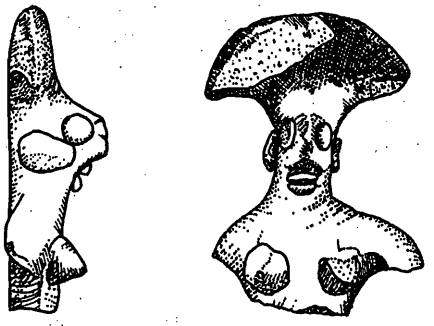

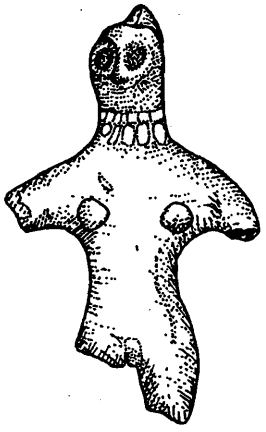

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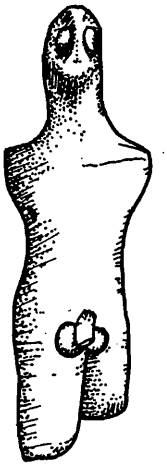

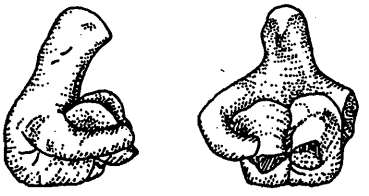

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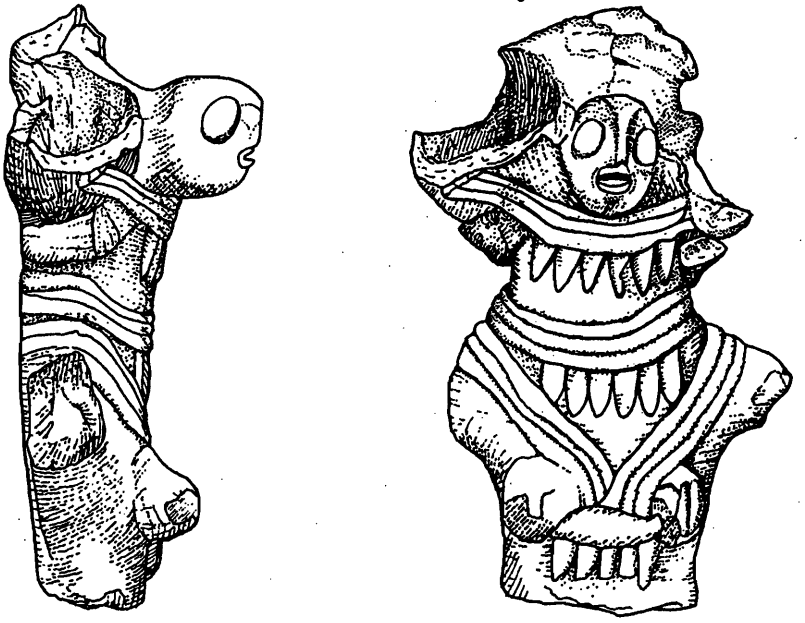

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6.
The Harappan State: Was it or wasn't it?

Jonathan Mark Kenoyer

INTRODUCTION

Recent discussions on the nature of early state societies have led some scholars to suggest that the early urban phenomenon of the Indus Civilization should not be characterized as a state level society. This paper will critically examine these arguments in the context of current studies of the Indus Civilization and recent excavations at Harappa, Pakistan. The sequence of developments currently documented from Harappa and other sites in Pakistan indicate that the Harappan socio-political organization was quite different from Mesopotamian or Egyptian states, but that it should nevertheless be considered a state level society.

Archaeological discussions of human social organization and the formation of state level society have been strongly influenced by specific historical contexts and models derived from related disciplines, such as anthropology, sociology, economics, history and political science. In the present academic and historical context, archaeological interpretive models have begun to move away from the search for primary causal factors and character trait lists of state level society.

