

CINNABAR USE IN THE EARLY BRONZE AGE MORTUARY PRACTICES OF THE NORTHERN BALKANS

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Abstract: The article presents the results of the SEM and RAMAN analyses as well as the microscopic examination of red pigments from three Early Bronze Age barrow graves from Kriva Bara (Northwest Bulgaria). The results indicate a mixture between hematite and cinnabar used in the mortuary practices. Thus, Kriva Bara barrow presented the earliest use of cinnabar in Early Bronze Age Northern Balkans. Its utilization in Prehistoric Europe and, especially amongst Yamna communities is also discussed.

Cuvinte-cheie: Balcanii de nord, epoca bronzului timpuriu, morminte tumulare, cultura Yamna, cinabru, hematit

Rezumat: În articol sunt prezentate analizele SEM și RAMAN, precum și observațiile la microscop ale pigmentelor roșii din trei morminte tumulare din epoca bronzului timpuriu de la Kriva Bara (Bulgaria de nord-vest). Rezultatele indică un amestec de hematit și cinabru folosit în practicile funerare. Astfel, tumulul de la Kriva Bara reprezintă cea mai veche utilizare a cinabrului în Balcanii de nord din epoca timpurie a bronzului. Se discută, de asemenea, utilizarea acestuia în Europa preistorică și, în special, în cadrul comunităților Yamna.

INTRODUCTION

Cinnabar is a mineral containing mercury (Hg) which, alongside gold (Au), silver (Ag), copper (Cu), iron (Fe), lead (Pb), and tin (Sn), is one of the seven metals known in ancient times. It occurs as an amorphous mercuric sulphide, which subsequently converts to a crystalline red mercuric sulphide (HgS)¹. The word “cinnabar” derives from the Greek’s “κιννάβαρι”, a word that has two components originating from the words “motion” and “weight” which are in fact the main properties of mercury (Hg). Alongside other properties, cinnabar changes its color to black when exposed to sunlight and does not regain it if the exposure was long. A highly intense red dye was produced from cinnabar. Its unique qualities, striking beauty and eye-catching intensity made it one of the most precious pigments to ancient civilisations, symbolising vitality, power, and spiritual significance. Its vibrant colour was often associated with blood, life, and the divine, further elevating its importance in rituals and ceremonial contexts. Its rarity, difficulty of extraction, and refinement added to its allure, making it a luxury item reserved to art, religious

artefacts, and mortuary practices. Ancient cultures, no matter whether Roman, Chinese, or Mesoamerican, valued cinnabar not only for its visual impact but also for its transformative qualities, reflecting the alchemical and mystical belief that it held the power to transcend physical states. This transformative symbolism likely influenced its use in funerary contexts, in tombs, on statues, stelae and ceremonial objects, usage meant to ensure the transition of the soul, and its rebirth in the afterlife².

In daily life, cinnabar “...may have been reserved for special occasions (and people), limited body decoration and tattooing”³. Other than its ritual use, it had practical applications, as well. It is well known that in China and India it was used as a medical remedy taken orally as a „...sedative and to treat fever, insomnia, stroke, trauma to the brain, mouth and tongue ulcers, and other ailments“, and as an ointment – to treat ulcers, syphilis, etc⁴. From the perspective of mortuary practices, it is noteworthy that it delays decomposition “...thanks to its powerful bactericide and insecticide properties”⁵.

² Manova 2021, p. 13–31; Gliozzo 2021.

³ Gliozzo 2021, p. 9.

⁴ Emslie et alii 2019, p. 79–93 with references.

⁵ Cervini-Silva et alii 2013.

¹ Kiplik 1956.