From Earth to Enlightenment
Materiality, Technology and Cultural Transmission of Terracruda Sculpture Across Buddhist Asia
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Colouring the Body
Pigments, Symbolism, and Beauty Practices in Ancient Afghan Buddhist Art

Giulia Forgione
University of Naples "L'Orientale", Italy; Italian Archaeological Mission in Afghanistan

Abstract This paper examines the role of colour, pigments, and ornamentation in Afghan Buddhist clay and stucco sculpture (4th-8th c. CE). Moving beyond purely symbolic interpretations, it considers pigments both as precious materials and as elements of visual experience. The relationship between sculptural ornamentation, real objects, and broader visual traditions receives particular attention. The study also investigates whether pigment choices may reflect culturally embedded ideals of beauty and bodily appearance, including practices comparable to the use of cosmetics, thereby opening new perspectives on artistic production, material culture, and perceptions of the body.

Keywords Buddhist art. Pigments. Cosmetic practice. Ornamentation. Beauty. Bodily appearance.

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1 Introduction

Between the 4th/5th and 8th c. CE, clay, stucco,[1] and mixed techniques[2] became particularly widespread across a vast region extending eastwards from Afghanistan to Xinjiang and southwards from Uzbekistan to India, where they were used to decorate Buddhist sacred spaces. Among the richest surviving *corpora* are Buddhist clay and stucco sculptures[3] produced in Afghanistan, many of which retain remarkable evidence of their original polychromy. Although the origins and transmission of this sculptural practice remain debated, its relationship with the Indian world is reflected in Sanskrit technical and ritual literature. Compiled between the 6th and 12th c. CE, the *Śilpaśāstra*s, *Āgama*s, and other treatises on arts and crafts also prescribe the production and polychromy of clay images.

Indian cultural influence extended beyond the technological and material aspects of this tradition to its aesthetic and iconographic language, since most of the figures represented belonged to the Indian cultural sphere. Colour likewise helped define iconographic types and shape how sacred images were understood and experienced.

Although colour has often been lost or survives only in fragmentary form, the remaining evidence shows that pigments formed an integral part of the sculptural conception rather than serving merely as a decorative finishing layer. According to the texts, through colour, artists completed the transformation of clay into living sacred images, contributing not only to their visual appearance but also to their symbolic and ritual efficacy.

Despite the importance of polychromy, its systematic study has long been hampered by several factors. Traces of colour are often poorly preserved, and their survival depends not only on the pigments themselves but also on the integrity of the complex stratified system to which they adhere. Clay sculptures are composite objects made from materials with very different physical and chemical properties. An inner clay core, prepared by mixing vegetal fibres into the clay paste, was modelled around a wooden armature, sometimes reinforced with reeds and ropes. The core was then covered with progressively finer layers of clay, followed by finishing layers of clay or stucco intended to receive the polychromy. All these constituent materials, together with any organic binding media, are susceptible to deterioration over time. Consequently, surviving polychromy is often difficult to detect and may not be visible to the naked eye.

Moreover, access to the archaeological material remains limited. Many sculptures are held in Afghan museums, while others are dispersed among

1 In this study, 'stucco' is used as a conventional broad term for white, malleable composite sculptural materials whose precise composition has not been established by archaeometric analysis. In Central and South Asia, these may include gypsum, lime-based compounds, or mixtures of components, depending on local traditions and technological practices. The term therefore refers to a class of modelling materials rather than a specific composition, unless a more precise identification is available.

2 'Mixed techniques' refers to sculptures combining clay and stucco, generally with a clay core and an external stucco coating of variable thickness, ranging from a few millimetres to more than 2 cm. The stucco could also be extensively modelled to achieve the final shape and surface details.

3 In this study, 'clay sculpture' refers specifically to sculptures made of clay and dried without firing.

collections elsewhere.[4] Where such evidence has been investigated, research has focused mainly on identifying pigments and painting techniques through archaeometric analysis (Stančo 2016; Olivieri, Pannuzi 2019). By contrast, the principles underlying these techniques, together with the cultural significance of colour, have received far less attention (Forgione 2019; Filigenzi 2020; Forgione 2025). Still less attention has been paid to the relationship between sculptural polychromy and culturally constructed notions of bodily appearance – including complexion, cosmetic practices, and the use of precious materials and ornaments.

