# Ideology and the Harappan Civilization

#### DANIEL MILLER

Department of Anthropology, University College London, Gower Street, London WC1B 6BT, England

Received June 18, 1984

# INTRODUCTION

This paper has two principal aims, the first of which is to relate our knowledge about the Indus or Harappan civilization, which flourished in Pakistan and northwest India between 2600 B.C. and 2000 B.C., to more general comparative models of early civilizations. In recent times the Harappan has become the least used and least influential example in such studies. The second aim is to show how ideas derived from the critique of ideology which have recently been applied to the analysis of prehistoric materials, particularly aspects of European prehistory (Miller and Tilley 1984), may also be used in the analysis of such an early civilization. This approach is predicated on the assumption that the prehistoric record can be interpreted not as a mere passive reflection of a past society but as a process of representation which acted to constitute as well as to reflect social relations.

The current interpretation of the Harappan civilization is influenced by the existence of a more general branch of archaeology called the study of ancient civilizations or states. This involves the comparative analysis of areas which include, at the minimum, early China, the Harappan, Peru, Mesoamerica, Egypt, and Mesopotamia. Many synthetic presentations discuss these as related phenomena, looking for comparative traits or defining criteria (e.g., Daniel 1968; Redman 1978). This is particularly the case with the Harappan, which has been interpreted as at least partially influenced by the earliest of such civilizations in Sumeria. It has become increasingly clear through recent excavations and analyses that the Harappan presents some striking contrasts with the Middle East and other early civilizations. One of the purposes of this review of the evidence is to recognize the impact that this subsuming category has had upon our previous interpretations and to suggest that it is these particular differentiating characteristics which make the Harappan of great interest.

The Harappan is perhaps unusual in the degree to which we are entirely reliant on prehistoric materials for its interpretation. The Harappan script

has not yet been convincingly deciphered, and there is no writing of a later period, for example by successors, conquerors, or colonialists, which clearly refers back to it and provides a basis for its description. Although there have been a number of important recent excavations, the total archaeological evidence is also probably still sparse compared to, for example, the Middle Eastern or American cases.

This scarcity of evidence poses the problem of which methodology might be employed. This paper is written in the belief that although further work may well provide contradictory and alternative evidence to that currently available, there is, at present, quite sufficient material to provide the basis for an interpretation, and that this is worthwhile because this evidence is itself challenging and suggestive for our understanding of the development of complex societies.

The problem of lack of evidence might at first appear compounded by the theoretical perspective which will be employed here. The model of ideology suggests that whatever the immediate instrumental uses made of artifacts such as buildings and metallurgy, all artifacts are also forms through which a society creates representations of itself. They provide an important element in the *habitus*—the everyday world in which the human subject is created in history and which provides the source from which these same subjects, through their strategies as individuals and social groups, create history (Bourdieu 1977:78–87).

Since the material world is understood as an active form of intervention, rather than a mere passive reflection, it follows that there is no direct relationship between the models it provides and other elements of social organization. An ideological representation suggested in the evidence from burials or ritual may be that of an ideal, for example, of egalitarianism, denied by the degree of hierarchy found in control over material resources or esoteric knowledge. A particular array of forms may represent the interests of a particular group and mask those of subordinate elements in society who have no access to control over the forms taken by cultural property. This poses problems for the archaeologist, since it suggests that different sources of evidence may well provide entirely contradictory images of the same society.

Such an approach requires quite different epistemological presuppositions than those often regarded as "proper" for archaeological research (Miller 1982). A given set of evidence cannot be linked directly to generalized models of human behavior, since in two different cases it may represent two quite different types of social relation. For this reason an approach derived from what Hodder has called "contextual" archaeology (Hodder 1982:217) is adopted, in which the interpretation of any set of material is based on its relationship to a number of the other sources of evidence that provide its context, the intention being to produce some

schema which makes sense of the various sources of evidence in relation to each other and with some model of the dynamics of social relations—a schema which may include contradiction as well as coherence.

The shift in emphasis has further implications. Certain types of activity are more amenable to lawlike generalization than others, and, as a result, what appeared as a principle of epistemology may in fact itself become an ideological construct, legitimating certain kinds of interpretation at the expense of others. More deterministic reasoning based on natural activities, such as ecological disaster or environmental potential, may become more acceptable than cultural activity and the study of social relations which are not amenable to such reasoning. A premise of this paper is that for the study of historical transformations, significance should not be denied to the area of social relations and political formations just because these cultural activities do not lend themselves to the same kind of formulation as do noncultural pressures and developments. The model of the natural sciences is eschewed in favor of those areas of history and anthropology which have as their prime focus an understanding of culture and society, with an emphasis on interpreting social relations. The social interests of concern to the construction of a model of ideology are those of major social forces such as class, caste, or gender. Use will also be made of Foucault's notion of power as a productive component not entirely reducible to any particular historical subject, but equally constitutive of those subjects (Foucault 1981:92-95).

Previous analyses of the Harappan have tended to divide into separate topics such as trade, art, and religion. In this review each of these topics will be investigated, despite reservations as to the appropriateness of some of these categories, and the current interpretations will be examined in some detail. Through such a survey it can be shown how significant problems may be discerned in each area, which make them anomalous with respect to the previous investigators' expectations. In this contextual approach the "meaning" of trade or social differentiation can only be understood when all of these issues are related such that each becomes the context for the others. As a result of this analysis, it will be shown that various processes of differentiation, expected of an ancient civilization, do not occur, and that this lack of variability when taken as an issue in itself helps to link together the whole series of anomalies.

The resultant interpretation, although superficially similar to some of the earliest accounts of the Harappan in, for example, the emphasis on homogenization in social reproduction (e.g., Piggott 1950), may have implications very different from those assumed in these early interpretations. Although we remain unsure of many of the details of power and social relations, an overall pattern may be discerned at this stage, signifying a process which may account for the various characteristic traits of

the Harappan. Although there are probably some similarities with later historical societies in which asceticism and monastic order are predominant, there is no example in which certain of these traits are so elaborated over a comparable area and time. As such the Harappan may be considered a major addition to archaeologically based comparative studies of social reproduction. Summary accounts and more conventional interpretations of the Harappan include Agrawal (1982), Allchin and Allchin (1982), Fairservis (1971), Piggott (1950), Sankalia (1974), and Wheeler (1968). Important further sources are Fentress (1976), Possehl (1979a and 1982), and Lal and Gupta (1984). Following a brief account of the pre-Harappan, the material available for the mature Harappan will be divided here into two main sections. First, the evidence of the settlements themselves, and second, the material objects found within them.

# THE PRE-HARAPPAN

A prime exemplar of the study of ancient civilizations as a component part of the study of social development, and the one which may serve as a preliminary model here, is that developed by Friedman and Rowlands (1977). This article attempted to place the rise of civilizations within an evolutionary perspective. The term "epigenetic," used in the title, implies that each stage of development depended upon those changes realized within the previous stage but does not represent a necessary further development since a variety of factors might be unfavorable to further progress. The model was thereby opposed to teleological models. A major advance represented by this kind of study is the emphasis on the relationship between internal factors of social analysis such as kinship, exchange, social stratification, and the organization of production.

Although Friedman and Rowlands present an initially linear sequence, it is clear from their discussion of each civilization that they envisage a wide variety of actual sequences. The earlier part of their model shows how simple lineage-based organizations can, through the manipulation of patterns of exchange, for example, of women, develop into more hierarchical social orders (initially hierarchies of lineages), with a concurrently emergent ritualized representation in which supernatural forces are linked to powerful groups in such a manner that ritual acts as a social relation of production. These may further develop into ceremonial complexes which reproduce the centrality of new elites and may be the loci of surplus appropriation. This sequence is also concurrent with changing modes of control over production and labor, and with the intensification of production in order to produce surpluses which include products made specifically for the prestige of these elites, either through new specialization by artisans or through the control of comparatively rare materials

imported from outside. In turn such processes may favor further social and material differentiation. The model is based upon a process of the reproduction of a social totality, with early forms implicit in later developments. This model [when expanded from this highly condensed summary; see Friedman and Rowlands (1977) for details], provides a plausible reconstruction of the social dynamics which underpin the differentiation and specialization observable in the archaeological record prior to the development of the Harappan.

Recent research in the same tradition has also shown the influence which a core region may have in both preventing and, in certain circumstances, stimulating development in its periphery (Kohl n.d.). This factor is of particular importance in understanding the origins of the Harappan civilization. There are several clear cases of the very early development of more complex systems of social organization in western Asia, represented in sites such as Jericho and Çatal Hüyük (Mellaart 1975), but these are overtaken by the more sustained trajectory observable in Mesopotamia which resulted in the first civilization, the Sumerians (Kramer 1963). It is in the impact of this area, the first which might be considered a "core" region, that we can perhaps discern the parallel developments in areas first on the immediate periphery, such as Elam, and later further east.

Recent excavations by Soviet, Italian, and other archaeologists have revealed a number of regional sequences to the north and east of Mesopotamia leading to highly developed incipient states with towns and monumental architecture. Most significant are those of central Asia (Kohl 1981) and the development of the twin towns of Shahr-i Sokhta and Mundigak in the Hilmand area (Tosi 1979). These are among a number of such regions which develop more complex settlement hierarchies, specialized crafts, and the possibilities for the kind of production and control over goods and new social hierarchies discussed by Friedman and Rowlands. In some cases the influence of the core region of Mesopotamia can be directly adduced. In eastern Iran, for example, the site of Tepe Yahya has been interpreted as the production center for chlorite bowls intended for export to the West (Kohl 1979). Even in the much larger site of Shahri Sokhta, the burial evidence indicates the importance of artisans in the new social hierarchy, which suggests that the reprocessing of raw materials for export was a major factor in the town's prosperity (Piperno 1979).

Our evidence for the equivalent sequence in southern Asia starts with the recent excavations at the site of Mehrgarh, situated at the foot of an upland region to the west of the Indus valley. Archaeologists have revealed a sequence suggesting settled occupation with agriculture from at least the sixth millenium, gradually developing a more sophisticated material culture, trade, and complexity of structures (Jarrige and Lechevallier 1979). One of the most noticeable features is the strong ties between the material remains here and sites in eastern Iran and central Asia (Jarrige and Lechevallier 1979:505; Gupta 1979).

