sup>th</sup>/9<sup>th</sup> century, Verardi favors earlier dates beginning in the early 3<sup>rd</sup> century with the final abandonment of the site in 795 CE when Ibrāhīm ibn Jibrīl reached Kabul and may also have attacked Zābul (Verardi and Paparatti 2005: 442; Verardi 2010: 346). The site—and its unfired clay-based sculptural production—can be divided into an early period and a late period. Taddei suggested a span of the 3<sup>rd</sup> to *c. 6<sup>th</sup> century* for the early period, with the late period from the late 7<sup>th</sup> to the 8<sup>th</sup>/9<sup>th</sup> century (Taddei and Verardi 1978; Verardi and Paparatti 2005: 405, n. 2). Verardi and Paparatti (2005) offer a slightly revised chronology, with the early sanctuary covering six phases from the early 3<sup>rd</sup> century to its destruction by fire in *c. 671-672*, and the late sanctuary from *c. 680* to its abandonment *c. 795*. Klimburg-Salter (2010: 184) has questioned this earlier date for the end of Tapa Sardār, arguing that it is not supported by art historical evidence, specifically the connections to art in Kashmir and Kabul at this time.

clay artifacts with red pigment from Tapa Sardār shows that they are formed of oxidized iron-bearing clay particles (Rosa, Theye, and Pannuzi 2019: 35).

***Mes Aynak, Logar***

Site: c. 2<sup>nd</sup>/3<sup>rd</sup> to 9<sup>th</sup> century<sup>25</sup>

Sculptural production (red clay-coated): c. 7<sup>th</sup> to 9<sup>th</sup> century(?)

Numerous unfired clay sculptures with pigment have been uncovered at Mes Aynak (see, e.g., Massoudi 2011). Klimburg-Salter (2019: 199; also 2018: 231) observed that ‘a large number of clay heads in different styles, but all using or appearing to use red clay, and many also of large size, have also been found at Mes Aynak, most of extremely fine quality.’ According to Paiman’s onsite observations, the sculptures are typically constructed of red clay over a yellow clay core and demonstrate direct influence from the artistic workshops of the Kabul Valley.<sup>26</sup> The monumental sculptures representative of the last phase at Mes Aynak also reflect the trend for a red appearance (Klimburg-Salter 2018: 231), but the differences in the use of red clay versus red surface treatments require further analysis. For instance, several of the monumental seated Buddhas in Mes Aynak’s Tepe Kafiriyat monastery were finished with a red ochre adhesive or resin to affix gold leaf (Tarzi 2011: 27).



Head of Buddha, Mes Aynak, clay with red slip, h. 19.5 cm, National Museum of Afghanistan, 010-63-79. (Photo: Niebuhr, 2016, WHAV)

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<sup>25</sup> Mes Aynak appears to have sustained a long period of occupation, possibly from as early as the 3<sup>rd</sup> century BCE to the 15<sup>th</sup> century CE as indicated by preliminary examination of ceramics collected within a 2-kilometer radius of the site (Paiman 2018: 58). Based on archaeological and numismatic evidence, Klimburg-Salter (2019: 197) has identified an early period (c. 2<sup>nd</sup>/3<sup>rd</sup>-6<sup>th</sup> centuries CE) and a late period (c. mid-7<sup>th</sup> to 9<sup>th</sup> centuries) for Mes Aynak’s artistic production, the latter of which was more active. She previously has shown that some of the clay sculptures of Mes Aynak’s Tepe Kafiriyat monastery were created not earlier than the 5<sup>th</sup> but more likely 6<sup>th</sup> century, while others were made during the late 6<sup>th</sup>/7<sup>th</sup> to 8<sup>th</sup>/9<sup>th</sup> centuries (Klimburg-Salter 2018: 227). Paiman also emphasizes that, according to the examination of ceramic and sculptural finds so far, the excavated monasteries cannot be dated prior to the mid-4<sup>th</sup>/5<sup>th</sup> century (personal communication, 24 October 2020). These dates conform with the preliminary chronologies suggested by other scholars, e.g., Engel 2011: 10.

