



A young couple's grave found in the Rakhigarhi cemetery of the Harappan Civilization

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Abstract: The Harappan Civilization, one of the earliest complex societies in the world, flourished on the Indian subcontinent. Although many additional Harappan settlements and cemeteries have been discovered and investigated, no coupled burials at Harappan cemeteries have been reported to date. In 2013–2016, we excavated the cemetery of the Rakhigarhi site (Haryana), the largest city of the Harappan Civilization. At the site, we found a grave that turned out to be a coupled (joint) burial of the primary type. This report is the first anthropologically confirmed case of coupled burial from a Harappan cemetery.

Key words: Harappan civilization, Rakhigarhi, Joint burial, Sex determination, Anthropology

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Introduction

The Harappan Civilization, one of the earliest civilizations of the world, flourished from 2600 to 1900 BCE [1], spreading over the north-west and west parts of the Indian subcontinent [2]. Since the first report by Sir John Marshall in 1924, many Harappan sites have been discovered where cemeteries also have been excavated.

The discovery of Harappan necropolis has attracted the special attention of expert archaeologists. Pioneering studies on them have successfully reconstructed the funeral rites of the Harappan people. Significant information on the anthro-

logical features of Harappan mortuary practices also has been obtained [2]. According to the archaeological record so far, the Harappan people for the most part was buried in a singular grave, though different subtypes did exist [2]. Even if rarer types of joint graves have been occasionally found in Harappan cemeteries, not even one single instance of an actual couple's grave has been reported to date. Considering that the coupled joint grave is not so rare in other ancient civilizations, it is unusual that such tombs have not been discovered in Harappan cemeteries.

In order to clarify the overall situation of coupled burials in Harappan cemeteries, Indian archaeologists have had to wait for subsequent reports from necropolis sites of the same period. We admit that the anthropological data from Harappan graves is not sufficient for any comprehensive conclusions on how people at the time treated their dead [3]. We also note that the majority of the archaeological surveys completed thus far have been focused mainly on Harappan cities and towns, with relatively fewer rural sites having been investigated [2]. Our 2016 investigation of a joint burial discovered in the Rakhigarhi cemetery might therefore prove meaningful. The current anthropological report on a joint burial case found at Rakhigarhi cemetery enables us to consider how the couple's grave was constructed and maintained in Harappan necropo-

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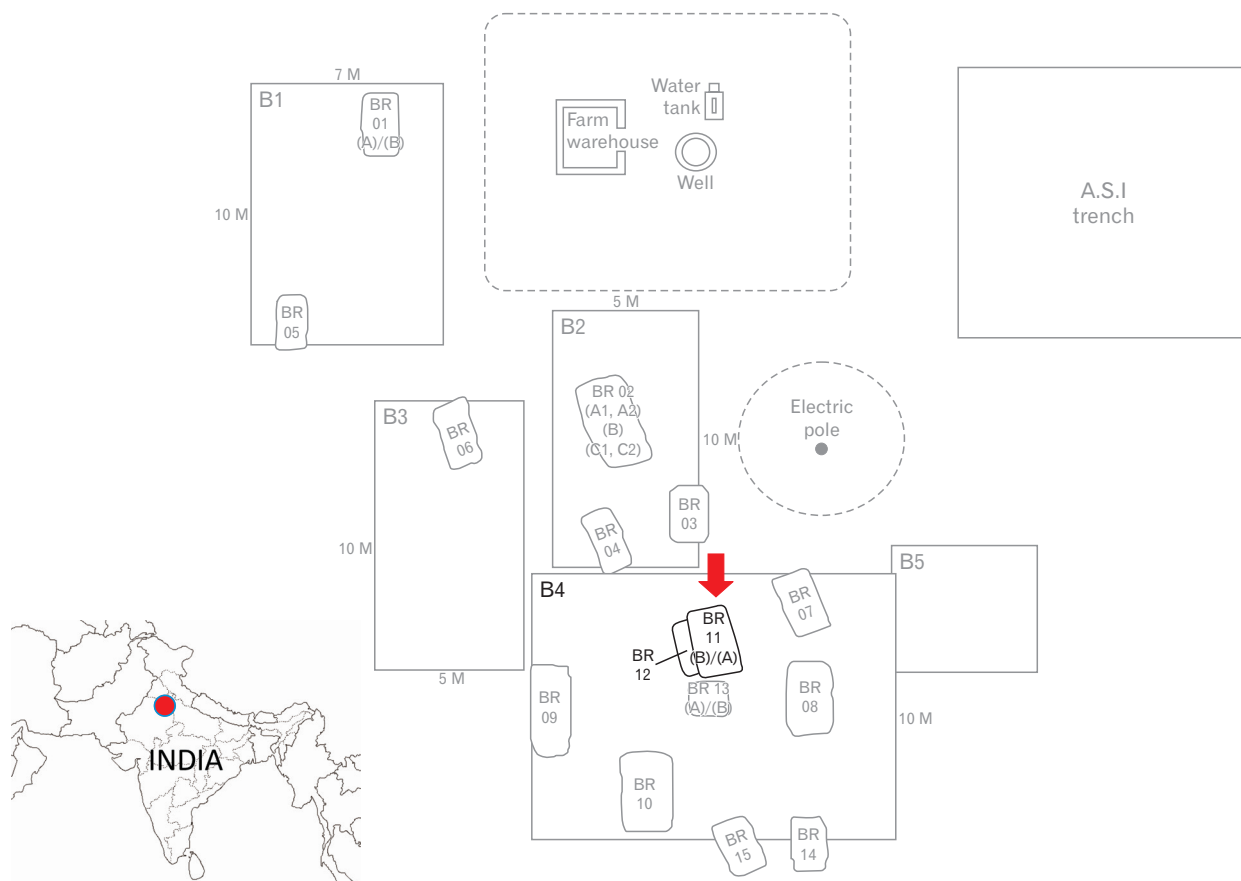