Already by the fifth millenium B.C. there is evidence for larger buildings representing some form of communal activities at Mehrgarh (Jarrige 1984:24). By the fourth millenium B.C. there are sites spread throughout the area of modern Pakistan, with regional sequences showing signs of growing complexity. These have been grouped under the general label of "pre-Harappan," on the grounds that many of these developments, such as town walls and stylistic features of the material culture, document traits which become prominent in the mature Harappan (Mughal 1970, 1982), though not all of this area becomes incorporated within the boundaries of the later, mature Harappan. There is evidence at this stage for larger sites with a greater degree of order and more complex buildings than in the earlier, simple villages (Sankalia 1974:331-358). Goods such as marine shells and lapis-lazuli whose sources are known testify to the development of long-distance trade (Chakrabarti 1978; Durante 1979). Evidence for craft production, fortifications, and street planning all are suggestive of the kind of elaborations found in the Friedman and Rowlands model and comparable to several similar sequences in Iran and central Asia.

The pre-Harappan sees the development of regional styles which may represent competitive groupings (Fairservis 1971:Chapter 5; Wheeler 1968:9-24) but unfortunately the labels we have for them are likely to be more a product of the sequence of their discovery than to be of significance for the contemporary heterogeneity. Excavations at sites such as Gumla (Dani 1971) and Sarai Khola (Halim 1972) provide details of the microtrajectories behind the general pattern of development. The problems of interpretation have been exacerbated by centering upon particular sites as the bases for comparisons. The resultant "cultures" tend therefore to be based mainly on their relationship to sites such as Kot Diji (Mughal 1970) or Said Qala (Shaffer 1978).

Such a sequence, ending in what is termed an ancient civilization, has provided for a whole series of expectations as to what the form of this final mature phase should be. Among the expectations which follow, in particular from the dominant contemporary examples of Egypt and Mesopotamia, are the further growth in trading and of some form of merchant class in relation to it, these remaining under the overall control of bureaucratic mechanisms that ally such developments with the rise of social hierarchies and of complex linkages between "prestige" goods, symbolic of growing differentiation of peoples: a parallel extention therefore of sophistication and social control in the organization of production, peoples, and exchange. We might expect, also, that there would be trade in

such exotica between a newly established civilization and those which had developed at an earlier date. Comparisons would also provide the basis for predicting the rise of ritualized structures, such as temples or extravagant burials, legitimating these transformations, perhaps with the later development of more secularized political power separated from theocratic forms.

The pre-Harappan evidence suggests trends in these directions, although the material is poor; larger walled sites such as pre-Harappan Kalibangan (Thapar 1973) may well represent new levels of social differentiation, control over production, and exchange. The evidence is much clearer outside of the Indus valley in the developments found in the Hilmand valley area of eastern Iran, especially the nearby, comparable, and contemporary sites of Shahr-i Sokhta and Mundigak (Tosi 1984). At this stage then, the pre-Harappan appears as one of a number of areas moving toward a greater degree of social complexity and urbanization.

Mughal (1970) shows that virtually all the familiar Harappan items are found somewhere in the pre-Harappan period, though their organization may be quite different. It will be argued, however, when we turn to the evidence of the Harappan civilization itself, that, so far from representing a continuity in these trends, as is the case, for example, in Mesopotamia and Egypt, there is evidence that this civilization represents a check, reversal, and systematic suppression of these very same social transformations in favor of a more idiosyncratic form of social control and social organization that is strikingly different from any comparative or contemporary examples.

The Harappan civilization represents a quite new development which emerges at around 2600 B.C. (possibly slightly earlier in the core area of its emergence which has not yet been located) in the form of a fusion of elements from these regional traditions, resulting in a much more homogeneous material culture, so that sites can be recognized with little difficulty as Harappan. These common features will be explored below, but they must clearly relate to a drastic alteration in the forms of social interaction and control. This transformation was achieved over an area previously unmatched. There are now around 800 sites which can be classified as of the mature Harappan (Jansen 1981:252). At 1.25 million km<sup>2</sup>, the area covered by this civilization is larger than the combined upper and lower Egypt under Menes or alternatively the total area of Sumer, Akkad, and Assyria (Agrawal 1982:135). Essentially, the area forms a semicircle (Fig. 1), its center along the Indus river but spreading eastward both in the south towards the Deccan and in the north across the Punjab towards modern Delhi. There is also a spreading westward along the southern coastline. The gap in the central-east area is occupied by desert regions which have since spread over what, at the time of the



Fig. 1. Sites of the Harappan civilization. Reprinted with permission from Allchin and Allchin 1982, courtesy of Cambridge University Press.

Harappan, appear to have been flourishing river systems. Some have suggested that the Harappan communities occupied a given ecological zone (Fairservis 1961), but it must be noted that insofar as this is the case, it is certainly not such a simple uniform zone as that suggested by the term "river valley civilization," since perhaps the majority of sites are not connected with the Indus alluvial system, which itself differs in nature between the Punjab in the north and Sindh in the south (Thapar 1982). Although the mature period may see an increase in settlement around the river valley this may follow rather than precede the development of social complexity.

The evidence for the subsistence practices of the Harappan civilization has grown considerably in recent years, providing a reasonable picture of the dominant plants and animal species exploited during the period.

There is clear evidence for regional differences in the use of rice and other major cereals, as also for some minor crops (Vishnu-Mittre and Savithri 1982). Evidence is still lacking, however, for many basic features of the subsistence base, including the type of irrigation practiced. There have been to date, no surprising or particularly revealing finds with respect to subsistence activities which might account for any peculiarity in the nature of the civilization itself.

# SETTLEMENTS OF THE MATURE HARAPPAN

Of the excavated settlements of the mature Harappan, that which has dominated accounts, being the largest, best preserved, and most extensively excavated, is Mohenjo-daro (Marshall 1931; Mackay 1938). This site in the Sindh area of southern Pakistan, next to the Indus, is thought to have contained around 40,000 inhabitants. The major features of the site are as follows (Fig. 2): It is divided into a higher tell conventionally called the "citadel" to the west, and a larger tell called the "lower town" to the east. The orientation of both is north-south. It is clear from the excavations that the lower town consisted mainly of residential and commercial buildings, and the major streets are aligned on cardinal points (Fig. 3), while the citadel consists in the main, if not entirely, of public buildings. These latter are arrayed on top of large, high platforms built of solid mud brick with baked brick facings. The most striking of these public buildings, situated near the apex of the mound, is a large bath. The citadel is probably fortified, although this has only been documented at one corner, while the lower town has not yet revealed any fortifications. Current work promises to expand greatly our knowledge of this site (Jansen 1984a).

These basic features provide a model against which other sites have been compared. The only excavated site of comparable size is that of Harappa (Vats 1940), also on the Indus river but around 600 km to the north. This site was much more poorly preserved, but as far as it is possible to tell it was also divided into several mounds (Fig. 2). Again the main residential mound is to the east, but the excavated public buildings are found by the river to the north of that mound which would be equivalent to the citadel at Mohenjo-daro. The inside of this citadel mound is so badly damaged that apart from the fortifications it has been impossible to interpret the remains within.

Few other sites have been excavated on a comparable scale. The site of Kalibangan shows the closest similarity of layout (Fig. 4), being again divided into a citadel and a lower town (Thapar 1973). At this site, the lower town is also fortified with a wall, and both here and where the outline of walls may be determined at the larger sites the enclosed area

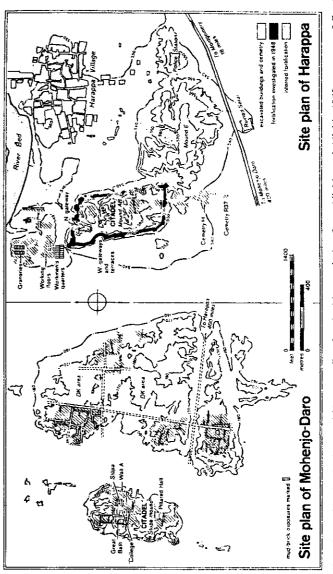


Fig. 2. Outline plans of Mohenjo-daro and Harappa. Reprinted with permission from Allchin and Allchin 1982, courtesy of Cambridge Uni-

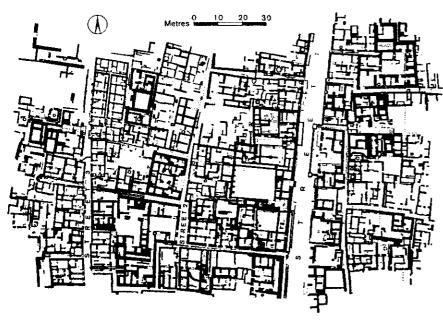


Fig. 3. Mohenjo-daro: plan of part of lower city (HR area). Reprinted with permission from Allchin and Allchin 1982, courtesy of Cambridge University Press.

appears to form a rough parallelogram. The internal layout again reveals clear town planning, that is, streets aligned on cardinal points and meeting at right angles. At Kalibangan the citadel itself is divided in two by a wall across its center. It is suggested by the excavators that the other half of the citadel may have been used for residential rather than public buildings.