<sup>26</sup> Paiman, personal communication, 24 October 2020; see also Massoudi 2011: 32. An apparently unique feature of some clay sculptures at Mes Aynak is their use of a metal armature rather than the wooden armature characteristic of Afghan clay sculpture. I am grateful to Zafar Paiman for sharing this observation.



## RED CLAY SCULPTURE

Three sites yielded sculptures that appear to be constructed exclusively of red clay: Ambaran (Akhnur) in Jammu, India, and Tepe Khazana and Tepe Maranjan in the Kabul Valley. The more recently unearthed sculptural finds from Shiwaki and Bazikhel may also have been constructed entirely of red clay, but further documentation and examination are required.

### *Ambaran*

Sculptural production (red clay): c. 6<sup>th</sup>/7<sup>th</sup> century)<sup>27</sup>

The approximately seventy extraordinarily diverse and beautifully sculpted heads attributed to Ambaran (Akhnur)—the ‘Akhnur Group’—feature an iron-rich red clay finished with a highly burnished surface that appears to be a layer of red clay slip.<sup>28</sup> The sculptures combine several techniques—a solid mass of clay (the ‘clay core’) is covered with a face cast from a mold; the hair and headdresses were hand modeled and built up around the face mask and clay core; and small decorative elements, such as hair curls and ornaments, were produced in molds and individually attached using an appliqué technique. The composite construction uses a single variety of red clay throughout. Originally unfired, many of the heads were subsequently accidentally burned,<sup>29</sup> as suggested by the uneven dark or blackened patches observed on the surface of the heads as well as blackened patches in cavities bearing the textured marks of the former wooden armature which would have been destroyed in a fire.<sup>30</sup>

An internal wooden armature was used to support the heads and to affix them to the figure’s body and/or a wall, as indicated by marks and indentations in the clay.<sup>31</sup> Varma (1970: 145-46) inferred that the figures used a central wooden element, or ‘vertebral column’ (Skt. *vaṃśadaṇḍa*), that extended from the trunk into the head, and that the wood column would have been wrapped in rope, straw, or reeds to help bind the clay to it.<sup>32</sup> Additionally, the Akhnur

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<sup>27</sup> Scholarship has offered considerably variable dates for the sculptural decoration of the site ranging from the 4<sup>th</sup> to 8<sup>th</sup> century. The decoration of Ambaran has generally been attributed to a slightly earlier date than Ushkur (Kashmir). Fabri (1955: 62), Barrett (1957: 58), and Rehman (1979: 286) all proposed the early 8<sup>th</sup> century, following Kalhana’s attribution in the *Rājatarangīnī* of Ushkur to the reign of the great Karkota dynasty king Lalitāditya Muktapida (r. c. 724-760 CE) (Stein 1900: 140). Siudmak (1989: 55) and Harle (1974: 31) prefer earlier dates in the 5<sup>th</sup>/6<sup>th</sup> and 6<sup>th</sup> century, respectively. More recently, B. R. Mani (2005: 567) has proposed pushing the chronology to the Kuṣāṇa period (second half of the 4<sup>th</sup> century) based on the stratigraphy determined during his excavations at the site; however there is not yet a firm correlation between his structural finds and the heads removed prior to his excavations in 1999-2001. Klimburg-Salter (1982: 110-11) prefers the 7<sup>th</sup> century based on stylistic comparison to the Ushkur groups and Gupta terracotta sculpture. Distinction must of course be made between the original foundation of the sites and the production of the clay sculptural groups.

<sup>28</sup> K.M. Varma (1970: 223), by contrast, states that the Akhnur Group heads in the Indian Museum, Calcutta do not have a final thin coat of clay or slip, perhaps due to the use of molds for the faces. I believe that this matter must be reviewed in consultation with conservation and technical experts, as well as through closer comparison to sculptures in Afghanistan.