As new varieties of ethnographic and archaeological information have become available, the narrow definitions and mono-causal models of the past have been rejected and replaced with more complex definitions and multifaceted models of culture change (for summaries see Claessen and Skalník 1978; Gledhill, Bender et al. 1988; Haas 1982; Kristiansen 1991).

While most scholars strive to keep up with the current theoretical discussions as well as the newly discovered archaeological data, the considerable time lag between excavation, analysis and publication results in a very muddy academic field. Historians, sociologists, anthropologists and archaeologists often end up talking about different sets of data, different analytical methods and using different theoretical frameworks. The range of theories regarding the formation of early states that have been proposed during the past several decades provide a striking example of this situation. These theories fall into generally overlapping or loosely differentiated categories; evolutionary, gradualist, conflict, integration, managerial, systems, synthetic, structural, ideological, processual or post-processual, to name a few.

The present debate regarding the formation and character of the integrated urban polity of the greater Indus Valley seems to be engulfed in a similar mass of overlapping and loosely differentiated models (Kenoyer 1991a). Two major points of contention have persisted despite repeated attempts at resolution. The first issue revolves around the time frame for the formation of the integrated polity that is commonly referred to as the Indus Valley Civilization or the Harappa Culture. The second major issue is whether or not the socio-political organization of the Harappa Culture can be considered as that of a state-level society.

While the major approaches proposed in the past have distinct merits, they nevertheless reflect an attempt to maintain traditional perceptions of culture change and state formation, all the while forcing the available data into what have clearly become inappropriate models.

One notable exception to this pattern is seen in the comprehensive study by Shaffer where he has outlined a more flexible framework for discussing the social transformations in the greater Indus region (Shaffer 1991). The central concept is a Tradition that is defined as having "persistent configurations of basic technologies and cultural systems within the context of temporal and geographical continuity" (Shaffer 1992:442; Willey and Phillips 1958:37). Shaffer identifies three major cultural Traditions for the northwestern subcontinent; the Helmand Tradition, the Baluchistan Tradition and the Indus Valley Tradition. Each Tradition is divided into Eras and Phases (Table 6.1). The different Traditions and Phases are not totally distinct phenomena, but are connected through economic, social and ritual interaction systems. These interaction systems are reflected by broad distributions of cultural traits.

Table 6.1. Northwestern South Asia Archaeological Traditions
(After Shaffer, 1992)

Indus Valley Tradition	Baluchistan Tradition	Helmand Tradition
Early Food Producing Era	**Early Food Producing Era**	**Early Food Producing Era**
Mehrgarh Phase	Mehrgarh Phase	Ghar-i-mar Phase *
Regionalization Era	**Regionalization Era**	**Regionalization Era**
Balakot Phase	Kachi Phase	Mundigak Phase
Amri Phase	Kili Gul Muhammad Phase	Helmand Phase
Hakra Phase	Sheri Khan Tarakai Phase *	
Kot Diji Phase	Kechi Beg Phase	
	Damb Sadaat Phase	
	Nal Phase	
Integration Era		**Integration Era**
Harappan Phase	Kulli Phase	Shahr-i-Sokhta Phase
	Periano Phase	
Localization Era		**Localization Era**
Punjab Phase	Bampur Phase	Seistan Phase
Jhukar Phase		
Rangpur Phase	Pirak Phase	

* These Phases are not identified by Shaffer and are possible additions proposed by Kenoyer 1991a.

At first glance Shaffer's framework may seem no different from earlier models that are monolithic or 'total' systems (Adams 1984). However, the specific Eras that represent dominant adaptive strategies are subdivided into Phases that variously reflect other processes and contrasting levels of control and interaction.

For example, the patterns of adaptation and interaction that begin during the initial transition to food production, help to define the trajectories and variables that will be essential to the later processes of integration. In much the same way, the centrifugal forces that are in the background during the Integration Era provide the pattern for the subsequent Localization Era (Kenoyer 1991).