This paper proposes a more integrated approach to the study of colour in the Buddhist sculpture of Late Antique Afghanistan. Drawing on archaeological evidence from major Buddhist sites such as Tapa Sardar, Tepe Narenj, Fondukistan, Mes Aynak and Hadda,[5] as well as comparative data from neighbouring regions and Sanskrit texts, it considers pigments not simply as technical materials but as elements embedded within a wider cultural system.

Comparisons with available analyses of pigments used in cosmetic practices in earlier periods and more distant regions also help situate this fragmentary evidence within the longer history of material and aesthetic traditions.

Ornaments, jewellery, and coloured surfaces are examined as interconnected expressions of shared concepts of beauty, status, and sacredness, embodying visual codes common to both artistic production and everyday life.

The paper also considers whether certain pictorial conventions observed in Buddhist sculpture – especially in the rendering of the skin, lips, and eyes – may have drawn on contemporary practices of bodily adornment and cosmetics. Rather than treating symbolic and naturalistic interpretations as opposed, these dimensions are considered complementary in the construction of the figures.

4 At present, direct access to archaeological material in Afghanistan remains severely restricted by the security situation, while opportunities for fieldwork and institutional collaboration are limited. The dispersal of sculptures among museums and collections in Afghanistan and abroad further complicates the study of coherent archaeological and artistic *corpora*.

5 The sites discussed here comprise a selection of well-documented Buddhist sites in Afghanistan and neighbouring regions investigated by different archaeological missions during the twentieth and twenty-first centuries. They were selected for the quality of the available archaeological record and their importance for the study of clay and stucco sculpture. With the exception of Hadda and Mes Aynak, which comprise several sacred areas, most are organised around a principal cultic space centred on a main stupa and associated with subsidiary structures and monuments. Mes Aynak and Tepe Narenj are among the few major Afghan Buddhist sites extensively excavated in the twenty-first century, through large-scale rescue excavations and a planned archaeological programme, respectively. Together with earlier discoveries at key sites such as Tapa Sardar and Fondukistan, these excavations have substantially expanded our understanding of the artistic and technological development of Buddhist sculpture in Afghanistan. For detailed information on the individual sites, excavation histories, and archaeological missions, the reader is referred to the extensive published literature; only the principal excavation reports and selected reference studies are cited here. These include: Taddei 1968; Taddei, Verardi 1978; Verardi, Paparatti 2005 (Tapa Sardar); Paiman, Alram 2013 (Tepe Narenj); Hackin, Carl, Meunié 1959 (Fondukistan); Hackin 1928; Barthoux 1933 (Hadda); Massoudi 2011; Litecka, Marquis, Engel 2013 (Mes Aynak).

2 Bodily Appearance and Ornaments

Figures in Indian art, as well as in the Buddhist art of Central and South Asia, are governed by iconographic conventions that define the identity of represented beings through a complex system of visual codes. Alongside postures (*āsana*s), gestures (*mudrā*s), garments and hairstyles, the body itself is constructed according to precise proportional canons that help express the nature, rank and spiritual qualities of the figure. The perfection attributed to divine or sacred beings is thus conveyed through bodily appearance, making beauty a visible manifestation of purity, virtue and transcendence. Physical features could likewise convey ideals of conduct and morality.

Within this cultural framework, ornamentation – including colour as an integral element of appearance – was never understood as mere decoration. The Sanskrit concept of *alaṃkāra*, meaning 'to make sufficient' and usually translated as 'ornament' or 'adornment', originally conveys the idea of rendering something complete, perfect, and appropriate to its function. The same term was used in Sanskrit poetics to designate rhetorical devices that embellish literary language, whereas in the visual arts it primarily refers to the adornment of the human form with jewellery, garments, flowers, hairstyles, auspicious marks, and cosmetics.

Accordingly, these elements did not simply beautify the body; they completed it, making it appropriate to its intended role, whether divine, royal, or ritual. *Alaṃkāra* also had an auspicious and protective dimension: jewellery, unguents, perfumes, and cosmetics could act as talismanic elements, invoking prosperity and warding off harmful forces (Gonda 1975).

Although Buddhas, monks, and ascetics generally lack jewellery – which symbolically expresses renunciation of worldly possessions – they are nevertheless visually characterised by other forms of adornment, including distinctive colours, garments, and iconographic attributes. By contrast, most other figures are richly adorned with necklaces, bracelets, *keyūras*, rings, earrings, and elaborate hair ornaments, as well as, in some cases, sumptuous crowns and garments decorated with rows of plaques representing jewelled textiles. Comparable motifs also occur elsewhere in sculptural programmes, for example in representations of textiles and thrones supporting sacred images, reflecting a broader visual culture in which precious materials and adornment held particular significance.[6]

Moreover, several studies have shown that jewellery and other objects represented in sculpture, including thrones and furniture (Srinivasan 2021), often reproduce items from contemporary material culture. This correspondence is particularly well documented in Gandharan art (1st c. BC-3rd c. CE), both in schist and limestone sculpture (Tissot 1999; Rabbani 2020) and in later clay and stucco productions (Forgione 2024).