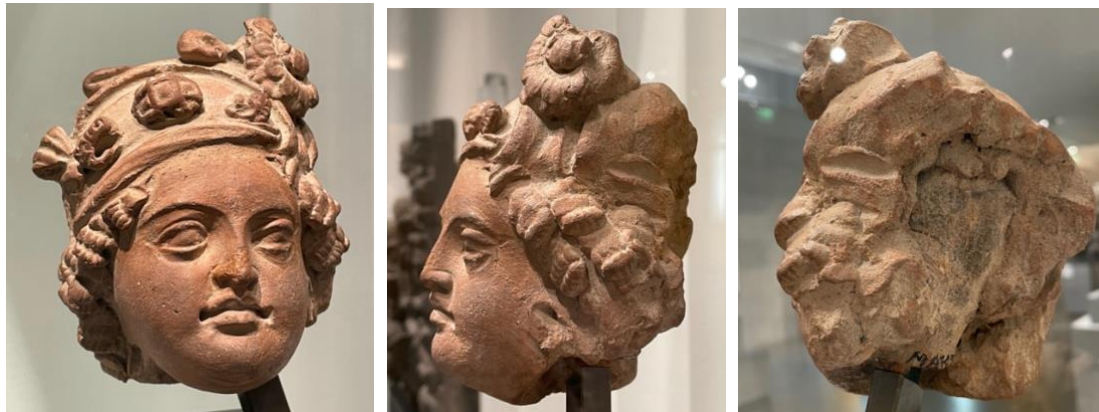
<sup>29</sup> This theory was first proposed in 1970 by K. M. Varma and has been adopted by a few subsequent scholars, notably Klimburg-Salter (1982); Verardi (1983); Taddei (1996); and Luczanits (2004, 2008).

<sup>30</sup> The blackened patches, which indicate the unintended presence of oxygen during the firing process, are not, however, definitive proof as to whether the firing was accidental or deliberate (John Eskenazi, personal communication, 8 October 2020; also Reedy 1992).

<sup>31</sup> Varma (1970: 137; also 141) differentiates between the use of a proper armature as in a ‘constructed frame linking different limbs of the body’ and use of a wooden dowel to join the separately made head and trunk or the head to another surface.

<sup>32</sup> The fact that he found limited evidence partly reflects the small number of Akhnur heads he examined. Varma (1970: 145): ‘It has been pointed out that our Fig. 28 has a hole caused by the loss of the extension of the *vaṃśadaṇḍa* and inside the left wall of the same hole two furrows of thin size—one being comparatively prominent while the other somewhat faint—are visible. These are possibly the impressions left by the ropes wound around the *vaṃśadaṇḍa* in the course of a spring.’

Group heads used clay chunks or ‘knobs’ (in addition to wooden dowels) to affix the heads to a wall or other surface, probably while the clay was still wet. These elements, along with surface variations, convey where the head was attached and from which angle the head was intended to be viewed. Thus, while most heads were affixed to a surface in the form of high relief panels, others were likely attached only by their bodies or were freestanding similar to clay sculptures in eastern Afghanistan, like the early 8<sup>th</sup>-century figures from Fondukistan placed in niches and earlier examples from Haḍḍa.<sup>33</sup> In distinction from the Afghan Śāhi-period sites, Ambaran’s sculptural program appears to have been assembled in a narrative context. The highly sophisticated sculpting and elaborate decorative detailing of the Ambaran sculptures further differentiates them from many of their early Afghan counterparts.



Head of a princely figure or bodhisattva, Ambaran (Akhnur), red clay (accidentally fired), Musée Guimet, Paris, MA 7096. (Photos: Kimmet, 2021)

### ***Tepe Khazana, Kabul Valley***

Sculptural production (red clay): *c.* 7<sup>th</sup> century<sup>34</sup>

The approximately thirty (or fifty?)<sup>35</sup> heads recovered through salvage archaeology from Tepe Khazana in the 1930s and deposited in the National Museum of Afghanistan can also be identified as red clay.<sup>36</sup> The sculptures—which display a rich red color—were accidentally fired due to a conflagration at the site ‘several centuries ago’ (Tissot 2006: 347).<sup>37</sup> There has been no technical examination or other study of the objects. Photographs kindly supplied by the National Museum of Afghanistan appear to demonstrate technical similarities with the Akhnur Group, but, unfortunately, the consolidation and wooden backings attached by the museum for preservation and display make it difficult to understand the production technique.<sup>38</sup> Recent examination of heads attributed to Tepe Khazana in the storeroom of the Musée

<sup>33</sup> In her detailed technical study of the Fondukistan clay sculptures, Novotny (2007, 2009) reconstructed the sculptural program of the temple showing the arrangement of the figures in niches.