Fig. 1. Rakhigarhi cemetery (indicated as red dot in Inset map of India). Locality B4 is unearthed by us in 2016. Of the graves in the locality B4, RGR 7.3/B4/BR11 (indicated by arrow) was turned out to be a joint burial of primary type. A.S.I Trench indicates the area where Archaeological Survey of India previously excavated. BR, burial; B1 to B5, localities of the site.

lis for the first time ever.

Case Report

During 2013–2016, we excavated a cemetery (RGR 7.2 and 7.3) at the Rakhigarhi site (Hissar District, Haryana), the largest city of the Harappan Civilization (Fig. 1) [2]. The site is located roughly 150 km northwest of Delhi, the capital city of India. When trench B4 was unearthed, we found nine graves there (Fig. 1), one of which (RGR 7.3/B4/BR11) turned out to be a joint burial of the primary type. The burial pit, having been dug over an earlier (BR 12) grave, was 2.54 m long, and its average width was 1.5 m (Fig. 2). The skeletal remains of both individuals (11A and 11B) found at the bottom of the pit were well preserved except for the foot bones of 11A (Fig. 2). The bodies had been placed in the supine position with arms and legs extended. The 11A specimen's head faced towards 11B (Fig. 3). Burial potteries were typical moderate-sized,

Mature Harappan Red ware pots (bowls, globular pots and lids). One banded agate bead, possibly a part of a necklace, was found near the right collar bone of 11B (Fig. 3). Upon completion of the field survey, the skeletons were carried to the lab of Deccan College Deemed University, Pune, for further detailed study.

As for the skeletal individuals (A and B) of BR11, the sexes were determined using the standard method of Buikstra and Ubelaker [4]. Of the two individuals of BR11, 11A exhibited a narrow greater sciatic notch (degree 4–5), the absence of a preauricular sulcus, a pronounced glabella, a large mastoid process, and the flexure shape of the mandibular ramus. On the other hand, 11B showed a wider greater sciatic notch (degree 1–2), the presence of a preauricular sulcus, a ventral arc, and subpubic concavity (Fig. 4). We thus concluded that 11A was a male while 11B was a female.