Examples from geographically distinct sites show how similar forms could reflect a broader body of technical knowledge, aesthetic conventions, and practices associated with valuable materials. These include sculptural

6 For several examples of figures and their distinctive features, including ornaments, attributes, garments, and decorative motifs, see Faccenna, Filigenzi 2007.

ornaments from Fondukistan, decorative plaques from Tapa Sardar and Tepe Narenj, and artefacts made of precious materials from Mes Aynak.[7]

Clay ornaments therefore did not merely reproduce jewellery; they translated objects already familiar in contemporary society into sculptural form. Among these, precious stones and coloured inlays – whether real gems, semi-precious stones, or coloured glass – held a particularly prominent place.

3 Precious Stones and Pigments: Shared Material Knowledge

Precious materials have long played an important economic role. From a religious perspective, Buddhism also encouraged the circulation and use of precious and semi-precious substances, including gemstones, metals and, arguably, pigments. These materials were used for ritual offerings and donations and to embellish sacred images and religious monuments.

Buddhist literature frequently refers to the so-called Seven Precious Substances (*saptaratna*), a group of seven precious materials whose composition varies among textual traditions.[8] These substances adorned Buddhist paradises and constituted especially meritorious offerings. Their presence in sacred spaces, relic deposits, and sacred images conveyed not only wealth and prestige but also profound religious and symbolic meanings. At the same time, their economic and symbolic value depended not only on rarity and visual qualities but also on the specialised knowledge and technical skills required to recognise, acquire, and transform them.

This material framework is also essential to understanding sculptural polychromy and its possible relationship with cosmetic practices. At first sight, precious substances, pigments, and cosmetics may seem to belong to distinct domains. Yet these domains were interconnected by knowledge of how mineral and organic raw materials were identified, acquired, and processed. Minerals thus formed a common resource base from which pigments, cosmetics, and precious objects could be produced for different purposes, with some materials circulating between these spheres (malachite is one example).

This does not necessarily imply that the same artisans worked across all these domains. Rather, it points to a broader technological and economic system in which specialised knowledge, natural resources, and artisanal practices circulated among different crafts, workshops, and networks of production and exchange.

Another important link between precious and semi-precious stones and mineral-derived pigments lies in their natural origin. Their provenance – often associated with mountains, caves, and other powerful natural environments – contributed to their symbolic significance. In Indian thought, certain precious substances and naturally occurring materials

7 Although the gem-like forms reproduced in clay cannot be conclusively associated with specific minerals, they may be compared with those found in actual gemstones and other precious substances. Some shapes were associated with specific materials, as cutting techniques were intended to enhance properties such as transparency, colour, and brilliance. Such forms of expertise are not exclusive to the modern world, but belonged to long-standing traditions of recognising, processing, and appreciating mineral resources. These comparisons may therefore help reconstruct the possible original appearance of the clay ornaments, including their colours.

8 For further information and references, see Forgione 2024, 48-51.

could be understood as *svayambhū* ('self-existent' or 'self-generated'), a concept referring to entities that arise spontaneously in nature rather than through human intervention (Filigenzi 2015). Their perception as manifestations of nature rather than products of human manufacture could, in turn, enhance their sacredness and exceptional ritual value. Natural properties were therefore closely connected to the meanings attributed to these materials. Many minerals were associated with mythical origins and consequently endowed with cosmological, spiritual, apotropaic, and even therapeutic properties.

4 From Minerals to Pigments: Colour, Materiality, and Meaning

The visual, physical, and chemical properties of minerals shaped the economic, cultural, and symbolic values attributed to them. Among the criteria used to assess raw materials, colour, lustre, transparency, and crystalline structure were key (Biswas, Biswas 1996).

Of these, colour held a particularly prominent place. Colour could evoke natural elements such as the sky, the sea, the moon, the stars, and vegetation, generating emotional and symbolic associations.

Indian aesthetic thought also recognised a psychological dimension of colour. This is embodied in the concept of *rasa*, the aesthetic and emotional experience that works of art were expected to elicit in viewers. Like poetry and theatre, the visual arts therefore conveyed emotions through form, gesture and colour. At the same time, colour (*varṇa*) occupied a central place in Indian systems of classification and evaluation, extending well beyond artistic production.