<sup>34</sup> Paiman (2020: 77) dates the objects to the end of the 7<sup>th</sup> or middle of the 8<sup>th</sup> century.

<sup>35</sup> Tissot (2006: 347) states that fifty heads were deposited in the National Museum; this number is followed by Fussman (2008: 302). Paiman (2018: 97, n. 3), however, clarifies that, according to the then museum director Omara Khan Massoudi, there were only thirty red clay heads and some body fragments in the collection at the time of Tissot’s publication.

<sup>36</sup> See Novotny 2009: 142; Paiman 2018: 97, n. 3; also Klimburg-Salter, Musée Guimet curator Pierre Cambon, and National Museum Director Fahim Rahimi and curators, personal communications.

<sup>37</sup> As a result, Tissot (2006: 347-50) identifies the heads as ‘baked clay.’ She refers to two reports by H. A. Kohzad: 1933-1934 [AH1312], *Salnama-e Mojala-e Kabul*, Kabul; 1967 [AH1346], *Honare Qadime Afghanistan*, Kabul. I have not managed to access either report.

<sup>38</sup> The objects are stored in the presidential palace, making them inaccessible for further study.

Guimet, Paris, revealed a stark difference in the technique seen at Ambaran.<sup>39</sup> The Guimet's Tepe Khazana heads (MG 18565, MG 18566, MG 18570) are hand modeled as a solid mass of red clay with no visible aggregate material; it is not a composite construction as at Ambaran. A mold might have been pressed into the clay mass to form the face, then finished by hand. Decorative elements like hair curls are made with a mold and attached with the appliqué technique. Curiously, there appear to be differences in the surface treatment, texture, and color of the Tepe Khazana heads in the Guimet from those in the National Museum of Afghanistan. Without studying the full group of sculptures in person, it may not be possible to reconcile these differences.



Head of a male, Tepe Khazana (exc. no. 42), red clay (accidentally fired), National Museum of Afghanistan. (Photos courtesy of the National Museum of Afghanistan)



Head, Tepe Khazana, solid red clay, Musée Guimet, Paris, MG 18565. (Photos: Kimmet, 2021)

### ***Tepe Maranjan, Kabul Valley***

Sculptural production: *c. 5<sup>th</sup>/6<sup>th</sup>-8<sup>th</sup> century(?)*<sup>40</sup>

Two small donor figures are identified as 'red clay' in Tissot's (2006: 345) catalogue of the National Museum of Afghanistan.<sup>41</sup> I am not aware of a technical discussion of these donor figures or other references to the varieties of clay used; the type of clay is not mentioned in the

<sup>39</sup> I'm grateful to Guimet curator Pierre Cambon for permitting our team to study these objects and sharing his immense knowledge on September 27-28, 2021.

<sup>40</sup> Fussman and Le Berre (1976) attributed the clay sculptures to the 6<sup>th</sup>-7<sup>th</sup> century CE. Fussman (2008: 303) later shifted this dating to the 5<sup>th</sup>-6<sup>th</sup> century. Tissot (2006: 343) says 'perhaps sixth to eighth century.' Taddei (1999: 394) writes that 'it is true, Tarzi argues, that the two kneeling donors appear to be as late as Fondukistan, but the Bodhisattva and the Buddha images show the classical type of drapery which is typical of the early periods of Buddhist clay production.'

<sup>41</sup> I do not know if this is based on Tissot's own examination of the objects or on an unpublished (2002) report by Z. Tarzi which I have not yet managed to access.