Age at death was estimated by the degree of dental attrition, pubic symphysis, and auricular surface morphology [5–

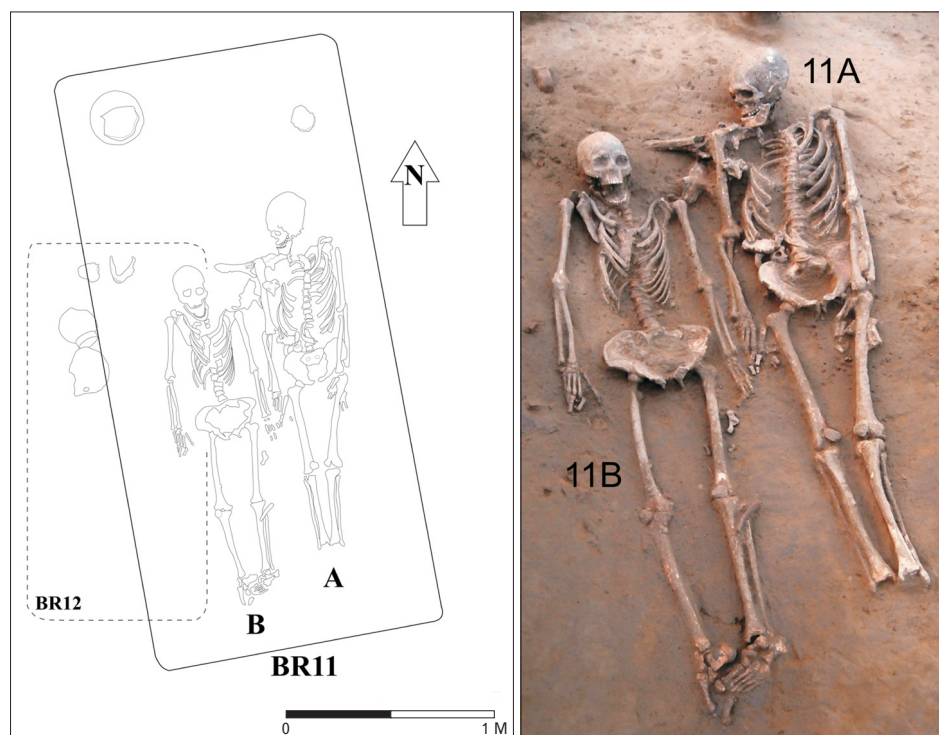


Fig. 2. The BR11A and 11B skeletons. Their heads were placed towards north. The burial for 11A and 11B dug over an earlier grave of BR 12. The skeletal remains of 11A and 11B found at the bottom of the grave. Foot bones of 11A were missing at the time of discovery.



Fig. 3. Magnified image of 11A and 11B. They were placed in supine position with arms and legs extended. The 11A's head faced towards 11B. Asterisk indicate the banded agate bead found near the right clavicle of the 11B. Inset is the magnified image of a bead. Scale bar=2 cm.

7]. All of the epiphyseal plates were closed. The degrees of the auricular surface were 2-3 for both individuals. No signs of degenerative changes were found. The individuals thus seem to have been young adults of similar age (11A, 21-35 years; 11B, 21-35 years). Although advanced and excessive attrition was found on their teeth, we conjecture that this might have had nothing to do with aging but instead had been caused

by the Harappan people's dietary habits or the individuals' specific occupational activities [8]. We also calculated the individuals' stature according to the maximum length of the long bones [9]. The statures of 11A and B, as estimated, were 172.08 ± 3.27 cm and 160.31 ± 3.72 cm, respectively.

The skeletons were examined for any evidence of non-specific or specific (leprosy or tuberculosis) pathological lesions, following the criteria outlined by Ortner [10]. Signs of trauma (fractures, dislocations, healing signs such as hematoma and callous formation) and evidence of medical interventions also were searched for, according to the method of Robbins Schug [11]. We could not find any evidence of trauma or specific or non-specific pathological lesions in the skeletons. The only signs of note were dental pathologies (linear enamel hypoplasia or calculus) observed for 11A.

Discussion

Archaeologists in India often have argued over the historical meaning of joint burials [12, 13]. For instance, a Harappan joint burial discovered at Lothal was regarded as a probable instance of a widow's self-sacrifice (suicide) demonstrative of grief over her husband's death [12]. Others contrarily claimed that it was difficult to estimate the sexes of the individuals, and that therefore, they might not have been a couple [13].