These observations are particularly relevant to the study of sculptural polychromy. If substances derived much of their significance from visual qualities, especially colour, the same principle may apply to pigments. Whether obtained from costly minerals or cheaper substitutes, pigments could reproduce the chromatic, symbolic, and emotional qualities associated with precious materials, allowing clay sculpture to participate in the same visual and conceptual language.

Less expensive substances, including coloured glass and ornamental stones, were also frequently used as substitutes, suggesting that, in some contexts, visual appearance – especially colour, brilliance, and transparency – could outweigh the intrinsic value of the material itself. This is particularly relevant to painted sculpture, where pigments of differing economic value could fulfil comparable visual and symbolic functions.

Orpiment provides a useful example. Although modern mineralogy has shown that it contains no gold, its brilliant golden-yellow appearance led ancient societies to associate it with the precious metal. This association gave orpiment symbolic meanings related to the sun, prestige, and wealth, and may also have increased its economic and social value relative to ordinary yellow pigments such as ochres. At Fondukistan, orpiment appears to have been applied to the earrings of some figures to imitate gold jewellery, while at Mes Aynak it was used beneath gilding, presumably to heighten its brilliance and chromatic effect.[9]

9 See Forgione 2025, 135-7, with previous bibliography.

Lapis lazuli offers another example. Although technically a rock rather than a mineral, it has been among the most highly prized blue materials since antiquity. Its deep blue surface, punctuated by golden inclusions of pyrite, evokes the night sky and may help explain its association with ideas of transcendence, stability, serenity, and meditation.

Other pigments derived from valuable mineral resources include cinnabar and gold, the latter also applied as leaf or powder.

The symbolic significance of colour, however, extended well beyond the imitation of precious materials. In Buddhist sculpture, colours were not always used naturalistically; instead, they could express qualities attributed to the figures represented. Gold leaf, for example, was applied to the skin of enlightened beings such as the Buddha, thereby manifesting their perfected nature **[fig. 1]**. Likewise, blue was frequently used for the Buddha's hair and around the eyes, not as a naturalistic colour but to reinforce his transcendent appearance and convey his transformative power **[figs 1-2]** (Forgione 2019; Filigenzi 2020).

From this perspective, sculptural polychromy should be understood not merely as a decorative or technical practice but as a visual language embedded in broader cultural conceptions of colour, materials, and bodily appearance. This raises the further question of whether colours applied to the face, beyond explicitly codified choices such as the golden complexion of enlightened beings, drew on contemporary cosmetic practices and culturally defined ideals of bodily appearance.



Figure 1 Buddha head from Qol-e-Tut. © Zafar Paiman/ Italian Archaeological Mission in Afghanistan



Figure 2 Buddha head from Tepe Narenj. © Zafar Paiman/ Italian Archaeological Mission in Afghanistan

5 Pigments Across Sculptural Polychromy and Cosmetic Practices

Although many pigments employed in antiquity are now known to be toxic, they were widely used not only in painting and sculpture but also in cosmetic practices. Archaeological evidence remains limited, particularly for Afghanistan and South Asia; nevertheless, the available laboratory analyses indicate that several mineral pigments were used in both domains, often serving comparable aesthetic, symbolic, and, in some cases, functional purposes.

This overlap is particularly evident in the treatment of the eyes. As noted above, the eyes of Buddhas, bodhisattvas and occasionally donor figures were frequently outlined with a dark pigment, often blue **[fig. 2]**, although black examples and instances combining blue and black are also well documented.

This aesthetic may be compared with the long-standing practice of outlining the eyes with kohl, usually black or dark grey, which remains widespread throughout India, Pakistan, and Afghanistan and is traditionally applied by both women and men (Simpson 2021, 2).[10] Pāli and Sanskrit do not clearly distinguish between blue and black, as both colours may be encompassed by the term *nīla*, broadly meaning 'dark'. The same term is used in textual descriptions of the Buddha's eyes, suggesting that this feature belonged to the set of idealised bodily characteristics defining the Buddha as a perfect being (Filigenzi 2020).

This broad semantic range suggests that the visual effect of darkness may have been more significant than the precise hue. At the same time, it may have allowed some flexibility in the choice of pigments and in the interpretation of the tradition, depending on resource availability, economic constraints, and the scope for artistic creativity. Preliminary, as yet unpublished analyses from Tepe Narenj, for example, indicate the use of lapis lazuli for blue details on the sculptures, probably including the eyes.[11] Unfortunately, no chemical or physical analyses are currently available to identify the materials used for the black lines at other sites.