1933 archaeological reports of Carl and Hackin (Hackin, Carl, and Meunié 1959), nor in the 1976 report of Fussman and Le Berre. At this stage of research, we cannot exclude the possibility that the two figures were constructed of a yellow or gray clay core<sup>42</sup> and finished with a layer of red clay as Paiman has proposed to be the case for the large seated bodhisattva from Tepe Maranjan's Chapel E.<sup>43</sup>



Donor figures, Tepe Maranjan, Red clay (?), National Museum of Afghanistan, inv. nos 64-11-1 and 64-11-7 (current location unknown). (Photo: Klimburg-Salter, 1967, WHAV; detail.)

### ***Shiwaki, Kabul region***

Site: c. 1<sup>st</sup>-7<sup>th</sup> century CE(?)<sup>44</sup>

Sculptural production: *dates unknown; possibly Śāhi period*<sup>45</sup>

Located south of Kabul, Shiwaki contains a group of Buddhist monuments including a main stupa and numerous tumuli (Fussman 2008). Recent excavations by the Afghan Institute of Archaeology have uncovered remains of red (?) clay statues that may date to the Śāhi period, but further examination is required to assess their exact materials and construction.

### ***Bazikhel, Paghman district***

Site: *dates unknown*

Sculptural production: *dates unknown*

Bazikhel (also known as Ghondi Zarsang and Tapa-e-Zasang) is situated in the Paghman district about 25 km southwest of Kabul.<sup>46</sup> After the site was looted in 2003, a group of clay heads were recovered and entered the National Museum of Afghanistan; Paiman identified

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<sup>42</sup> Fahim Rahimi, Director of the National Museum, believes that the donor figures are made of gray clay with a polished surface layer (personal communication, 14 October 2020); unfortunately, the figures are no longer in the museum and thus cannot be properly examined.

<sup>43</sup> Paiman, personal communication, 24 October 2020. While the excavation reports discuss the bodhisattva sculpture's insect-damaged wooden armature and need for onsite consolidation, they do not mention the types of clay used. The object is kept in the collection of the National Museum of Afghanistan (inv. no. 72-11-IM (?)). See images published in Tissot 2006: 343 and Hackin, Carl, and Meunié 1959: figs. 7-9.

<sup>44</sup> The site's chronology remains conjectural. Prior to excavation, Fussman (2008: 300) noted that there were no object finds to aid in dating the site but hypothesized dates as early as the 1<sup>st</sup> century CE (Shevaki 1, inner stupa, contents of relic casket), 4<sup>th</sup>-6<sup>th</sup> century (Shevaki 3, inner stupa), and 5<sup>th</sup>-7<sup>th</sup> century (Shevaki 1, outer stupa).

<sup>45</sup> Paiman, personal communication, 24 October 2020. I do not know the precise find spots of these fragments.

<sup>46</sup> The coordinates are 34° 29' 15" N and 68° 54' 49" E; see: <https://www.mindat.org/feature-1146669.html>.

them as red clay with red pigment.<sup>47</sup> Whether the heads are constructed entirely of red clay or red clay-coated requires further examination, as does the site's chronology.

## RED-PAINTED CLAY SCULPTURE

Further analysis of the clay-based sculptures identified as 'red painted' may lead to new conclusions about technical innovations and how to categorize artifacts with a red appearance. The red surface may be the result of pigment, clay slip, or another treatment. The thickness and durability/friability should also be analyzed as a basis for comparison.

### ***Khwaja Safa, Kabul region***

Site: *built c. 300-500 CE; destroyed 867-879(?)*<sup>48</sup>

This Buddhist monument in the south of Kabul was excavated in 2004 by the Afghan Institute of Archaeology, yielding a number of clay statues painted red, including the head of a male figure and a seated Buddha figure (missing head) (Paiman 2005: 28-30).

### ***Tepe Kalan, Kapisa***

A large clay Buddha head painted in red was excavated at Tepe Kalan in 1940 by J. Carl and deposited in the Kabul Museum, though its current location is unknown.<sup>49</sup>

### ***Kharwar (Kafir Kot), Logar Valley***

Sculptural production: *c. 6<sup>th</sup>-7<sup>th</sup> century*<sup>50</sup>

Many of the known Kharwar clay sculptures—mostly heads of Buddhas, donors, and devas, as well as some torsos of donors—now held in the National Museum of Afghanistan<sup>51</sup> were finished in a layer of red paint and in some cases gilded.<sup>52</sup>

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<sup>47</sup> Personal communication, 24 October 2020.

