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HARAPPAN CIVILIZATION

A Contemporary Perspective

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35. Daimabad Bronzes

THE discovery of the Daimabad bronzes (Pls. 35.1 to 35.5) though momentous has caused considerable controversy among archaeologists. They were the subject of heated debate during the seminar on the "Indus Civilization: Problems and Issues," organized by the Indian Institute of Advanced Study, Simla, November 1977. M.N. Deshpande then Director General of the Archaeological Survey of India, referred to these objects in his inaugural address and S.A. Sali, the excavator of Daimabad, also discussed them in the course of the deliberations of the seminar (Sali in press). S.R. Rao, who preceded Sali at the renewed Daimabad excavations, has also published his views (Rao 1978). All these authorities are of the view that the bronzes belong to the Late Harappan times, but this opinion appears to be based on the circumstantial evidence. At the Simla seminar this dating was questioned. Some scholars feel that the bronzes are tribal in origin, and as such may be as late as the 18th century A.D. Recently, D.P. Agrawal and his team have analyzed the elemental composition of the bronzes using atomic absorption spectrophotometry and have concluded that "We would not be surprised if these images turned out to be of the historical period" (Agrawal, Krishnamurthy and Kusumgar 1978: 45). His argument is based on the negative evidence that "no arsenical alloying has been reported from the Chalcolithic Cultures so far, but these Daimabad bronzes show greater than 1 percent arsenic.... It may also be pointed out that the Chalcolithic Cultures are very poor in copper and such massive figures appear completely out of place in the Chalcolithic context" (Agrawal, Krishnamurthy and Kusumgar 1978: 45). The exquisite hoard is thus

hanging in a sort of chronological vacuum between the 18th century B.C. and the 18th century A.D. I therefore propose to examine the stylistic and technological aspects of the bronzes, as well as investigate their probable function, in order to establish their antiquity and authorship.

Before beginning the discussion of the authorship and the antiquity of bronzes some note of the objects in the hoard and the circumstances of their discovery is called for. The bronzes were found at Daimabad (District Ahmednagar, Maharashtra), an extensive Chalcolithic site located on the left bank of Pravara River, a tributary to the Godavari. The site was first excavated on a small scale in 1959 by M.N. Deshpande (Indian Archaeology: A review 1958-59; Dhavalikar 1969-70) and has been worked on a large scale since 1974 by S.A. Sali (Sali in press). It is a purely Chalcolithic site which, as the recent excavations show, was first occupied about 2000 B.C. and was finally deserted by 1000 B.C. after which it was never reoccupied.

The hoard consists of four bronzes: an exquisite chariot pulled by a pair of bulls, an elephant, a rhinoceros and a buffalo. They are all in an excellent state of preservation and have not lost their pristine features.

CHARIOT AND BULLS (Pls. 35.1 and 35.2)

The chariot and bulls are the most remarkable pieces in the hoard. Its total length is 45 centimeters and the width is 16 centimeters. The complete bronze consists of an elaborate chariot yoked to two bulls and driven by a man standing within it. Two solid wheels rest

^{*}Editor's note: See S. A. Sali's paper in this volume for a review of Daimabad.

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Harappan site. There are a few toy cart models of copper (Piggott 1970). But they too share some elements with the Daimabad chariot. The copper carts all have projecting ring loops through which the axle is passed. The most noteworthy feature of the axle is that it is fixed to the wheels so that it moves along with them: the same feature is also a part of the modern chariot. The toy carts, presumably of bronze, from Chanhudaro were apparently built the same way. "The wheels are now immovable, but they must originally have revolved in two axle-brackets cast in one with the frame" (Mackay 1943: 164). This feature may have facilitated the dismantling of the vehicle since the chasis could just be lifted off the axle much as they do today in Sind (Mackay 1929: 26-28). It is pertinent to quote Childe in this connection: "Sumerian and other early vehicles were probably just as easily taken to pieces, and this point must be remembered in considering the possibility of using them for long distance transport" (Childe 1951: 183). This would be possible because of the manner in which the axle was fixed to the wheels. One is told that this mechanism actually marks an early stage in the evolution of wheeled vehicles (Singer et al., 1956: 72). And what is more, even the village carts of modern Sind "preserve the main outline of the ancient Harappan vehicles, the wheels turn in one piece with the axle as do those of many other recent carts with solid wheels" (Mackay 1929). The joined wheel and axle is thus a distinguishing feature of Harappan vehicles and same is to be seen in the Daimabad chariot.