Similarly, the archaeological evidence for pigments used in eye cosmetics remains fragmentary, with available data spanning different regions and periods. Nevertheless, these data reveal both regional preferences and patterns of circulation. For example, galena and malachite were widely used as eye cosmetics in Egypt as early as the 2nd and 5th millennia BC, respectively (Mocchiutti 2013, 5). By contrast, analyses from Afghanistan, Pakistan, and India point primarily to the use of antimony-based preparations.

This geographical distinction should not, however, be interpreted too rigidly. Antiquity was characterised by extensive exchange networks through which raw materials, finished products, technical knowledge, and aesthetic practices circulated across vast areas. The use of pigments such as galena (see Chandra 1940, 66; Simpson 2021, 2) and the more widely available malachite

10 The use of kohl has deep historical roots and is attested as early as the Indus Civilisation (Chandra 1940, 62-5). Beyond its decorative function in emphasising the eyes, kohl also fulfilled ritual, protective, and therapeutic purposes. Brides traditionally wore kohl during marriage ceremonies, children received it as protection against the evil eye, and many formulations were believed to prevent eye diseases and alleviate discomfort caused by intense sunlight owing to the properties of their ingredients.

11 The analysed sample cannot be conclusively associated with a specific area of the sculpture. Nevertheless, detecting lapis lazuli in a fragment preserving barely visible pigment traces remains informative, as it suggests a wider use of this pigment at the site, where blue traces are commonly observed on sculptural and painted surfaces.

in South Asia and Afghanistan therefore remains possible, even where direct evidence is lacking. Conversely, the repeated archaeological discovery of antimony rods – often elaborately decorated – at sites such as Besnagar in India, Bala Hisar in Afghanistan, and Taxila, Sirkap[12] and Barikot (Colliva 2012, 49-50, tab. 3.4) in Pakistan attests to a well-established tradition of antimony-based eye cosmetics across the region, at least during the Kushan and Gupta periods, with possible textual references dating as early as the *Atharva Veda* (Chandra 1940, 70, 105). At Mohenjo-daro (3rd/2nd millennium BC), green earth has also been identified as an eye cosmetic, providing a close functional parallel with the use of malachite in Egypt (Chandra 1940, 66).

By contrast, the use of lapis lazuli as a cosmetic pigment has not yet been established with certainty. Only two cosmetic containers from the Tehran Plain (6th-5th millennium BC) have been reported to contain lapis, and these findings require further investigation (Vidale et al. 2016, 19, fn. 56).

However, several pigments used in the polychromy of clay sculptures also occur in cosmetic practices. These include ochres, cinnabar, and lead-based compounds such as red and white lead. White lead, like gypsum, could be used either on its own or mixed with other pigments to modify their hue or increase opacity. Copper-based minerals are also documented.

Red ochres, derived from hematite, were among the most widely used pigments throughout antiquity, including in cosmetics. Equally significant is the apparent use of cinnabar at Mohenjo-daro. Unidentified red pigment residues on an applicator stick provide early evidence for the use of such materials on the lips or cheeks (Chandra 1940, 66), suggesting that this was already an established aesthetic practice. Their use on the lips continued in later historical periods and, in many regions of South Asia, has survived to the present day (Chandra 1940). Given the widespread production of lead-based pigments, red lead may also have served similar cosmetic purposes, although direct evidence remains limited.

White lead was extensively used as a cosmetic foundation to lighten the complexion, reflecting an aesthetic ideal that associated fair skin with beauty, refinement, and, in many cultural contexts, elevated social status. This practice is attested as early as the 4th millennium BC in Iran, at Shahdad and Shahr-i Sokhta. Similar evidence comes from Mohenjo-daro during the 3rd/2nd millennium BC, where lead carbonates were used to whiten the face. The production of synthetic white lead is well documented in Egyptian cosmetics during the 2nd millennium BC and was later described by Pliny the Elder in the *Naturalis Historia*. Comparable practices are also reported in the Greek and Chinese worlds (Chandra 1940, 66; Mocchiutti 2013, 4-8).

Gypsum provides a less prestigious but equally significant example. It could be used in cosmetics either in pure form or mixed with other pigments to lighten their colour, a practice documented in both Iran and Egypt. Although direct evidence from Afghanistan and South Asia is currently lacking, its use in these regions cannot be ruled out.