<sup>48</sup> Paiman suggested that Khwaja Safa was built *c.* 300-500 CE and destroyed by Muslim invaders in 867-879 (see Fussman 2008: 302).

<sup>49</sup> According to Basir Kamjo, Curator of the Kushan Period at the National Museum (personal communication, 2020). The Buddha head (K.M. inv. no. 25-1959) was listed number 25 in the excavation report of J. Carl (1959: 131) and illustrated in Tissot (2006: 335). In reference to the plan published in the MDFA VIII report, Fussman (2008: 308), however, identifies this head as coming from the site labeled 'Z = Dala Sang ?' (not the site labeled 'Y = Tepe Kalan ?'), comprising two chapels each occupied by a colossal clay seated Buddha.

<sup>50</sup> Verardi (2004), who surveyed the site for one day, attributed the sculptures to the 6th-7th century, whereas Paiman (2006: 33) offered an early attribution of the 5<sup>th</sup>-6<sup>th</sup> centuries for the Kharwar sculptures and those of Mes Aynak and Tepe Narenj.

<sup>51</sup> These objects were looted from the site in the early 2000s but recovered by Afghan authorities and transferred to the National Museum.

<sup>52</sup> See Verardi 2004: 20, 26; also color photographs held in the WHAV. National Museum Director Fahim Rahimi concurs with Verardi's assessment that the sculptures are made of cream/yellow and gray clays finished with red pigment (personal communication, 14 October 2020).



Head of a male figure wearing a turban, possibly a donor, Kharwar (Kafir Kot), unfired clay with traces of red paint, H. 20 cm, National Museum of Afghanistan, inv. no. 35.41.04.6. (Photo: Klimburg-Salter, 2004, WHAV)

### ***Bāmiyān, Hindukush***

Sculptural production: *c. 5<sup>th</sup>-7<sup>th</sup> century(?)*

Historical narratives and scientific analyses suggest that the colossal Buddhas of Bāmiyān (late 6<sup>th</sup>-early 7<sup>th</sup> century CE)<sup>53</sup> were covered in a layer of reddish paint or varnish (Inaba 2019: 77; Lluveras-Tenorio et al. 2017).<sup>54</sup> Fragments of clay sculptures from the Bāmiyān caves in the National Museum of Afghanistan display use of red pigment, but proper examination is needed to determine whether red clay was used.<sup>55</sup>

### ***Al Ghata, Wardak***

Site: *c. 2<sup>nd</sup>-3<sup>rd</sup> century and (?)*

Sculptural production: *mid-6<sup>th</sup>-early 9<sup>th</sup> century(?)*

Al Ghata, situated in Wardak province about 30 km southwest of Kabul, was excavated by the Délégation Archéologique française en Afghanistan (DAFA) in the summer of 2005. Unfortunately, there is no excavation report nor published articles. Of the original clay sculptures that decorated the former monastery and stupa, only three or four heads made it to the National Museum of Afghanistan; much of the sculpture was looted following the excavation (Paiman 2018: 107, n. 19). Based on onsite observations and examination of the Al Ghata heads in the National Museum, Paiman proposes that the clay sculptures were covered with a red clay layer.<sup>56</sup> Photographs held in the WHAV of two of the heads are not adequate to verify this hypothesis, though a red surface treatment (possibly red paint or clay slip) is visible.

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<sup>53</sup> See Klimburg-Salter 2019, 2020; Lluveras-Tenorio et al. 2017.

<sup>54</sup> Through scientific analyses, Lluveras-Tenorio et al. (2017: 4-5) determined that the original paint layer of the Buddhas' outer robes was pink, later overpainted in an orange-red color (Western Buddha) and pink (Eastern Buddha), with a third historical overpainting using a layer of white lead covered in red.