ELEPHANT (Pl. 35.3)

The elephant is the largest of the three animals in the hoard. The beast stands on a platform 27 centimeters long and 14 centimeters broad. There are four ring loops which once held the wheels, all of which are unfortunately missing. The total height, including the platform, is 25 centimeters. The large trunk is curved at the lower tip but the tusks appear to be broken or not completely indicated. A short tail is almost hidden in the rump. This animal recalls another bronze elephant from the southeast Deccan (Barret 1958) which is dated to about the third century A.D. Barret's specimen is a female, standing, or rather running, on a platform with raised edges and ring loops for wheels (all of which are missing). There is a small bell tied around its body.

There is some superficial resemblance between

Barret's pachyderm and the Daimabad specimen. Technologically, however, they are far removed from one another. The former was hollow cast. The Daimabad elephant is solid. There are sufficient stylistic and technological differences between these two specimens which show that the Daimabad elephant cannot be dated to the early historical period.

RHINOCEROS (Pl. 35.4)

The rhino stands not on a platform as in the case with the elephant, but on two horizontal bars over two sets of wheels; the bars are bent at both the ends with the axle passing through them. The wheels, which are solid with a projecting hub on the inside, are fixed to the axle and move along with it. The rhino is 25 centimeters long and 19 centimeters high with a distance of 13 centimeters between the two sets of wheels. Skin folds on the animal's body are rather stylistically depicted with those on the back and the belly forming a sort of rectangle. This resembles the treatment on some of the Indus rhino seals (Marshall 1931: III, Pl. CXV, No. 342-46). Short ears are pointed upwards. The mouth is too long and resembles the snout of a bear. A short horn on the tip of the snout is also indicated. Rhinos probably inhabited the northern Deccan in prehistoric times and the beast has been tentatively identified at Inamgaon (Classon 1977: 255).

The presence of the rhinoceros in the hoard is extremely important because the animal was never portrayed in Indian art save the Harappan, and they delineated the beast with considerable sympathy. Thus its presence in the Daimabad hoard points to its Indus origin. The Daimabad example can also be favorably compared with a terracotta specimen from Lothal (Rao 1978: 62).

WATER BUFFALO (Pl. 35.5)

The buffalo also is modeled in a naturalistic manner. Its height, including that of the wheels, is 31 centimeters and the length is 25 centimeters. It resembles a bison somewhat, but on close observation it is clearly a water buffalo with characteristic transverse ribbing on its horns. The animal stands on a platform similar to that of the elephant, but the corner near the right foreleg is broken. The axles attach to the platform through vertical bars which are provided with holes. The front wheels are smaller (eight centimeters in diameter) than those on the rear (10 centimeters).

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cost. This is especially likely if the bronzes were required for community religious purposes. Recall that all the bronzes were provided with wheels; although those on the elephant were lost. Thus it is not unlikely that they were meant to be used in procession, possibly as seen on a seal from Mohenjodaro with four animals (an elephant, a rhino, a tiger and one unidentified animal) in a file facing right (Marshall 1931: II, 365; III, Pl. CXVI, 14 & CXVIII, 10). Again from Mohenjodaro comes a seal amulet on one side of which is an animal in the center, a gharial according to Marshall, on either side of which is a bull. Below the central animal is an elephant on the left and a tiger on the right (Mackay 1938: Vol. I, 357; Vol. II XCI, 13, 19a; XC, 2a, 10). It is thus clear that these animals (viz. the elephant, rhino, bull, buffalo, tiger, etc.) played an important role in the religious life of the Harappans. The same tradition, in some form or other, seems to have continued to some extent in the succeeding Chalcolithic cultures of the

Deccan. A Malwa Ware jar, again from Daimabad, is profusely painted with a jungle scene in two horizontal registers (Fig. 35.1). The upper one shows a muscular human male figure with two deer approaching, as if enchanted, and peacocks in between. The lower register has three tigers springing away in the opposite direction. The human figure is solid while the bodies of the animals are hatched. These scenes have a narrative quality, and one feels that the animals are paying obeisance to their Lord (Indian Archaeology: A review 1958-59: Fig. 8). Similar animals are depicted on a Malwa Ware vase fragment from Prakash (Thapar 1967: Fig. 12; and Fig. 35.2).