Copper-based minerals, including atacamite and paratacamite, have been identified in cosmetic materials from Shahr-i Sokhta in Iran (Mocchiutti 2013, 33-4, 38). Given the shape of the containers and their reconstructed use, these minerals may have been used as ingredients in eye cosmetics to produce green or bluish hues.

12 For a detailed bibliography, see Chandra 1940, 27 fn. 3.

Comparable conventions can be observed in the sculptural polychromy of late antique Afghanistan, particularly in the treatment of facial features and skin tones.

White complexions, produced with pigments such as calcium carbonate, gypsum, or possibly white lead, are particularly common among sacred figures, including Buddhas, bodhisattvas, and attendants (see, for example, Stančo 2016, 182, 187, 192-3). Their recurrent association with enlightened or morally elevated beings suggests that a light complexion was deliberately chosen to convey ideals of purity, spiritual perfection, and elevated status. Conversely, dark complexions could in some cases characterise demonic or malevolent beings, as in the depiction of the *yakṣa* Āṭavika at Mes Aynak (Filigenzi 2013, 49-50). However, conventions of skin colour were not limited to this opposition. In several painted contexts, the alternation between light- and dark-complexioned figures may also have served other purposes, including the visual differentiation of geographical or cultural identities.[13]

Red pigments were equally important in shaping the appearance of the face. Shades of red were often applied to the lips, cheeks, and eyelids, while fine red lines emphasised physiognomic details. Red ochre was by far the most common pigment, although red lead has also been detected on the cheeks of a sculpture from Hadda, one of the major Buddhist centres of the Kushan and Huna periods, where it was used with ochre to enhance the skin tone.[14] In another case, physicochemical analyses identified cinnabar on the lips of a Buddha head from Mes Aynak (Stančo 2016, 131, 183; Forgione 2025, 137). The emphasis placed on the mouth – a feature closely associated with breath, speech, life, and the transmission of the Buddha's teaching – is potentially significant.[15] It cannot be excluded that this choice also echoed contemporary cosmetic practices, in which cinnabar was likewise applied to the lips; the early evidence from Mohenjo-daro offers a possible, much earlier parallel for its cosmetic use.

Realgar and orpiment (for the latter, see also above) provide a further example of pigments shared between artistic and cosmetic contexts. According to Pāli textual sources, both were used as cosmetics and in various ritual practices (Chandra 1940, 77, 125). In artistic contexts, they are documented, for example, at Ajanta in the rendering of skin tones.[16]

Green hues are less frequently documented and analysed in clay sculpture and were generally obtained from copper-based pigments (see, for example, Stančo 2016, 136-7). These pigments, however, were typically used for garments, body haloes and other elements rather than for the face and body, although green earth has been reported in the flesh tones of some figures at Ajanta (Bon Valsassina, Capanna, Ioele 2013).[17]

13 Such distinctions are visible, for example, in painted contexts from Bamiyan, Ajanta (India) and Kizil (Xinjiang), where differences in skin tone may have functioned as visual markers of geographical or ethnic diversity (see the demons and the Gods of the Directions at Kizil in Zin 2010, 26-7). Colour conventions therefore appear to have conveyed a range of symbolic, social, and cultural meanings.

14 For further discussion and references, see Forgione 2025, 134.

15 Cinnabar was also associated with ideas of transformation and regeneration, partly because it was the principal source of mercury, whose capacity to bond with gold was interpreted as evidence of transformative power (Biswas, Biswas 1996, 50).

16 See Bon Valsassina, Capanna, Ioele 2013; ASI, NRICP 2015.

17 It should be noted that green earth is distinct from copper-based green pigments and was available locally at Ajanta.

6 Conclusions

The evidence discussed in this study suggests that pigments and coloured materials cannot be understood solely within the sphere of artistic production. Rather, they formed part of a cultural system in which the same, closely related, or functionally equivalent substances circulated across different domains, including sculpture, painting, cosmetics, ritual practices, medicine, and, in some cases, metallurgy. Their meanings and functions were shaped not only by aesthetic choices but also by technological knowledge, the availability of natural resources, shared cultural traditions of beautification, and symbolic values. Comparison with cosmetic practices further suggests that such materials could contribute to the appearance and adornment of both sculpted and living bodies.

Although the available evidence remains fragmentary and unevenly documented, bringing together archaeological, archaeometric, and textual sources offers a more integrated perspective on the role of colour in Buddhist societies. Future research based on broader datasets and more systematic interdisciplinary investigation may refine this picture and clarify connections that remain tentative at present.

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