Building from his initial model it is possible to construct a more complex interpretive framework that allows for the coexistence of different levels of control as well as differing levels of interaction (Gailey and Patterson 1987; Kristiansen 1991; Mann 1986).

First it is necessary to emphasize that social processes such as state formation are not homogeneous and cannot be simplified as either rapid or gradual. Furthermore, the various communities that become integrated during the Integration Era, Harappan Phase were connected through different types of "ideological, economic, military, and political relationships" (Mann 1986). The patterns of these relationships do not entirely conform to the integrative processes of the ruling elites (Gailey and Patterson 1987; Lamberg-Karlovsky 1981) and exist on different levels and in different networks. For example, some communities may have been organized in state-level structures, while other communities probably moved into and out of state-level networks as a part of their adaptive strategy.

The potential complexity of these relationships makes it extremely difficult to sort out specific power relations on the basis of traditional forms of archaeological data. In the following paper I will first address the question of formative processes and identify specific types of data that are needed to define these complex patterns. Specific examples will be taken from recent research at Harappa and other sites in the greater Indus Valley. In the second half I will briefly outline the contrasting arguments for and against state-level society and conclude with some preliminary thoughts regarding the nature of Harappan social organization.

FORMATIVE PROCESS

The sequence of developments currently documented from Harappa and other sites in Pakistan indicate that certain aspects of the Harappan culture evolved over a considerable period of time with roots extending back as early as the first transition to food production. Other aspects of this culture appear at later periods and give the impression of more rapid transformation. During the Harappan Phase or Integration Era of the Indus Valley Tradition (Shaffer 1991, Kenoyer 1991a) we see the development of multiple levels of integration that are

characteristic of a state-level society, combined with other forms of interaction that seem more consistent with chiefdom and tribal forms of social organization.

EARLY FOOD PRODUCING ERA AND REGIONALIZATION ERA

The initial transition from hunting and gathering to various modes of food production involving agriculture and animal husbandry, resulted in specific patterns of economic organization, social organization, conflict resolution and ideology. These transitions occurred over a considerable period of time, beginning in the Neolithic and eventually, during the Chalcolithic, resulting in the juxtaposition of many different communities.

In Baluchistan, the Indus Valley and the adjacent peninsular regions there is sufficient evidence to identify the presence of mobile hunter gatherers (Misra 1973; Possehl and Kennedy 1979; Possehl and Rissman 1991), sedentary and transhumant agriculturalists (Jarrige 1984, 1985), seasonal pastoralists (Allchin 1977; Allchin and Allchin 1982; Meadow 1991; Mughal 1990), along with varying forms of marine, lacustrine and riverine resource exploitation (Dales 1974; Khan, et al. 1989, 1990; Meadow 1979). The resulting array of subsistence systems are characterized by different technologies, craft traditions, settlement patterns, economic and social interaction networks, and most importantly different ideological systems. The ideological systems are reflected in figurines, ornament styles, artifact styles and decorative elements on ceramics (Shaffer 1992; Kenoyer 1991).

In the greater Indus region and Baluchistan, the communities practicing these different adaptive strategies did not exist in isolation, but would have come in contact or confrontation with adjacent groups practicing different strategies and having different ideologies.

Over time, decisions made by individuals and communities as to how to deal with the "others" developed into patterns of interaction or power relations (Mann 1986) which are only indirectly represented in the archaeological record. Nevertheless, we can assume that these relations would include both kin and extra-kin interaction, conflict resolution, economic exchange and ideological legitimation (Mann 1986).

I would suggest that these initial patterns of interaction provided the basis for later forms of social organization including eventual state level organization. In order to further understand the nature of these processes it will be necessary to collect more information from sites of the Early Food Producing Era and compare these with what is known from sites such as Mehrgarh, Kili Gul Mohammed, Jalilpur, Gumla, etc.