There are other unexcavated sites which may have similar dual layouts. Wheeler (1968:60-61) has noted two on the south coast. The site of Amri is not claimed by the excavator to show this pattern, and is assumed to have been originally a single mound, but certainly today it represents two separate mounds, and the excavations are insufficient to determine the character of the buildings (Casal 1964). A number of other dual mounds have been found during general site surveys (Chakrabarti 1979:207). Two recently excavated sites, Surkotada and Banawali, consist of single-walled settlements each divided by a further wall down the center. The excavators note features which reflect the citadel and lower town distinction (Bisht 1982:116-117; Bisht and Asthana 1979). The fullest publication of a site outside the twin major towns is that of Lothal (Rao 1973, 1979), which is a port in the Gujerat province of India. Here is found only

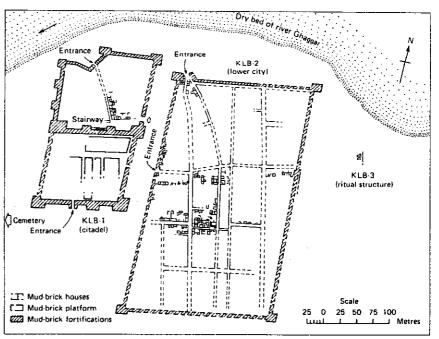


Fig. 4. Plan of the Harappan period at Kalibangan (after Thapar). Reprinted with permission from Allchin and Allchin 1982, courtesy of Cambridge University Press.

a single mound surrounded by a wall, but once again divided into an area of public buildings, based on mud-brick platforms, at the higher end and residential buildings at the lower end of the site. Two other recently excavated sites on the coast, Balakot (Dales 1979) and Allahdino (Fairservis 1982), show a similar pattern of a single mound, with a high end, on which there may be public buildings, and a residential sector which, at all sites, is based on straight streets which meet at right angles. In all the Harappan sites excavated so far, with the single exception of Lothal, the public buildings are to the west of the residential areas.

Fentress has shown clearly that previous excavators have exaggerated the similarities in general layout between Mohenjo-daro and Harappa (1976:136-137). Nevertheless, if we take all the excavated Harappan sites, certain patterns emerge in terms of the separation of certain types of building, the use of artificial platforms, orientation, and formal layout of streets. In some cases such as at Kalibangan the imposition of this characteristic pattern is coincident with the arrival of other features which suggest an incorporation within the mature Harappan (Thapar 1973). It is possible, as Fentress has shown, to emphasise the heterogeneity of these sites, especially if we include recently excavated sites such as Balakot and Allahdino. There are, after all, only three excavated sites with

the "classic" pattern of dual mounds. Some of these features have to be taken as polythetic categories; for example, the citadel appears to vary greatly in the degree to which it includes residential housing or mud-brick platforms. The degree of consistency, however, becomes much more impressive if two further factors are taken into consideration, which are the size of the settlements and similarities in the public and private buildings within them.

To encounter the kind of pattern so far described for sites the size of Mohenjo-daro is hardly surprising and might suggest a ruling town dominating the villages around it, comparable to Mesopotamian settlement patterns (Johnson 1972). If, however, we examine the comparative sizes of the other sites discussed (see Table 1) we find that while Kalibangan is of a reasonable size, some 14 ha compared to the 85 ha of Mohenjodaro and Harappa, others are of a quite different order of magnitude (Chakrabarti 1979). Lothal is a mere 4.7 ha, while Allahdino and Balakot are minute hamlets of 2 to 4 ha and Surakotada is of less than a single hectare.

# SIZES OF EXCAVATED HARAPPAN SITES AND "CITADELS"

To find any sort of similarity in general plan between sites under a hectare and those of 85 ha suggests something of much greater significance. Normally archaeologists studying the settlement pattern of an early state would expect to distinguish "towns" from "villages" on the dual criteria of size and morphology, but here even the tiniest site may be trying to emulate the same pattern. This interpretation is similar to that which I have found necessary when working in a contemporary Indian village. Large houses are found to have separate rooms which relate to different kinds of activity or degrees of purity. In small, single-roomed houses one is often faced merely with a step up in the floor level or with a row of stakes, which can only be interpreted as the vestigial represen-

TABLE 1 SITE AND CITADEL SIZE AT HARAPPAN SITES

Site	Overall size (Ha)	Citadel size (Ha)	Ratio of citadel to site
Mohenjo-daro	85	12	1:7
Harappa	85	12	1:7
Kalibangan	14	4.2	1:3
Lothal	4.7	1.2	1:3
Balakot	2.6		
Surkotada	0.7	0.35	1:2

Note. Based on Chakrabarti 1979 with additional measurements from published plans.

tations of what would have been divided if space had allowed. Clearly, as one goes down in size of Harappan settlement the separate citadel becomes a practicable impossibility, and we find Surkotada divided into two, and then other, small sites within a single mound but still separating out into different classes of building. What is consistent is the comparative regularity of layout, all sites having main streets orientated on cardinal directions, all but one with a higher area to the west. Piggott (1950:173) reports even the hamlet-sized Amilano as approximating a grid. This degree of regularity is quite different from our image of the peasant "village." A town-village dichotomy would also suggest that the former would be the site of the major public buildings, while hamlets would be only for residential purposes. In fact the proportion given over to separate and "special" areas may be quite as great in the smallest sites as in the largest. As found in Table 1, the separate citadels of the largest sites are approximately a seventh of the entire site, but at the smaller sites of Lothal and Kalibangan the citadel takes up a third of the site, and at the minute site of Surkotada the site is divided in half. It is still quite uncertain as to what these divisions may represent, but overall it appears to confirm the idea that the Harappan civilization has no "villages" in morphological terms.

The Harappan civilization, as will be found from other material evidence, shows remarkably little individualization of artifacts, and the buildings themselves are hard to distinguish; in particular there is almost a complete absence of architectural decoration. In layout these houses are also relatively homogeneous, being usually based around a courtyard which cannot be entered directly from the main street but from around a corner or through another room, indicating a concern with privacy. The uniformity of brick size and proportions has been noted at virtually every Harappan site. The impression of a general homogeneity of site layout which has been noted is further strengthened by the results of the excavations at the largest sites, which suggest a retention of the plan over a considerable period as streets, wells, and other features are maintained during the buildup of the tells.

There has recently begun a massive reexamination of the materials excavated at Mohenjo-daro by a team led by the architect K. Jansen (1984a), and these together with the study by Sarcina (1979a, 1979b) of the plans from the earlier excavations have given us a clearer idea of the structure and variability of the private house at Mohenjo-daro. Sarcina divides the private house into a number of ideal types depending on the number and configuration of rooms. In a study of 112 houses in an area of Mohenjo-daro she found that 100 fitted within two of her basic models, that is, houses either with courtyards at a corner and surrounded by rooms on two sides, or with a courtyard in the center of the north face

and surrounded by rooms on three sides. As shown in Table 2 there are only 7 houses over 150 m<sup>2</sup> and none under 50 m<sup>2</sup>. The artifacts found within these houses suggest that differences in size relate to larger occupying units rather than any great disparity in wealth. Sarcina suggests that the house sizes would appear appropriate for comfortable living by nuclear families. We have no evidence for the kind of social unit in occupation but the variability found appears to represent little more than that which might be expected from the developmental cycle of some form of domestic group, allowing for childless widows and a few more extended units such as might be expected in a peasant village.

Private houses of this kind account for about 77% of buildings in the Mohenjo-daro lower town according to Sarcina, other buildings being used for shops and possibly smaller public buildings. Commercial activities seem intermixed with residential dwellings, and suggest a dispersed retail structure. Of particular interest are Sarcina's comments on the smaller houses. There have been claims that blocks of small dwellings represent slave or servant quarters (e.g., Piggott 1950:170). Although Sarcina found some smaller private dwellings, she noted "At the other end of class of sizes, there are houses—only 22 or c.12% of the whole—with an area less than 80 sq. m. these do not testify necessarily to slaves or servants who lived in them. In fact they are built with the same care as the larger houses and, wanting other evidence, may have been the private houses of small families, often with commercial function too" (1979b:185). Buildings excavated at other sites appear to show similarities in terms of both size and layout, although in many of the smaller sites entire house plans are rare.

This homogeneity of residential buildings is repeated when we consider the larger public buildings. Using Mohenjo-daro as the base line, the most noticeable feature is that of the great bath near the apex of the site. As well as the bath itself the building contains a number of small cubicles, which appear to have been for washing, with doors orientated in such a manner as to preserve privacy. Next to this building is another consisting of a rectangular series of brick platforms, built upon a much larger mud-

TABLE 2
Size of Houses in Mohenjo-daro

Size of houses	Number of houses	
0-50 m <sup>2</sup>	0	
50-100 m <sup>2</sup>	55	
100-150 m <sup>2</sup>	50	
$150-m^2$	7	

Note. Data abstracted from Sarcina 1979a.

brick podium. The separate platforms are revetted and separated by passages. This building is conventionally described as a granary (following Wheeler 1968:43). Other public buildings include a columned hall and large structures given names such as "college." There is little evidence for the precise function of these buildings, and the names given to them are somewhat arbitrary. Fentress (1976:140–170) has effectively criticized the conventional interpretations, and the question of alternative reasoning will be returned to later.

The citadel at Harappa is too poorly preserved for one to be sure of its features, though large drains and wells are suggestive. To the north is found a building known as a granary (Wheeler 1968:3) though having few features in common with that at Mohenjo-daro. Nearby are five rows of circular working platforms, called "working floors" and claimed to be for threshing grain, and the so-called barracks. Although no bathing area has been found, the close proximity of these buildings to the Indus itself may be noted.

In his interpretation of these two segmented platforms as granaries, Wheeler suggested that they formed part of some kind of redistributionbased economy. The interpretation of barracks for the work people and the threshing floors follows from this. He clearly envisaged something similar to the temple-based enterprise of the contemporary Middle East with its own labor force, tax revenue system, etc. There are problems, however, with this interpretation. As Fentress (1976), Jansen (1979), and Shaffer (1982) have argued, there is no specific evidence for the use of these platforms as granaries. Apart from their segmented nature they are really just two of a large number of such platforms. It also seems quite unlikely that a major storage granary would have been situated outside of the citadel walls at Harappa. Fentress, who provides the most thorough review of the evidence, notes the cremated bones found in association with the "threshing floors" and the well-made and private barracks and concludes "In fact there is as much evidence for interpreting this complex as a religious place, with priests' quarters and consecrated platforms as there is for the suggestion that is it a granary together with workmen's quarters and working platforms" (1976:173).