<sup>55</sup> Small clay heads from Bāmiyān's Cave G (*c. 5<sup>th</sup>-6<sup>th</sup> century CE*) on display at the Musée Guimet, Paris in September 2021, demonstrate a similar construction technique to the museum's Tepe Khazana heads: solid clay with (possible use of a) mold for the face, mold with appliqué for individual hair curls, and finished in paint (inventory numbers MG 17915, MG 17916, MG 17917, MG 17920, MG 17951; all excavated by DAFA, Joseph Hackin Mission, 1930).

<sup>56</sup> Paiman, personal communication, 24 October 2020.

## EXPANDING THE CORPUS AND FURTHER TECHNICAL STUDIES

This corpus of clay-based material and the phenomenon of unfired red clay production—which was of strikingly short duration—offer a possible cultural link across the full territory of the Śāhi kingdoms, an area that has only recently been regarded as culturally contiguous,<sup>57</sup> although already understood as such by scholars who identified it as Historical Northwest India.<sup>58</sup> It is hoped that ongoing research and the reexamination of objects housed in South Asian museums, as well as early archaeological reports, will allow for a reattribution of materials and thus the expansion of this corpus. Notably, limited examples of Buddhist clay-based sculpture have been documented in present-day Pakistan,<sup>59</sup> none being red clay (whereas stucco and terracotta are more common—but often inaccurate—attributions). This understanding will better allow scholars to treat issues of provenance<sup>60</sup> and chronology.

Of paramount importance is the need for further technical studies based on scientific analyses of the objects within this corpus. The sources and properties of red clay, for instance, merit further examination. In the Kabul Valley, Tepe Narenj and Qol-i Tut demonstrate a preference for the use of a red clay surface treatment over a common or yellow clay core, whereas finds from Tepe Khazana and possibly Tepe Maranjan are constructed of solid red clay. Red and yellow clays are widely available in the wider Kabul area (Forgione 2019: 132-33; Paiman, personal communication, 24 October 2020). The red clay—according to technical analyses (Forgione 2019: 132-33)—displays a reduced plasticity, whereas Basir Kamjo, Curator at the National Museum of Afghanistan, has observed a possible source of highly plastic red clay north of Kabul.<sup>61</sup> What are the different properties and plasticities of the red clays from these different sources around the Kabul Valley?

- Was the mineralogical composition the same?
- How did the particle size distributions differ?
- Were different organic additives and binders found in the matrix?
- What was the water content?
- Were different plasticities selected for clay used for sculptures versus clay used for architectural surfaces?
- What were the motivating factors in selecting red clay versus yellow or green clay?

Here we might note that the combined use of red, green, and yellow clays was not restricted to the Kabul Valley but was also used at, for instance, the Central Asian temple of Adzina Tepe (niche 1, corridor 27) for a late 7<sup>th</sup>-early 8<sup>th</sup>-century stamped votive plaque of a seated Buddha in which the Buddha is composed of a green clay matrix and inserted onto a red clay background with arched niche and stupa (Taddei 1993: 50-51).<sup>62</sup> Much earlier, in the 2<sup>nd</sup> century BCE-1<sup>st</sup>/2<sup>nd</sup> century CE, painted unfired clay sculptures from Old Nisa, Turkmenistan,

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<sup>57</sup> I refer primarily to the research conducted within the framework of the Austrian Science Fund project ‘Cultural Formation and Transformation’ (P31246) by a large network of multidisciplinary experts.

<sup>58</sup> See, for instance, Klimburg (1982: 25).

<sup>59</sup> For instance, a unique female head with elaborate headdress excavated at Sahri Bahlol in 1912 (Peshawar Museum, PM-3350) (Luczanits 2008: 320, figs 5, 6); and numerous heads excavated at Taxila that have been variously identified as ‘stucco,’ ‘clay,’ and ‘terracotta’ in the Archaeological Survey of India archives and literature but are likely clay that has been accidentally fired (see, e.g., Varma 1970: pl. XIV).

<sup>60</sup> Much of the clay-based sculpture from the Śāhi territories (much of which is today in reputable museums worldwide) remains without secure provenance due to illegal excavation, looting, and sale in antiquities markets from the mid-19<sup>th</sup> century to the present.