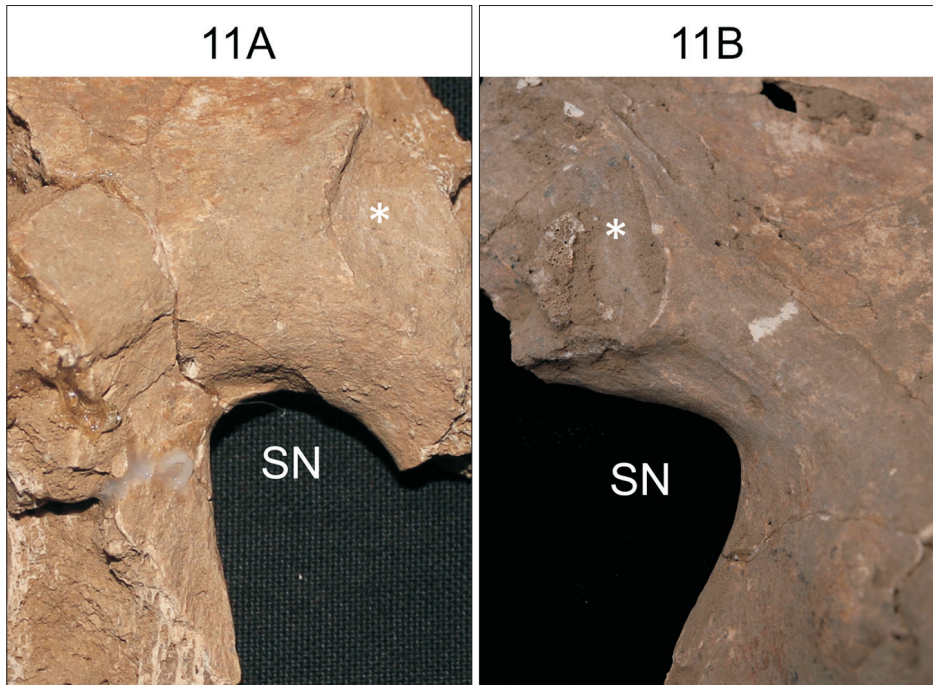


Fig. 4. Sex estimation of 11A and 11B. Asterisks for auricular surface. The shapes of greater sciatic notches (SN) clearly show that 11A is a male while 11B is a female. 11A exhibited a narrow greater sciatic notch; 11B showed a wider greater sciatic notch.

Other than this controversial Lothal case, none of the joint burials reported from Harappan cemeteries to date has been anthropologically confirmed to be a couple's grave.

In this sense, the present report is of academic significance. Based on our anthropological examination, it is certain that grave RGR 7.3/B4/BR11 is a case of couple's grave. The couple in the grave must have been buried either simultaneously or almost so because there was no clear archaeological evidence that one of them had been buried later than the other. The socio-cultural evidence, furthermore, does not indicate exclusionary mortuary behavior as has been observed in other Harappan cemeteries [11]. We also ruled out that this grave might have been associated with any funeral customs by which widows take their own lives shortly after the husband's death (e.g., Sati). In fact, among the total of 62 graves (of RGR 7.2 and 7.3) in the Rakhigarhi cemetery [2], only the present case was identified as a couple's joint burial. This means that the couple's burial reported herein should not be considered to have been the outcome of any specific funeral customs commonly performed at that time. Rather, it is more plausible that two individuals died at or almost at the same time, and that therefore, they had been buried together in the same grave.

In the field of burial archaeology, the discovery of couple's burial sites has often sparked fierce debate. In one case, archaeologists discovered, in the Italian village of Valdarò, a

Neolithic burial, in which grave the individuals seemed to be in an embrace [14]. In another joint burial reported from Andronovo in the Novosibirsk region (Russia), the individuals were facing each other with their hands held [15]. Another case is that of the Alepotrypa Cave (Greece), a Neolithic burial in which well-preserved 5,800-year-old skeletons were found embraced, their arms and legs interlocked [16]. There have also been additional reports on ancient couples discovered in the Mesolithic Ganga Valley (India) and Chalcolithic Deccan (India), among still others [17, 18].

The current report on grave RGR 7.3/B4/BR11 of Rakhigarhi is thus meaningful, as it is the first-ever report on an anthropologically confirmed, couple's joint burial case discovered in a Harappan cemetery. The best explanation for this case is that the two individuals died, of unknown causes, at exactly or nearly the same time, and were then buried together. As joint burials are important for inferring historical family structures and the broader society they represent, more studies on Harappan graves of that type are requisite.

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