Expanding from the two major sites, certain recurrent features begin to emerge. No site has such an imposing feature as the great bath of Mohenjo-daro, but at Lothal there is found a row of 12 bathrooms on top of a massive mudbrick platform at the highest end of the site, with large drains leading from them (Rao 1979:77). The excavator is uncertain whether these represent 12 separate buildings or were all part of one larger structure. At the highest point of Allahdino is found an open court 8 by 20 m whose main distinguishing feature is a large stone-built well and a bathtub (Fairservis 1982:109). The late (Harappan) phase at Damb

Sadaat contained a large mud-brick platform with large drains set within this (Fairservis 1971:145). Thus there is the clear inference that near the highest point of a number of sites is to be found a large feature set on a brick platform and connected with the use of water and, probably in every case, bathing.

Another feature is the segmented platforms which may be termed warehouses as well as granaries (e.g., Rao 1979:112). The only site where evidence has been preserved for what lay above these is at Kalibangan. Here the citadel includes four such brick platforms each reached by a flight of stairs. One of these still had some remains at the top which consisted of a well and a rectangular pit with the bones of bovines and antlers. Another platform was found to have seven "fire altars." These are shallow rectangular or oval pits with charcoal, a block fixed in the center, and sometimes flat rectangular or triangular terracotta "cakes" found around the block (Thapar 1973:95, 101). Evidence for "fire-altars" has also been claimed for Lothal (Rao 1979:97) and Banawali (Bisht 1984:95).

In summary, the citadel areas of the sites seems commonly to include one or several massive brick platforms, often incorporating large drains and surmounted by features connected with water and, more rarely, fire, and therefore suggesting a ritual association. There is no good evidence to suggest that these may be related to the kinds of redistributive economic function that was postulated by Wheeler, and the platforms so interpreted have always had an absence of extant remains on their surface. For the public buildings, as for the form of the settlements themselves, a normative model can be postulated on the basis of the larger settlements to which the smaller sites respond with a correspondingly smaller feature, at the extremes a gradation from the great bath to a stone tub and from a columned hall to buildings that are simply larger in scale and thickness of walls than ordinary residential dwellings.

#### THE ARTIFACTS

Turning from the settlements to the other main source of evidence, the artifacts contained within them, produces some striking parallels. The Allchins echo the conclusion of most researchers when they state that "It is possible to typify each craft with a single set of examples drawn from one site alone" or, for example, that "a standard range of copper and bronze is recorded in site after site" (Allchin and Allchin 1982:193). This impression of homogeneity results from two complementary factors: the similarity between artifacts at different sites and their predominently plain form, which also gives an impression of primarily utilitarian concerns. The lack of decoration or particularizing features in the buildings

is matched by the metalware, consisting mainly of sheets cut into simple shapes, or made up into container forms, and the chipped stone material dominated by parallel-sided blades. This latter industry has been studied both at factory sites, where actual working surfaces can be observed in situ (Allchin 1979:185), and from recent excavations. Detailed analysis of the assemblages at Allahdino and Balakot reveals a marked decrease in reworking in the Harappan levels (Allchin 1979:193–200). This may be set against the rarity of secondary working in most of the artifact forms found in the Harappan.

Exceptions to these generalizations which show elaborate decoration and are therefore frequently illustrated are the pottery and seals. The classic Harappan black-on-red ware, which includes both geometric and naturalistic designs, is easily recognizable as a conventional style, and the particular stylistic units used, such as pipal leaves or intersecting circles, seem common to most sites. The shapes also appear to be heavily standardized (Manchanda 1972). The range of seals includes many idiosyncratic designs, but the majority fall into two or three common motifs (e.g., Mackay 1938: Plates CXXXII-CXCIV). The overall impression of homogeneity is enhanced by the spread and uniformity of a range of artifacts, unique to the Harappan, which have thereby become defining features in the normative tradition. These include the system of weights, the seals or sealings, various ornaments, and the triangular terracotta "cakes."

The assertion of homogeneity is always dependent upon the level of analysis. Artifacts which are the same in terms of centimeters may be highly variable at the level of millimeters. As modern techniques have become more sophisticated they are bound to reveal a degree of diversity. Such diversity has already been noted in terms of subsistence activities, and work on the peripheral areas of the Harappan suggests also some interaction with non-Harappan communities as a source of variability (Possehl 1980). The artifacts have also been subject to modern reanalysis to establish with more precision the nature of this assumed similarity between sites. The most sustained work on this subject is the comparison between the material from the two major sites of Harappa and Mohenjodaro by Fentress (1976, 1979). Her aim was to critique the conventional interpretation of homogeneity as "normative" and to exemplify the concern for variability advocated by the "new archaeology." There is therefore a clear bias toward the assertion of variation in contrast to the earlier attempts to deny it. The problem is how to interpret the degree of variability she reveals.

There are two basic dimensions to her analysis, the comparison of the lowest and the highest levels (which are absolute rather than stratigraphic, owing to the techniques of the early excavators), and a compar-

ison between the two sites. Such is their similarity over a distance of 600 km that she is forced to use the differential proportions of the same artifact types, in relation to the proportions of soil shifted, rather than actual differences in classes of artifacts. I would assert that in all five artifact classes examined, it is the overall similarity between the two sites which is striking.

For the main kind of square seal she notes that "About 75% of the devices or symbols on the seals at both sites are of two types; the bull with stand and the script without animals" (Fentress 1976:210). The main differences between the sites are a greater proportion of seals at Mohenjodaro and of seal impressions at Harappa (which might have been thought to cancel each other out as evidence for variability), and, second, a lack of copper tablets at Harappa, which is part of a general comparative paucity of metal there. The weights are admitted to be essentially the same in both weight and frequency at the two sites. Of the next category of artifacts she notes "a general comparison of the figurines at Mohenjodaro and Harappa seems to indicate that they are quite similar" (1976:234) and only minor differences in style and the proportion of the sexes represented are noted. There is clearly a higher proportion of metal artifacts at Mohenjo-daro, and some differences in the kind of vessels found. The jewelry, however, is simple and similar at both sites, as are the ordinary metal tools. The ceramics were not recorded quantitatively and are hard to compare. Burial forms seem to show the greatest variability.

When these sites are compared to the material from any of the recent excavations such as coastal Allahdino and Balakot, while there are clear local forms such as in the coarse pottery, the dual factors noted as producing homogeneity are paramount. More sophisticated and fine-grained research is bound to be able to differentiate further in the future, but should our emphasis be on variability wherever it is found, or does the "resistance" of the material to such investigations point to its unusual nature? Even Fentress finds a quite remarkable lack of evidence for any change in almost every artifactual form studied over time (miniature amulet-tablets being the sole exception, Fentress 1976:263) despite an occupation which lasted several centuries. All of this comes from a source whose declared aim was to demonstrate the opposite of these conclusions. The implication is that homogeneity over an enormous area and period cannot be reduced to the normative tendencies among the traditionalist archaeologists.

This homogeneity must be accounted for first at the levels of production and exchange. One expectation might be of a high degree of centralization in production, but this does not seem to be the case. Current work at Mohenjo-daro, which includes a large scale surface survey, prom-

ises to provide far more detailed information on craft production. As yet we have only a preliminary indication of the results. These suggest that, while most of the familiar commodities are produced on the site, the nature of this production is generally dispersed (Bondioli and Tosi 1984:26-31; Kenover 1984:109). Depending upon the product there is evidence for a variety of small workshops and also for considerable manufacturing activity taking place within the ordinary houses of the residential sectors. There is no evidence for a factory-style system of centralized production, producing largely for trade. This type of manufacture may be matched by the evidence from other areas. Even comparatively small sites such as Lothal and Chanhu-daro appear to provide evidence for the local manufacture of a large proportion of the typical artifacts. At Chanhu-daro, a site of only 4 ha, there is evidence for working in metal, a bead-making factory, the manufacture of stone weights, seals, and work in shell (Mackay 1943). This decentralized form of production suggests that the homogeneity is not a product of the technology or direct centralized control. At sites such as Allahdino, which are so small that they could not possibly have supported such a range of manufactures, there is no noticable absence of any of the common artifact types (Shaffer 1982:45), so that there must have been an effective internal trading network which supplied such sites. This latter has been emphasized by Fentress as having been a major means of ironing out local and differential access to resources (1976, 1982). Almost all the excavation reports from Harappan sites devote a large proportion of their presentation to the seals and the stone weights. The analysis of the latter demonstrates a standardized and accurate series found throughout the area (e.g., Mackay 1938:601-612; Mainkar 1984). The seals may attest to some administrative control over production, as suggested by the recent finding of a seal impression on the container used in a pottery firing (Halim and Vidale 1984:82-83). The total evidence for administrative functions, internal trade, and resultant standardization is impressive. There is no reason, however, to assume that this clearly effective administrative of commerce could not have been just as decentralized as the production processes.

The one category of object which is conspicuously absent from the Harappan sites is that which traditionally was assimilated under the European category of "art" objects. Although a prime goal of the early excavations, little suggestive of the expensive, exotic, complex, luxurious, or aesthetic has been found. This is not at first evident from the conventional accounts. Most of the standard references give the kind of proportionate space to a discussion of "Art" in their account of the Harappan as would be expected in that of any early "civilization," but this is illusory. The reason the so called "priest-king" figure with the fillet on his forehead or the small bronze dancing girl is continually shown

in publications is simply that there are no alternatives. The sum total of such figures from the largest of the ancient civilizations would not do credit to a single urban site in most areas of the ancient world. This presents a striking contrast to Mesopotamia or Egypt. When we find anomalies of this magnitude, even when represented by such inappropriate categories as "art," then they represent important evidence in themselves.

This conclusion seems relevant also to the the even more amorphous category termed "luxury, status, or prestige goods." There are quantities of beads at all the sites and a certain amount of gold and silver, but these seem to be in general use as ornaments, rather than select items of consumption. Simple necklaces, mirrors, small metal figurines, and plain metal vessels are the only objects normally placed within the luxury class. To confirm such an identification requires evidence that such goods were intended to be marked off and distinguished from mundane common forms, and their distributions (as at Lothal and Mohenjo-daro) do not support these claims. Concentrations are only found as hoards, which may have been for trading or repair rather than personal consumption. For example, there is nothing so far to suggest that gold represents anything more than another and equal substance from which ornaments could be made.