Directions for future research will be the nature of relations between the lowlands and the highlands as well as between resource areas and major production sites. Other important patterns will be seen in the spatial organization of habitation and public structures, the layout of settlements, the segregation of crafts and occupations and the development of specific technologies that came to be centrally controlled during the later integration area.

Examples of specific technologies whose roots can be traced to this early period include ceramic technologies (Jarrige 1983a, 1985; Jarrige and Meadow 1980; Wright 1989), metallurgy (Kenoyer and Miller 1995), shell working (Kenoyer 1984, 1989), agate bead making (Kenoyer 1986) and steatite manufacture (Rissman 1989; Vidale 1989b). Current studies in the styles of production and finished products (Kenoyer 1992; Vidale 1989a; Wright 1991) are directed towards a more precise understanding of how they reflect the larger sphere of socio-political development and what role they played in culture change.

For example, communities along the Makran coast used the gastropod *Turbinella pyrum* to make shell bangles during the early Neolithic. These bangles along with other marine shells and finished disc beads were traded inland to sites such as Mehrgarh. White shell bangles and tiny shell disc beads became symbols of status and wealth during the Neolithic and on into the later Chalcolithic. During the urban Harappan phase, a specific style of white shell bangle made from *Turbinella pyrum* and white fired steatite disc beads are primary indicators of Harappan culture. These symbols and the socio-economic and ideological processes that they reflect did not evolve suddenly, but over a considerable period of time.

Another similar example can be seen in the compartmented buildings of the early Neolithic at Mehrgarh and the gradual expansion of these structures into larger units. When combined with other early patterns of settlement organization such as lower and higher mounds (Flam 1981) and massive platforms or perimeter walls (Dales and Kenoyer 1990a, 1991; Durrani 1988; Jarrige 1988a) these architectural styles clearly provide the template for the organization of space in both domestic and urban contexts during the Regionalization and Integration Eras.

Similar formative processes were undoubtedly developing in subsistence practices, as agricultural systems were integrated with animal husbandry and pastoralism during the Early Food Producing and Regionalization Eras. Traditional pastoral practices in South Asia are characterized by a wide range of strategies that allow large herds to exist in the midst of intensive agricultural regions. Future ethnoarchaeological studies are needed to try and identify or differentiate diurnal herd movements, such as radial or circular grazing patterns and seasonal migratory pastoralism. The archaeological identification of these different subsistence strategies will be essential for a more reliable interpretation of the Harappan subsistence system.

These brief examples suggest that some of the unique features of state level organization in the Indus Valley region reflect cultural choices that were made thousands of years earlier and therefore cannot be attributed to rapid restructuring of society at a specific point in time.

In contrast with these long term processes, it is clear that significant changes in economic organization occurred at different times during the Regionalization Era. These changes include both production processes and interaction networks.

One of the early changes that is crucial to later urban and state level organization is seen occurring during the early Chalcolithic at Mehrgarh (Period III, 4500 B.C.). At this site there is a change from the import or acquisition of finished commodities from distant producers to the acquisition of raw materials and production at the site itself.

This change in the process of economic interaction introduced several new mechanisms of control that had not existed previously. Raw materials from distant regions could be controlled through the mobilization of resources needed to acquire these materials, including the knowledge of source areas, extraction techniques, labor, transport and protection en route.

Somewhat later at Harappa, during Period 2 (just prior to 2600 B.C.) we have evidence for the expansion of trade networks to the south, bringing chert and shell to the site from distant resource areas (Kenoyer 1991b). The abandonment of black chert sources to the west does not indicate a total break with the western piedmont or highlands, because we find a continued presence of lapis lazuli, steatite, alabaster, copper and tin. The expansion of trade networks to the south undoubtedly reflects a set of new alliances or increased control over distant resource areas. In addition, the switch to tan-brown chert, which is functionally no better than the black chert, may reflect an ideological change related to socio-economic or ritual status or at a more general level, ethnic identity.