<sup>61</sup> Basir Kamjo, personal communication, Kyoto University, 13 December 2019. Kamjo plans to procure a sample of this clay for testing, but the unstable security situation in Afghanistan and Covid-19 pandemic have delayed this endeavor.

<sup>62</sup> A black and white image of this Buddhist plaque is published in Carranza 1993: 51, cat. no. 59.

combined a greenish clay core (with large particles) and outer layer of yellow-brown clay (with finer particles). Scientific analysis of the clay fragments shows that each layer displayed the same mineralogical components; the key differences were in the particle size distribution of the clays and the quantity of each mineral as well as the presence of natural dyes which impacted the color (i.e., the green clay contains a higher amount of the mineral chlorite) (Chiari, Invernizzi, and Bertolotto 1993: 228-229). In Afghanistan, there is also unpublished evidence for the use of green clay at Haḍḍa, as demonstrated by several sculptures in the Musée Guimet collection: a grayish-green clay Buddha head with red surface treatment attributed to Tepe Kalan (MG 17235); a green clay lion head that was part of the architectural decoration at Tapa-i-Kafariha (MG 21203); and several green clay samples possibly from Tapa-i-Kafariha.<sup>63</sup> Further examples of hybrid clay sculptures and architectural components along with their technical analysis may shed light on the topic.



Left: Head of a Buddha, Haḍḍa, Tepe Kalan, green clay with red surface treatment, Musée Guimet, Paris, MG 17235. Center: Head of a lion, Haḍḍa, Tapa-i-kafariha (excavated, DAFA, 1928), Musée Guimet, Paris, MG 21203. Right: Collection of red and green clay samples from Haḍḍa, possibly Tapa-i-Kafariha, Musée Guimet storeroom. (Photos: Kimmet, 2021)

The *raison d'être* of this brief but profuse output of Buddhist sculptures with red appearance remains without a definitive answer. Patrons and artisans selected red—whether clay, clay slip, or paint—for the outermost layer of these objects. While it is possible that they sought to replicate the red of stone objects found in less arid climatic zones of South Asia, this does not adequately explain the impetus since unfired red clay sculpture is also found at many Buddhist sites in Central Asia.<sup>64</sup> Red is an auspicious, sacred color in South Asia, but the precise ideological considerations behind this choice require further research. Were the material properties a major reason? If, for instance, the red clay from the Kabul region lacks plasticity and adhesiveness, then, following Forgione (2019: 134), we might hypothesize that—from a technical standpoint—it was preferable to use a more plastic clay for the sculpture's core and to use red clay only for the finishing layer or surface treatment in order to attain the desired visual effect. This could account for the much more limited production of solid red clay sculptures known in Afghanistan than sculptures using composite or layered techniques. As already noted in the case of numerous sites in Afghanistan (Tepe Narenj, Mes Aynak, Haḍḍa, Bāmiyān), a thin paint-like layer of red clay offered both technical and aesthetic advantages when finishing sculptures in pigment and/or gilding by strengthening the adhesiveness of the outer layers and enhancing the radiance of the gold. Further possible—but requiring more

<sup>63</sup> I am grateful to curator Pierre Cambon for sharing these materials and his insight during a research visit to the Musée Guimet together with Klimburg-Salter and Lenko, September 25-28, 2021 (financed by the FWF Shahi project).

<sup>64</sup> For example, Buddha and bodhisattva heads from Rawak Stupa (Xinjiang Autonomous Region), attributable to the 6<sup>th</sup>-7<sup>th</sup> century Khotan kingdom, also share the use of unfired red clay.



technical study—would be that the iron-rich red clays, while less malleable than other clays, offer superior durability when they dry or harden. This alone does not adequately explain the popularity of red clay sculptures across eastern Afghanistan, Central Asia, and in parts of northwest India given the differences in source locations of the clays, recipes for the clay matrices, and construction techniques (layered, solid). Here I am inclined to follow Paiman’s proposal that under the rising power of the Śāhi rulers in the Kabul Valley, new artistic workshops developed south of the Hindukush that used red—and to a lesser extent green—clay to create a new school of sculpture.

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