It is tempting to identify the person in the chariot as *Paśupati*, "The Lord of Beasts," for the simple reason that all the animals, save the tiger, which appear on the famous *Paśupati* seal from Mohenjodaro, are present in the Daimabad hoard. Marshall's identification of *Paśupati* on the seal was based on comparisons with medieval representations of Śiva

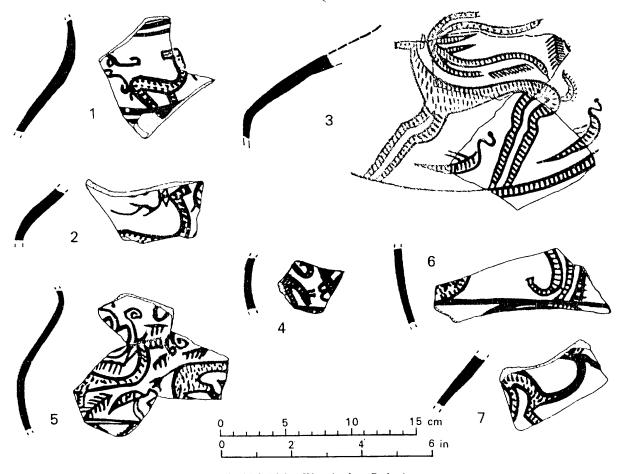


Fig. 35.2. Malwa Ware jar from Prakash.

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(Marshall 1931: I, 52-56; Pl. VII, 4). Presently, however, one is not concerned with the identification and the iconography of the figure. One can only conclude that the evidence discussed in the foregoing pages amply demonstrates that in all probability the

bronzes in the hoard belong to the Late Harappan period at Daimabad, and that they were probably imported from Harappa, or some smith from Harappa made them locally.

NOTE

¹The rhinoceros is depicted on the coins of Chandragupta II (A.D. 380-415) where it signifies the conquest of eastern India.

BIBLIOGRAPHY

Agrawal, D.P., R.V. Krishnamurthy and S. Kusumgar, 1978

New Data on the Copper Hoards and the Daimabad Bronzes. *Man and Environment* 2: 41-46.

Agrawal, D.P., R.V. Krishnamurthy and S. Kusumgar, in press

Arsenical Coppers in the Bronze Age. To appear in the M.N. Deshpande Felicitation Volume.

Barret, Douglas, 1958

An Early Indian Toy. *Oriental Art* 4 (N.S.): 118-19.

Childe, V. Gordon, 1951

First Wagons and Carts—From the Tigris to the Severn. *Proceedings of the Prehistoric Society*. 17 (N.S.): 177-94.

Classon, A.T., 1977

Wild and Domestic Animals in Prehistoric and Early Historic India. *The Eastern Anthropologist* 30: 241-89.

Coghlan, H.H., 1951

Notes on the Prehistoric Metallurgy of Copper and Bronze in the Old World. *Occasional Papers on Technology* 4. Pitt-Rivers Museum, Oxford.

Dhavalikar, M.D., 1969-70

Daimabad: A rediscovery. Puratattva 3: 34-43.

Indian Archaeology: A review (IAR), 1958-59

Excavation at Daimabad, District Ahmednagar. Pp. 15-18. Delhi: Archaeological Survey of India.

Lal, B.B., 1979

Kalibangan and Indus Civilization. In *Essays in Indian Protohistory*. D.P. Agrawal and Dilip K. Chakrabarti, eds. Pp. 65-97. Delhi: B.R. Publishing Corp.

Lamberg-Karlovsky, C.C., 1967

Archaeology and Metallurgical Technology in

Prehistoric Afghanistan, India and Pakistan. *American Anthropologist* 69: 145-62.

Mackay, E.J.H., 1929

Note on a bas-relief found at Ur. *The Antiquaries Journal* 9: 26-29.

Mackay, E.J.H., 1938

Further Excavations at Mohenjodaro. 2 vols. Delhi: Government of India.

Mackay, E.J.H., 1943

Chanhudaro Excavations, 1935-36. American Oriental Series 20. New Haven: American Oriental Society.

Marshall, Sir John, editor, 1931

Mohenjodaro and the Indus Civilization. 3 vols. London: Arthur Probsthain.

Piggott, Stuart, 1970

Copper Vehicle Models in the Indus Civilization. *Journal of the Royal Asiatic Society:* 200-202.

Rao, S.R., 1968

Contacts between Lothal and Susa. 26th International Congress of Orientalists, New Delhi. Vol. 2: 10-11.

Rao, S.R., 1978

Bronzes from the Indus Valley. *Illustrated London News* March: 62-63.

Sali, S.A., in press

Harappan contacts in the Deccan. In *Indus Civilization: Problems and issues*. B.B. Lal and S.C. Malik, eds. Simla: Indian Institute of Advanced Study.

Singer, Charles, et al., 1956

A History of Technology. Vol. 2. Oxford: Clarendon Press.

Thapar, B.K., 1967

Prakash—1955: A Chalcolithic site in the Tapti Valley. *Ancient India* 20-21: 5-167.