The knowledge for processing raw materials probably played an important role in allowing the control of specific manufacturing processes that involved both local and non-local materials. At Mehrgarh during Period III the drilling of hard carnelian and other agates was achieved by the use of special varieties of jasper. Other sites along the southern piedmont appear to have been using the same variety of jasper (Flam, personal communication), but this knowledge did not extend to the north at the site of Rehman Dheri. I have not been able to quantify this pattern yet, but would expect that most carnelian beads in the north were traded from the south, or that less carnelian beads were produced due to the increased amount of time needed to drill them with other types of stone.

At some point in time another variety of stone that was even more efficient for drilling hard agates was discovered, possibly in Baluchistan. Its use is documented at Shahr-i-Sokhta (latest levels and surface, 2700 - 2300 B.C.) (Piperno 1973) and at the major Harappan Phase sites on the alluvial plain; Chanhu-daro, Mohenjo-daro and Harappa. The distributions of these different types of drills may reflect the control of knowledge, because we know that other commodities were moving between these various regions at the same time periods.

The production of black fired terra-cotta bangles at Harappa during Period 2 provides another example of how a technology that began during the Regionalization Era may have provided the model for later high-fired black stoneware bangles. Black fired terra cotta bangles were common at many sites in Baluchistan and northern Pakistan, but the development of stoneware bangle manufacture is found only at the major sites of Mohenjo-daro and Harappa during the subsequent Harappan Phase.

The production of stoneware bangles uses some of the basic technologies needed to make black terra cotta bangles, but other processes are much more refined, labor intensive and require carefully controlled firing. During the Harappan Phase, stoneware bangle manufacture was closely monitored and controlled by certain individuals or communities (Blackman and Vidale 1992; Halim and Vidale 1984; Vidale 1989a). Furthermore, the use of these bangles appears to have been limited to a small number of individuals at the largest sites of Mohenjo-daro and Harappa, with only rare examples occurring elsewhere.

These examples briefly illustrate the ways in which raw materials or finished commodities came to be produced and controlled. In some cases specific new technologies appear to have evolved during the Regionalization Era and continued on into the later Integration Era. In other cases less complex technologies of the Regionalization Era provided the foundation for technologies that were highly specialized and controlled during the later Integration Era.

New evidence for the use of graffiti and other forms of writing (Dales and Kenoyer 1990b; Durrani 1988; Kenoyer 1991a), multiple level settlement hierarchies and urbanism (Mughal 1990), and the expansion of internal economic networks also indicate that the different features of the Integration Era did not develop simultaneously.

RISE OF URBANISM AND STATE LEVEL SOCIETY: PRECONDITIONS

The general formative processes discussed above are not unique to the Indus Tradition, but can be identified in all regions of the world. However, it is only in specific geographical regions that we see the development of distinctive regional cultures and eventually urban and state-level society. The inter-related factors that contributed to this transition include the distribution of land suitable for agriculture and pastoralism, the location of specific resources that were selected to define social status, and the environmental setting of highlands and

lowlands, coasts and interior that influenced the patterns of social and economic interaction.

In the context of the greater Indus region during the Early Food Producing and Regionalization Eras we can summarize the developments as the fulfillment of four major sets of preconditions (Kenoyer 1991). Building once again from the work of numerous scholars (Butzer 1982; Flannery 1973, 1979; Redman 1978; Renfrew 1972; Trigger 1972; Watson *et al.* 1984). I have slightly modified these preconditions to emphasize factors I feel are most critical. These factors are closely interrelated and together provide the necessary foundation for the development of urbanism and state level society in the Indus Valley Tradition.

Precondition 1. Diversity of the Subsistence Base and Resource Variability Which Have the Potential for Production of Surplus

Precondition 2. The Development of Social and Economic Interaction Networks between Major Ecosystems and Resource Areas.

Precondition 3. Technological Capability to Fill Specific Needs of Urban and State-Level Society

Precondition 4. Differentiation in Status on the Basis of Access to Essential Resources and the Ability to Control Distribution of Essential Resources.