Apart from the settlements themselves, the subject which has received the most attention in Harappan studies is that of external trade. There have been two recent extended analyses of this subject (Asthana 1976, Ratnagar 1981). discussing in particular the extent of contact with Mesopotamia and the likely sources of Harappan raw materials. Debates center on whether we are to envisage sea trade centered on a port such as Lothal, caravans passing across Iran, or local exchange (e.g., Lamberg-Karlovsky 1975). Journals such as the Social and Economic History of the Orient regularly have articles on the subject of the identification of the Harappan in Mesopotamian literary sources.

Two recent discoveries of apparent "colonies" of Harappan people outside of the area of the Harappan itself have added to this controversy. The first is a set of sites in the Shortugai region of Afghanistan (Frankfort and Pottier 1978) and the second is in Oman (Tosi n.d.). These are sometimes assumed to parallel sites such as Kültepe, the colony of Mesopotamian traders in Anatolia, and relate to control of trade in lapis-lazuli from Afghanistan (although little of this has been found in the Harappan) or perishable goods, such as a wool for cotton exchange with Mesopotamia.

This evidence leads us to expect a considerable quantity of artifacts within the Harappan which have demonstrably been imported from outside. Such evidence has certainly been searched for, and Dales (1979:265)

regarded this as one of the major aims of the Balakot project. It is somewhat disconcerting to find, then, that from the entire Harappan corpus only a single find can be placed with some certainty in this category, a rounded seal of Persian Gulf type found at Lothal (Rao 1973:118). There are other possible candidates such as some carved stone bowls and the odd sherd, bead, or cylinder seal, which may be imports on stylistic grounds, but which also may have been made locally under an external influence. It can, however, by now be asserted that there is a remarkable lack of evidence for external trade in the Harappan material. The number of Harappan finds in Mesopotamia is not large; around fifty are presently attested, but in Mesopotamia there are many imports from other regions, while for the Harappan, the problem is only partially a lack of imports from Mesopatamia. Perhaps more importantly, even sites much closer to home, such as Mundigak and Shahr-i-Sokhta, appear to share almost nothing in common with their vast neighbor. The effective isolation from the west has been noted by Gupta in a detailed comparison of the relevant sites (1979:261, 284-285).

This is a fairly extraordinary contradiction between strong evidence for external contact in the recently discovered sites outside the Harappan and the almost total absence of any results from such contacts. One solution may be that while the Harappan engaged upon an extensive trade in raw materials, there was a complete embargo upon the importation of foreign manufactures. Thus there are copper "buns" of the kind found at Lothal, or raw lapis coming in, but no exotic artifacts which might have lent themselves toward the representation of personal status. Extensive trade in such imported raw materials within the Harappan is demonstrated by the internal dispersal of both production and products. The evidence is especially clear from the shell materials, which are often known to have come from a particular area, and yet may be actually worked at sites far inland (Durante 1979). In general, however, the literature on the external trade of the Harappan has played down this absence of evidence and therefore again failed to address the particular nature of the Harappan.

### SOCIAL DIFFERENTIATION

The disparity between the present analysis and most conventional interpretations is clearest over the question of social divisions. The Allchins provide the conventional view that "there are many indications that the Mature Indus period urban society had evolved considerable social stratification and division" (Allchin and Allchin 1982:222–223). It has already been shown that evidence for prestige goods is very unclear and that the variability in house size and type analyzed by Sarcina is compatible with

the fluctuating demands of the domestic cycle. There are merchant's houses [e.g., at Lothal (Rao 1979:91)] which may include goods stored for future exchange or as capital. There have been no finds, however, which suggest anything beyond these very transitory differences. There is no evidence for a clear class of wealthy individuals who have marked out their distinctiveness. Sarcina, commenting on the distribution of artifacts in the homes, concludes that the "quality of found objects suggest a well-distributed welfare and a comfortable standard of living, devoid of either luxury, on the one hand, or evident signs of exploitation on the other" (1979b:186).

Our knowledge of this material is likely to markedly expand over the next few years thanks to a remarkable project led by the architect Michael Jansen (Jansen and Urban 1984; Urban and Jansen 1983). This includes some complex reanalyses of the documentation made during the original excavations of Mohenjo-daro in order to examine the architectural features and the possibility of establishing contemporaneity. In addition there is a large-scale project based on the original excavation notebooks which will establish the original findspots, often in terms of the rooms in which they were recovered, of some 38,000 artifacts. It would be wrong to preempt what are likely to be highly revealing results. Preliminary findings have been published for one of the larger residences and the area of the great bath (Ardeleanu-Jansen et al. 1983;52-524; Jansen 1984b). These suggest that such sites are replete with finds of minor ornaments, terracotta toys, pottery, and simple copper tools. In short, very much the kind of material which is found throughout the site. There is nothing, as yet, to cast doubts upon Sarcina's conclusion.

It has been suggested that the "citadels" may include palaces or the residences of elites. Sarcina's work on the lower town is complemented, however, by the study by Fentress of the comparative proportions of artifact types in the two parts of the towns. She notes that goods made of metal, which might be considered as having luxury connotations, are not more common on the Harappan high mound than on the lower town, while at Mohenjo-daro the evidence shows a much *lower* proportion of such objects in the "citadel" area (1976: 240–241). Artifacts from public buildings are of much the same type as those from the ordinary residences of the lower town.

Another common archaeological source for the study of social differentiation is the analysis of burials and their associated grave goods. The burial evidence from the Harappan is extremely sparse. Only one of the two cemeteries found near Harappan is of the correct date, in addition to which there are also 221 skeletons from Lothal and some from Kalibangan. Overall there is quite a variety of burial practices (Fentress 1979), including extended skeletons in graves which may be brick lined, urn

burials, and deposits that look like graves but contain no skeletons within them. At Lothal there are a number of double skeletons (Rao 1979:141). In general, however, the grave goods are simple pottery forms, such as receptacles for meals for the deceased, and there is again no evidence for luxury goods or strong status markers, especially when compared to other ancient civilizations.

An important series of studies has been made of the skeletal and dental material. Kennedy noted a lack of nutritional stress in an examination of 350 skeletons of the mature Harappan period, concluding that "the Harappan skeletal series is aberrant when compared with series from other archaeological sites for which archaeological data suggest a significant development of social stratification" (1982:290; see also Lukacs 1982). Thus while a series of "royal" tombs may one day appear to challenge this conclusion, up to the present there is no evidence to suggest either elites or conspicuously impoverished classes, and some efforts were expended to prevent the development of such differentiation.

#### INTERPRETATION

To summarize the evidence so far, a set of problems have been noted for the conventional and some of the recent interpretations of the material evidence for Harappan society. All previous writers have commented upon some of the features described above, in particular the degree of homogeneity in the material culture, but these have been integrated into a model of the Harappan society which I believe accounts for only a part of the specific nature of the material and denies other tendencies. To interpret any one of these anomalies, they must be considered in the context of all the others.

The conventional model of a high degree of social stratification, supported by a large-scale external trade and a redistributive economy, has gone through a series of developments. Piggott (1950), for example, in one of the major books on the Harappan, argues for the bureaucratic control of trade and production. Much of the writing is influenced by two sets of comparisons, one to the ancient Middle East which provides the model of redistribution, slavery, and temples, and the other to contemporary Indian society which gives caste or guild-like groups (e.g., Fairservis 1976:111). From the latter Piggott derives an "orientalism"; to explain the homogeneity of the material, he assumes a stagnation and isolation in his comment on "a dead level of bourgeois mediocrity in almost every branch of the visual arts and crafts," which closely reflects contemporary British inabilities to understand Hindu aesthetics (Mitter 1977). For government Piggott saw "a state ruled over by priest kinds, wielding autocratic and absolute power from the two main seats of gov-

ernment" (Piggott 1950:153). The description of the skeletal material exhibits clear racist assumptions; he saw a "proto-australoid type, then as now, ranking amongst the under-dogs of the system and second the predominant mediterraneans, presumably the main contributors of the agricultural and urban features of the whole Western Indian Prehistoric world" (1950:147–148). Wheeler, the source of some of these ideas, preferred to emphasize military conflict and regimented styles, reflecting his own background and interests (1968:72–77). This is despite the fact that outside of sling stones the evidence for warfare or even any portrayal of soldiers is absent. A recent study of Harappan gateways demonstrates that these were clearly not designed to perform the kind of defensive function as that of fortified gateways in western Asia (Kesarwani 1984). This lack of evidence for military activities provides yet another glaring anomaly in relation to the Middle Eastern civilizations.

The evidence attested by such authors has been radically criticized in recent writings (e.g., Fentress 1976; Shaffer 1982; Vishnu-Mittre 1982). They have successfully demonstrated the variability of subsistence activities and modes of burial, and some regional differentiation (e.g., Possehl 1979b, 1980), but they have not acknowledged the implications of their own failures to demonstrate significant variability in other domains. Equally, the emphasis placed on various systemic models with their ecological grounding (e.g., Shaffer 1978) is poorly supported as causative of either the rise, the reproduction, or the fall of the Harappan, and is quite barren with respect to the reconstruction of the social formations which created and constituted it.

As a first step toward constructing what in the introduction was termed a contextual analysis, the Harappan material culture, including the settlements themselves, are to be considered as artifacts, that is, "artificial" creations of the Harappan civilization. The kinds of order they represent may have been instrumental in the organization of society. There are not two separate structures, the material "reflecting" the social, but a set of institutions and principles constitutive of both. Following the neorealist epistemology of Harre (1970) and Bhaskar (1978) (see Miller 1982) we have a set of patterns from which we postulate structures, which, although they may never be evident in themselves, can be presumed in order to account for the evidence. It is the possibility that the material evidence can embody contradictions which allows us to examine the question of ideology. This may occur either between what is represented in two sets of material or even within a given area, for example, as will be illustrated below, when representation in object form denies change over a considerable period. This procedure would be equally necessary in the analysis of contemporary ideology as for that of historic or prehistoric materials.