(Kenoyer 1991a)

Although it is not possible to isolate one precondition as being more important than the others, the current definitions of state-level society are closely associated with stratified social organization and the ability of some classes to control distribution of essential resources. The different mechanisms of social, political and ideological organization during the Integration Era were capable of resolving conflict at different levels and uniting a much larger region, again at different levels and through different mechanisms. The critical question that has yet to be addressed concerns the identification of a stratified and hierarchically structured, state-level society.

WAS IT OR WASN'T IT

In response to the early interpretations of the Indus Civilization as being an empire, Fairservis proposed various models for explaining the origins, character and decline of the Indus Valley Civilization (Fairservis 1961, 1967). In these discussions he rarely mentioned the word "state" except to say that " It was a civilization with cities but was not, at least politically, a state." (1967:43). It is important to note that the "state" that Fairservis disavowed was not the "state" as conceived by modern scholars (Gledhill 1988; Haas 1982; Kristiansen 1991; Lamberg-Karlovsky 1981).

In his early articles Fairservis (1989) contrasts the urban centered civilization of Mesopotamia with the dispersed village oriented civilization of the Indus Valley. In his more recent works the villages have been reclassified as "nucleated households" and the term "civilization" has been replaced with "chiefdom". Regardless of the modification in labels, his basic presentation of the data has not changed significantly, except for his more recent interpretations of the Indus script.

In a similar vein, Shaffer argues that the urban centers of the Indus region were a unique feature of an equally unique form of pre-state society (Shaffer 1982, 1988; Shaffer and Lichtenstein 1989).

The contrasting position held by most other scholars is that the Indus phenomenon can be variously defined as a "state-level" organization (Allchin and Allchin 1982; Dales 1973, 1976; Jacobson 1986; Jansen 1987, 1989; Jarrige 1977, 1983b, 1988b; Kenoyer 1991a; Lamberg-Karlovsky 1989; Mann 1986; Miller 1985; Mughal 1970, 1990; Thapar, B.K. 1982; Thapar, R. 1984; Wright, H. 1986)

Traditionally, the definition of "state-level" society was comprised of key attributes or core traits (Childe 1952; Adams 1966; Fried 1978; Service 1978). Using this approach, Jacobson systematically examined the available archaeological information (up to 1984) combined with the current anthropological theory in political organization (Jacobson 1986:137). He defined two lines of evidence to demonstrate that Harappan society had a "state-level" organization: "1) data which seem compatible with state-level societies *sensu lato*, and 2) evidence which tends to indicate that Harappan society was organized politically into what Claessen and Skalník (1978) would call 'an early state'" (Jacobson 1987:163).

The first category includes: cultural and possible linguistic commonalty over a broad geographic expanse; multiple urban centers and a three- or four-tiered settlement hierarchy; notational and measurement systems; administrative artifacts (such as seals); a culture-wide ideology (painted pottery symbols, figurines, seal motifs etc.); economic stratification and effective communication networks. In the second category, he concludes that Harappan society reveals evidence for decision-making by a centrally operating authority or group which "affected behavior in lower order settlements", and that this central force maintained the system and prevented fragmentation for over 500 years (current dating from Harappa would change this to almost 700 years, see Table 6.2) (Dales and Kenoyer 1990b; Kenoyer 1991b).

The contrasting arguments presented above have been reorganized and restated for many years using old as well as new data, but the basic frameworks and conclusions have remained unchanged. Shaffer and Fairservis continue to insist that the archaeological evidence is not consistent with state level society as it has been defined in the Mesopotamian or Egyptian models. They base this