An important feature of the Indus civilization is that it opposes itself at every point to nature. The now common anthropological cliché about "culture and nature" is suggested, but this would be misleading, since that dichotomy is related to the simple imposition by people of order on the natural world (and our particular postenlightenment concept of "nature"). In this case, however, as will be shown, we are concerned with an order that is opposed to the "natural" in both the human environment and the nonhuman environment. For example, previous village sites may well have developed in relation to the particularities of the local conditions, a small hillock, a depression, and so forth; equally in their form they betray the particular developments of the society of their inhabitants, a free pattern of contraction and expansion of housing units that can develop alongside the contingent social relations, the relative growth and decline of family, lineage, faction, etc. This is a common pattern in later "peasant" villages and can be studied from their spatial layout (e.g., Wright 1981)

In the Harappan, however, we see the establishment of an order in the settlements that opposes both the natural environment and the human. The sites are often laid out within geometric forms, on single or dual mounds with ordered streets on cardinal orientations. There is the creation at great effort of massive brick platforms to create a base for non-residential activities. All sites seem to include the construction of such a "tell," as opposed to the natural ground. Equally, if the Harappan is considered in terms of its own historical trajectory, that is, the sequence of developments which precedes it, there is evidence for the suppression of a number of evident trends which were manifested in regional and social differentiation.

The second major characteristic of the Harappan is that it represents a standardization of and around the mundane. There is more evidence for variability of ritual practices than of everyday artifacts (Fentress 1979). There is the elimination of anything which might challenge the order that this standardization represents. The plainness and the lack of decoration of both buildings and artifacts mean that these lose their possibilities of specific reference, and tend rather toward formalism. Thus, rather like modernism in recent times, they tend toward a kind of symbolic closure in which they refer not to groups of people, regions, or other external factors, but only to the style, that is, the order within which they were created (Miller 1984).

The penetration of this formal order is not absolute. An attempt to homogenize subsistence activities over this vast area would have been doomed to disaster, and this is the one area where pronounced regional variation has been demonstrated. Also, some very basic social patterns such as the developmental cycle of the domestic group may well have

been permitted to generate some variation in housing size and use. Thus the formal order does not attempt to subsume certain domains of largely practical native. The failure of any attempt to do so might have led to the emergence of a wider challenge to that order. The survival of the Harappan over such a long period may have depended upon this pragmatic separation (Bloch 1977). The basis of this ideology may have been a parallel between the control over nature and that over people, comparable (though different) to the association between science as control over nature and technological efficiency in social control today (Miller 1984:38).

This formalism as a set of ordered categories without external reference aids in the interpretation of the evidence for ritual. There is relatively little direct representation of a deity, although Fairservis has attempted to classify several different figures on the basis of the seals (1976). These and an etched terracotta cake show figures with both hominid and animal attributes, such as an antler on a human head. There are also rare representations of possible servants or priests, and the common "unicorn and standard/brazier" motif of the seals may be a sacrificial scene. The sacrificial remains at Kalibangan contained both bovine bones and antlers (Thapar 1973:95). Such a "deity" may be related to a dissolving away of human/animal (culture/nature) distinctions in favor of the reification of a composite form imposing itself upon both. The evidence is clearly limited, and what are conspicuously absent from the Harappan, compared to other early civilizations, are any obvious "temples" or grand statuary metaphorical of hierarchical relationships between people and the gods. or between people and other people.

The major sources of evidence for ritual activity are the finds atop the platforms, for example, the fire altars attested at Kalibangan, Banawali, and possibly at Lothal. There is also the much clearer evidence for the use of water for bathing near the highest points of the settlements, most spectacularly at the great bath at Mohenjo-daro. These two features, the uses of fire and water, are not usually quite such prominent elements in religious practices, although they have considerable importance in both of the major religions to emerge in historical times in this area, Vedic Hinduism and Zoroastrianism. They are important because they are substances commonly associated with purification through either washing or burning, which in turn, following the arguments of Douglas (1970) and Dumont (1970), is closely associated with the purity and separation of categories within a structure. These two substances are also evident in all ordinary households, in the clearly demarcated bathing area and the presumed hearth. Indeed the provision of bathing facilities being one of the very few distinctive features of Harappan architecture has been much commented upon by archaeologists: "the whole conception shows a remarkable concern for sanitation and health without parallel in the Orient in the prehistoric past" (Piggott 1950:168). This suggests that the major rituals of the fire altars and great bath are representations, at a grand ritualized level on the platforms, of the purificatory rites of the everyday. The relationship may also be reversed and it can be suggested that these everyday activities reproduce the sanctification which is manifested in the great rituals.

The most important center for "ritual" activity is in a sense, then, not to be found on the citadel, but in the highly repetitious nature of the everyday objects of the residential areas, whose standardization relates essentially to their own order. They reinforce as naturalized objects in the everyday world a similar set of categories and principles (Bourdieu 1977:87-95). Thus the citadel itself is a reproduction of that which is found in the lower town, in the large sites where the outline is clear, using the same parallelogram or square shape, i.e., they are not separate areas for a separate elite class. They very likely contain administrative and in some areas residential buildings used in the political and ritual control suggested by the maintenance of such standards.

This brings the argument to the question of the nature of power and interest, which must be a pivotal point in any social interpretation of archaeological remains. It seems likely that the people of the Harappan who may be said to have power may not have enjoyed privileged wealth or conspicuous consumption, and indeed are more likely to have been conspicuous through asceticism. The so-called "barracks" are more likely to have contained monks than slaves. In such a culture there is a gradation from the formalized abstraction of the guiding principles and values through to the direct involvement in the everyday world. It is those who can maintain the greatest distance from ordinary enterprise and who can embody the cultural capital necessary for an authoritarian stance in relation to the interpretation of the mythological "texts" (which may have been oral in form) who are thereby granted an authority and power that is literally consecrated. A normative tendency to puritanism seem a closer approximation to the evidence than a model of priests and priest kings.

There is no reason why either the complex bureaucracy which must have existed or the use of the major ritual forms need have been restricted to a separate and marked class or group. Control may have been the more effective through being highly dispersed. For us as archaeologists it is important to note that what we discover is the forms of representations. If, as seems likely, symbolic capital could not be translated into economic capital (see Bourdieu 1977 for these terms), then wherever hierarchy and division manifested itself this may not have been able to surface as the kind of material representation which is the archaeologist's form of direct

evidence for social relations. Clearly, then, lack of any material representation of class or hierarchy does not of itself mean that these did not exist.

We see here a differential mastery over the power inhabited by the major institutions which does not lead towards differential consumption. Weber's comment on more recent history may be projected backward some four millenia: "For even at the threshold of its appearance, asceticism showed its Janus face: on the one hand, abnegation of the world, and on the other mastery of the world by virtue of the magical powers obtained by abnegation" (Weber 1948:327). In the sphere of practical relations certain allowance is made for individual strategy, trading, and enterprise. As in later puritanism the individual seems to have been clearly marked, and there is evidence for the respect of privacy in the layout of the houses, which tended to open onto side streets and to have a room to be passed through before one could enter the main courtyard. This is again reflected in the construction of individual bathing rooms in the great bath and also of the "barracks." The simplicity of tools seems to suggest that the concept of function is also an important aspect of the ideology, such that the plain forms of buildings and tools act to represent this ideal (which is not to say that they were necessarily efficient). Historical puritanism as a model helps illustrate the possible compatibility of a powerful normative ethic with a concern for privacy and a high degree of commercial activity. Such historical analogies should not, however, be taken too far, since the Harappan ideology must have also contained unique features not found in any particular historical parallel.

One way of placing the Harappan within history is by working backward. A common assumption has been that the Harappan might be analogous to Hindu principles and social organization. Yet in many respects the picture presented here and that of Dumont's "Homo Hierarchicus" (1970) are not only different but diametrically opposed. Dumont presents the full flowering of a principle of hierarchy engendering perhaps the most diverse and differentiated societies ever to have existed, with ordering principles that manifest this variability and this hierarchy. We might go further by considering Hinduism as a polar opposite rather than a direct analogy.

Working backward in south Asian history, there is a sense in which, over a considerable period, the region has seen a series of cycles, as the ideology of one period develops in reaction to that of the previously established principles. Modern Hinduism arose against the background of the dominance of Buddhism. Buddhism, in turn, arose in reaction to the dominance of Vedic Hinduism. Might Vedic Hinduism have developed at least in part in reaction to the principles that dominated the Harappan Civilisation? If this is the case then the more reasonable parallel would

be between the Harappan and Buddhism, with both manifesting a position contrary to that of Hinduism. The argument would be similar to that of Tambiah, who compares both the principles and actuality of Buddhist and Hindu societies. He states: "The Buddhist picture of the genesis of the world, society, and kingship is a studied and ironical reversal of certain aspects of the brahmanical version that stems from vedic times: but the Buddhist intention is more than simply ironic, for it aspires to generate a rival and wholly different scheme of meaning although sharing with Hinduism certain elementary philosophical and conceptual particulars" (Tambiah 1976:19). Certain practices may continue from the Harappan to later periods, such as the sacrifice of cattle and the yogic position as found in scenes depicted on seals, but their significance may be quite different from that of the Vedic period.

We may imagine, then, a society in which an extreme normative order was valued and combined with control over the world. Such an order was antagonistic to anything which threatened it, which meant anything not generated by it. Objects that were marked by being luxurious, i.e., of specialized manufacture within the region, or exotic, having come from outside the region, were probably forbidden by embargoes on imports and possibly sumptuary laws. A marked difference between this order and Buddhist, medieval Christian, and other "monastic" orders was that the Harappan does not appear to have developed in the direction of great power and wealth accruing to particular institutions. Nor does there appear to have developed the hierarchy of semi-deities such as boddhisatvas or the principles of kingship. Indeed there are no buildings other than these small barracks which could be called monastic. As with other areas of activity, responsibility for the exemplification of order may have been widely dispersed and related to the domestic practices of the whole population rather than left to some assigned and separate group. There is no evidence for priest-kings and temple redistribution as suggested by the older interpretations of the Harappan.

The nature of power as the medium of cohesion in such a circumstance is problematic. Power may be ascribed to charismatic individuals or institutions embodied by individuals as in kingship. It may be ascribed to representative collectives or, as in classic Marxist analysis of ideology, to the differential ability to objectify interests held by various groups within a society, most commonly "classes." Foucault has stressed that power need not be conceived of as merely coercive abilities manifested by particular individuals, institutions, or groups, but may be considered as a more overarching and pervasive principle that both constrains as well as generates social forms, but is commonly strongly normative in its effects (Foucault 1981:92–95; Miller and Tilley 1984). In the Harappan, power resided in those organizational forms which ensured the repro-

duction of order, and which were as productive as they were constraining of social formations. While particular groups may at different times and places have, through their interpretation of esoteric texts, been able to differentially objectify their interests in some practices, this is denied in the material representations we have available, which are devoted to this more profound and stable power. Although there may have been an ideology of egalitarianism, this would have been very different from modern liberal and socialist principles of individual freedom (e.g., Childe 1952). This is not then a case of "primitive communism" since in the Harappan individuals are merely equal in their subjection to order, as in many theocratic states of history.

It is important that this is not represented as a kind of "orientalism," the legacy of occidental beliefs about the unchanging East and the oriental despotic state. Orientalism is a creation by the occident of its alternative and oppositional image (Said 1979). The highly significant evidence for a lack of change in time demonstrated by Fentress's work must be taken as a positive assertion of tradition, not mere stagnation as suggested by Piggott. It is the temporal version of the spatial homogeneity and should be analyzed as a similar phenomenon. This suggests the need to consider the kind of historical consciousness which may have been engendered by the Harappan. It was a highly conservative civilization, which sought to deny history, as is evident from the problems of the archaeologist in locating evidence for change over more than half a millenium. This conservatism is then an instrument of social reproduction. It is against this background that we can best understand the particular nature of the evidence for the end of the Indus civilization.

A belief system which confronts nature and human individual aspiration by denying both may be reified as immutable but has actually to expend some force in its own maintenance. There are always the tendencies toward individual and group aggrandizement, heresy, and innovation. It cannot be argued that the Harappan saw no change and had no history; otherwise, short of some external destructive force, it would still be with us. Rather there is a contradiction between its refusal to acknowledge or represent change and its actual history which could only finally manifest itself with the revolutionary overthrow of the entire state. This is a result of the kind of contradiction which may be generated by ideological constructions. The evidence is suggestive of what has been termed by Habermas a "legitimation crisis," (Habermas 1975; Tilley 1984:143), a breakdown in the ideological control that unified the various elements of the civilization and justified its continuance. This is an alternative interpretation of the end of the Harappan to those often proposed, which have added cataclysmic floods or droughts to the more traditional Aryan invasions (e.g., Raikes 1964; Wheeler 1968:126-134), and all of which

look to forces external to the Harappan. Thus the very lack of evidence for change manifests, with the hindsight of historical analysis, its contrary, the importance of the changes that are thereby being denied, and demonstrates the force of internal factors rather than their insignificance. This is similar to the problem of tiny sites emulating the pattern of major centers. The differences in size are just as significant, and it becomes the contradictions implicit in the denial of this difference which are the source for an analysis of ideology.

The evidence for external factors as the key to the decline of the Harappan has never been impressive. Wheeler's claims for an Aryan invasion have generally been rebutted on the joint grounds that there is no evidence for Aryan-connected artifacts or settlements following the Harappan, and his "massacre" victims do not appear to have been massacred (Kennedy 1982:291). Rather, we find many of the settlements show some evidence of decline in the later phases, in that they continue to be occupied, but by small-scale "squatter" occupations. The next phase of settlement is one of village occupancy similar to that which preceded the rise of urbanism in the area. There is no reason to expect other than long-term continuity of population, but without the structure which produced the civilization.

The interpretation of the Harappan civilization given here is by no means entirely original. Most interpretations have assumed a comparatively strong degree of theocratic control from priest-kings to pseudocaste systems, and have seen these as distinctive marks of the Harappan. No such organizations are necessary to the kind of interpretation outlined above. Rather, while this "theological" aspect of the Harappan is usually acredited to a separate section on religion, ritual, or government, when it is analyzed in terms of ideology we can confront almost every element of the evidence from the nature of the external trade to the lack of "art," to the forms of the mundane artifacts and settlement layout, and suggest a consistency through such a range of evidence by postulating a structure, that is an organization, which, while never evident to us directly, is arguable from the material forms generated by it.

# REFERENCES CITED

Agrawal, D.

1982 The archaeology of India. Curzon Press. Guildford. Allchin, Bridget

1979 Stone blade industries of early settlements in Sind as indicators of geographical and socio-economic change. In *South Asian archaeology 1977*, edited by M. Taddei, pp. 173-212. Instituto Universitario Orientale, Naples.

Allchin, Bridget, and Raymond Allchin

1982 The rise of civilisation in India and Pakistan. Cambridge University Press. Cambridge.

Ardeleanu-Jansen, Alexandra., Ute Franke, and Michael Jansen

1983 An approach towards the replacement of artefacts into the Architectural context of the Great Bath in Mohenjo-Daro. In Forschungsprojekt DFG Mohenjo-Daro, edited by G. Urban and M. Jansen. pp. 43-69. Veroffentlichungen des Geodatischen Instituts der Rheinisch-Westfalischen Technischen Hochschule, Aachen.

Asthana, Shashi

1976 History and archaeology of India's contacts with other countries from earliest times to 300 B.C. B.R. Publishers. Delhi.

Bhaskar, Roy

1978 A realist theory of science. Harvester Press. Sussex.

Bisht, R.

1982 Excavations at Banawali. In *Harappan civilisation*, edited by Gregory Possehl, pp. 113-124. Aris and Phillips, Warminster.

1984 Structural remains and town-planning at Banawali. In Frontiers of the Indus civilisation. edited by B. Lal and S. Gupta pp. 89-97. Books and Books. New Delhi.

Bisht, R., and Shashi Asthana.

1979 Banawali and some other recently excavated Harappan sites in India. In South Asian archaeology 1977, edited by M. Taddei, pp. 223-240. Instituto Universitario Orientale, Naples.

Bloch. Maurice

1977 The past and the present in the present. Man 12:278-292.

Bondioli, L., and Maurizio Tosi

1984 Craft activity areas and surface survey at Moenjodaro. In Reports on field work carried out at Mohenjo-daro: Interim reports, Vol. 1, edited by M. Jansen and G. Urban, pp. 9-38. Forschungsprojekt Mohenjo-daro, Aachen.

Bourdieu, Pierre

1977 Outline of a theory of practice. Cambridge University Press. Cambridge.

Casal, Jean-Marie

1964 Fouilles d'Amri. Publications de la commission des fouilles archeologiques, Paris.

Chakrabarti, Dilip

1978 Lapis lazuli in early India. Man and Environment 2:51-58

1979 The size of the Harappan settlements. In Essays in protohistory, edited by D. Chakrabarti and D. Agrawal, pp. 205-215, B.R. Publishers. Delhi.

Childe, Gordon

1952 New light on the most ancient East. Routledge & Kegan Paul, London.

Dales, George

1979 The Balakot Project: Summary of four years excavations in Pakistan. In South Asian archaeology 1977, edited by M. Taddei, pp. 241-274. Instituto Universitario Orientale, Naples.

Dani, A.

1971 Excavations in the Gomal Valley. Ancient Pakistan 5:1-177

Daniel, Glyn

1968 The first civilisations. Penguin, Harmondsworth.

Douglas, Mary

1970 Introduction to L. Dumont, Homo hierarchicus, Paladin, London,

Dumont, Louis

1970 Homo hierarchicus. Paladin, London.

Durante, Silvio

1979 Marine shells from Balakot, Shahr-i Sokhta and Tepe Yahya: Their significance for trade and technology in ancient Indo-Iran. In South Asian archaeology 1977, edited by M. Taddei, pp. 317-344. Instituto Universitario Orientale, Naples.

Fairservis, Walter

1961 The Harappan civilisation: New evidence and more theory. American Museum Novitates 2055:1~35.

1971 The roots of ancient India. Allen & Unwin, London.

1976 Excavations at Allahdino 1: Seals and inscribed materials. New York.

1982 Allahdino: An excavation of a small Harappan site. In *Harappan civilisation*. edited by G. Possehl, pp. 107-112. Aris & Phillips, Warminster.

Fentress, Marcia

1976 Resource access, exchange systems and regional interaction in the Indus Valley: An investigation of archaeological variability at Harappan and Mohenjodaro. University Microfilms, Ann Arbor.

1979 Indus charms and urns, a look at the religious diversity at Harappa and Mo-

henjodaro. Man and Environment 3:9-104.

1982 From Jhelum to Yamuna: City and settlement in the second and third millenium B.C. In *Hurappan Civilisation*, edited by G. Possehl, pp. 245-260. Aris & Phillips, Warminster.

Foucault, Michel

1981 The history of sexuality. Penguin, Harmondsworth.

Frankfort, Henri-Paul, and M-H. Pottier

1978 Sondage préliminaire sur l'établissement protohistorique Harappéen et post-Harappéen de Shortugai. Arts Asiatiques 34:29-86.

Friedman, Jonathan. and Michael Rowlands

1977 Notes towards an epigenetic model of the evolution of civilisation. In *The evolution of social systems*, edited by J. Friedman and M. Rowlands. pp. 201-276. Duckworth, London.

Gupta, S.

1979 Archaeology of Soviet Central Asia and Indian borderlands. B.R. Publishers. Delhi.

Habermas, Jurgen

1975 Legitimation crisis. Beacon Press, New York.

Halim, M.

1972 Excavations at Sarai Khola. Pakistan Archaeology 7:23-89, 8:1-112.

Halim, M., and Massimo Vidale.

1984 Kilns, bangles and coated vessels. In Reports on field work carried out at Mohenjo-Daro: Interim reports, Vol. 1, edited by M. Jansen and G. Urban. pp. 63-98. Forschungprojekt Mohenjo-Daro, Aachen.

Harre, Rom

1970 The principles of scientific thinking. Macmillan, London.

Hodder, Ian

1982 Symbols in action. Cambridge University Press, Cambridge.

Jansen, Michael

1979 Architectural problems of the Harappa culture. In South Asian archaeology 1977, edited by M. Taddei, pp. 405-432. Instituto Universitario Orientale, Naples.

1981 Settlement pattern in the Harappa culture. In South Asian archaeology 1979, edited by H. Hartel, pp. 251-270. Dietrich Reimer Verlag, Berlin.

- 1984a Preliminary results of two years' documentation in Mohenjo-daro. In *South Asian archaeology 1981*, edited by B. Allchin, pp. 135-153. Cambridge University Press, Cambridge.
- 1984b Theoretical aspects of structural analyses for Mohenjo-Daro. In Reports on field work carried out at Mohenjo-Daro: Interim reports, Vol. 1, edited by M. Jansen and G. Urban, pp. 39-62. Forschungprojekt Mohenjo-Daro. Aachen

Jansen, Michael, and Gunter Urban (Eds.)

1984 Reports on field work carried out at Mohenjo-Daro: Interim reports, Vol. 1. Forschungprojekt Mohenjo-Daro, Aachen.

Jarrige, Jean-Françoise

1984 Chronology of the early period of the Greater Indus as seen from Mehrgarh, Pakistan. In South Asian archaeology 1981, edited by B. Allchin, pp. 21-28. Cambridge University Press, Cambridge.

Jarrige. Jean-Francoise and Monique Lechevaleier

1979 Excavations at Mehrgarh, Baluchistan: Their significance in the prehistorical context of the Indo-Pakistan borderlands. In South Asian archaeology 1977, edited by M. Taddei, pp. 463-536. Instituto Universitario Orientale, Naples.

Johnson, Gregory

1972 A test of central place theory in archaeology. In Man, settlement and urbanism, edited by P. Ucko, R. Tringham, and G. Dimbleby, pp. 769-786. Duckworth, London.

Kesarwani, A.

1984 Harappan gateways: A functional reassessment. In Frontiers of the Indus civilisation, edited by B. Lal and S. Gupta, pp. 63-73. Books and Books, New Delhi.

Kennedy, Kenneth

Skulls. Aryans and flowing drains: The interface of archaeology and skeletal biology in the study of the Harappan civilisation. In *Harappan civilisation*, edited by G. Possehl, pp. 289-296. Aris & Phillips, Warminster.

Kennoyer, J.

1984 Shell Industries at Moenjodaro, Pakistan. In Reports on field work Carried out at Mohenjo-Daro: Interim reports, Vol. 1, edited by M. Jansen and G. Urban. pp. 99-116. Forschungsprojekt Mohenjo-Daro, Aachen.

Kohl. Phillip

1979 The "world economy" of West Asia in the third millenium B.C. In South Asian archaeology 1977, edited by M. Taddei, pp. 55-86. Instituto Universitario Orientale, Naples.

Kohl, Phillip (editor)

1981 The Bronze Age civilisation of Central Asia. M. Sharpe. New York.

Kohl, Phillip

n.d. The ancient economy, transferable technologies in the bronze age world-system, a view from the northeastern frontier of the ancient Near East. In Centre, periphery and dependency in ancient world systems, edited by M. Rowlands, K. Kristiansen, and M. Larsen. Cambridge University Press, Cambridge.

Kramer, Samuel

1963 The Sumerians. University of Chicago Press, Chicago.

Lal. B., and S. Gupta (Eds.)

1984 Frontiers of the Harappan civilisation. Books and Books. New Delhi.

Lamberg-Karlovsky, Carl

1975 Third millenium modes of exchange and modes of production. In Ancient civilisations and trade, edited by J. Sabloff and C. Lamberg-Karlovsky, pp. 341-368. University of New Mexico Press, Albuquerque.

Lukacs, John

1982 Dental disease, dietary patterns and subsistence at Harappa and Mohenjodaro. In Harappan civilisation, edited by G. Possehl, pp. 301-310. Aris & Phillips. Warminster.

Mackay, E.

1938 Further excavations at Mohenjodaro. Govt. of India, Delhi

1943 Chanhu-daro excavations 1935-36. American Oriental Society, New Haven.

Mainkar, V.

1984 Metrology in the Indus civilisation. In Frontiers of the Indus civilisation, edited by B. Lal and S. Gupta, pp. 142-151. Books and Books, New Delhi.

Manchanda, Omi

1972 A Study of the Harappan pottery. Oriental Publishers. Delhi.

Marshall, John

1931 Mohenjo-daro and the Indus civilisation. Arthur Probsthain, London.

Mellaart, James

1975 The Neolithic of the Near East. Thames and Hudson, London.

Miller, Daniel

1982 Explanation and social theory in archaeological practice. In *Theory and explanation in archaeology*, edited by C. Renfrew, M. J. Rowlands, and B.A. Segraves, pp. 83-95. Academic Press, New York.

Modernism and suburbia as material ideology. In *Ideology, power and prehistory*, edited by D. Miller and C. Tilley, pp. 37-50. Cambridge University Press, Cambridge.

Miller, Daniel, and Christopher Tilley

1984 Ideology, power and prehistory, an introduction. In *Ideology, power and prehistory*, edited by D. Miller and C. Tilley, pp. 1-16. Cambridge University Press, Cambridge.

Mitter, Partha

1977 Much maligned monsters. Clarendon Press. Oxford.

Mughal, M. Rafique

1970 The Early Harappan period in the Greater Indus Valley and northern Baluchistan. University Microfilms, Ann Arbor.

1982 Recent archaeological research in the Cholistan desert. In *Harappan civilisation*, edited by G. Possehl, pp. 85-96. Aris & Phillips, Warminster.

Piggott, Stuart

1950 Prehistoric India. Penguin, Harmondsworth.

Piperno, Marcello

1979 Socio-economic implications from the graveyard of Shahr-i Sokhta. In South Asian archaeology 1977, edited by M. Taddei, pp. 123-139. Instituto Universitario Orientale, Naples.

Possehl, Gregory (Ed.)

1979a Ancient cities of the Indus. Vikas, New Delhi.

Possehl, Gregory

1979b Pastoral nomadism in the Indus civilisation: An hypothesis. In South Asian archaeology 1977, edited by M. Taddei, pp. 537-552. Instituto Universitario Orientale, Naples.

1980 Indus civilisation in Saurashtra. B.R. Publishers, Delhi.

Possehl, Gregory (Ed.)

1982 Harappan civilisation. Aris & Phillips, Warminster.

#### Raikes, Robert

The end of the ancient cities in the Indus. American Anthropologist 66:284-299.

#### Rao, S.

1973 Lothal and the Indus civilisation. Asia, Bombay.

1979 Lothal, a Harappan port town: 1955-1962. Archaeological Survey of India, New Delhi.

#### Ratnagar, Shereen

1981 Encounters: The westerly trade of the Harappan civilisation. Oxford University Press, Delhi.

#### Redman, Charles

1978 The rise of civilisation. Freeman, New York.

#### Said, Edward

1979 Orientalism. Vintage Books, New York.

#### Sankalia, H.

1974 The prehistory and protohistory of India and Pakistan. Deccan College, Pune. Sarcina, Anna

1979a The private house at Mohenjodaro. In South Asian archaeology 1977, edited by M. Taddei, pp. 433-462. Instituto Universitario Orientale, Naples.

1979b A statistical assessment of house patterns at Mohenjodaro. Mesopotamia 13/ 14:155-199.

# Shaffer, Jim

1978 Prehistoric Baluchistan. B.R. Publishers, Delhi.

1982 Harappan culture: A reconsideration. In *Harappun civilisation*, edited by G. Possehl, pp. 41-50. Aris & Phillips, Warminster.

# Tambiah, S.

1976 World conquerer and world renouncer. Cambridge University Press. Cambridge.

# Thapar, B.

1973 New traits of the Indus Civilisation at Kalibangan: An appraisal. In South Asian archaeology. edited by N. Hammond, pp. 85-104. Duckworth, London.

1982 The Harappan civilisation: Some reflections on its subsistence and resources and their exploitation. In *Harappan civilisation*, edited by G. Possehl, pp. 3-14. Aris & Phillips, Warminster.

# Tilley, Christopher.

1984 Ideology and the legitimation of power in the middle neolithic of southern Sweden. In *Ideology, power and prehistory*, edited by D. Miller and C. Tilley, pp. 111-146. Cambridge University Press, Cambridge.

# Tosi. Maurizio

1979 The proto-urban culture of Eastern Iran and the Indus civilisation. In South Asian archaeology 1977, edited by M. Taddei, pp. 149-172. Instituto Universitario Orientale, Naples.

The notion of craft specialisation and its representation in the archaeological record of early states in the Turanian basin. In *Marxist perspectives in archaeology*, edited by M. Spriggs, pp. 22-52. Cambridge University Press.

n.d. The Indus Civilisation in the Indian Ocean. Paper presented at the 7th International Conference of South Asian Archaeologists in Western Europe. Brussels, 1983.

Urban, Gunter, and Michael Jansen (Eds.)

1983 Forschungsproject DFG Mohenjo-Daro. Veroffentlichungen des Geodatischen Instituts der Rheinisch-Westfalischen Technischen Hochschule, Aachen.

# Vats. M.

1940 Excavations at Harappa, Govt. of India, Delhi.

#### Vishnu-Mittre

1982 The Harappan civilisation and the need for a new approach. In *Harappan civilisation*, edited by G. Possehl, pp. 31-40. Aris & Phillips, Warminster.

#### Vishnu-Mittre, and R. Savithri

1982 Food economy of the Harappans. In *Harappan civilisation*, edited by G. Possehl, pp. 205-222. Aris & Phillips, Warminster.

#### Weber, Max

1948 Religious rejections of the world and their directions. In From Max Weber, edited by H. Gerth and C. Wright Mills, pp. 323-359. Routledge & Kegan Paul, London.

#### Wheatley, Paul

1971 The pivot of the Four Quarters. Edinburgh University Press, Edinburgh. Wheeler, Mortimer

1968 The Indus civilisation. Cambridge University Press. Cambridge.

# Wright, Susan

1981 Place and face of women in Doshman Ziari, Iran. In Women and space, edited by S. Ardener, pp. 136-157. Croom Helm, London.