Table 6.2. South Asia: General Archaeological Labels and Chronology

	GENERAL DATES
INDO-GANGETIC TRADITION	
Integration Era (Mauryan Empire)	
Ashoka	274-232 B. C.
Chandragupta Maurya	?317 - 298 B. C.
Alexander of Macedon receives "submission" of Ambhi, King of Taxila	326 B. C.
Early Historic Period begins around	600 B.C.
Regionalization Era or Post-Indus	
Northern Black Polished Ware	(?700) 500 to 300 B.C.
Painted Grey Ware	+1200 to 800 B.C.
INDUS VALLEY TRADITION	
Localization Era (Late Harappan)	1900 to 1300 B.C.
Integration Era (Harappan Phase)	2600 to 1900 B.C.
Regionalization Era (Early Harappan/ Chalcolithic)	ca. 5000 to 2600 B.C.
Early Food Producing Era (pre-ceramic Neolithic)	ca. 6500 to 5000 B.C.
"Mesolithic" transition	10,000 to 6500 B.C.

conclusion on the absence of hereditary elites, royal burials, centralized political institutions represented by temples and palaces, combined with the dispersed and extensive nature of the Indus economy, which is based on what they interpret as cattle pastoralism.

The first point that needs to be made is that most discussions of prehistoric states no longer maintain the trait lists or narrow definitions cited by Fairservis and Shaffer. Furthermore, the lack of these traits can be explained in several ways. For example, the absence of royal tombs, monumental palaces and temples may in fact be a problem of archaeological excavation and recording techniques. Many of the complex and sometimes massive structures at Mohenjo-daro and Harappa could have been elite residences, centralized administrative structures or even temples, but later disturbances obscured their primary function and the lack of appropriate excavation and recording techniques makes it impossible to reinterpret these structures.

Alternatively, the Indus people may have had values that did not result in the construction of permanent shrines, temples, massive sculptures and royal tombs. The current focus on the level of technological development and the spatial patterning of craft objects within and between settlements has demonstrated that certain segments of Indus society were trying to differentiate themselves from the rest. These individuals used distinctive pottery styles and wore elaborate ornaments made from carefully worked raw materials, including gold, silver, electrum, carnelian, lapis lazuli, turquoise and shell. They also required ornaments and symbolic objects made from manufactured substances such as bronze, faience, stoneware and fired steatite. The most distinctive symbols were the inscribed seals and stoneware bangles.

Fairservis (1986) and others have suggested that the animal motifs on seals may reflect clans or moieties, but they may just as well reflect different classes of elites. Regardless of the specific internal organization of these communities, we can assume that some sort of formal lineage system existed, and such lineages or kin relations would have been important for organizing trade, economic alliances and political integration (Thapar, R. 1984). Without genealogical texts or genetic trait analyses, it is not possible to show that these were hereditary elites, but at least they must have been an exclusive segment of society.

Other members of the population had the same styles of ornaments, but made from more readily available materials, such as terra cotta, painted to imitate the precious stones and artificial materials. The use of symbolic objects made from a variety of materials, combined with the evidence of burials, architecture and settlement patterns, clearly indicates social stratification and the presence of elites.

Although the degree of territorial unity, social stratification and political centralization differs from

that of some early states, many of our earlier conceptions of state organization are changing (Gledhill 1988; Kohl 1987). In Mesopotamia, rival city states existed for almost 500 years before the establishment of the state of Akkad (circa 2350 B.C.) (Nissen 1988). Also, while some city states in southern Mesopotamia may have been centralized, others, particularly in the north, appear to have been decentralized in terms of direct control (Stein and Wattenmaker 1990). These differences are attributable to the distributions of resources and materials needed to define status, and need not correlate with the presence or absence of supra-kin mechanisms for maintaining social order.

CONCLUSION

In summary, I would support the concept of a Harappan state that was characterized by different levels of integration. At the highest level of integration, encompassing the largest geographical area, would have been competing classes of elites. These elites maintained different levels of control over the vast regions of the Indus and Ghaggar-Hakra Valley and interacted within different spheres of political, economic, military and ideological hegemony. The largest cities may have been relatively independent, possibly organized as "city-states", with direct political control only over local settlements and lands. Political and economic integration of the cities may have been achieved through the trade and exchange of important socio-ritual status items.

Instead of one social group with absolute control, the rulers or dominant members in the various cities would have included merchants, ritual specialists and individuals who controlled resources such as land, livestock and raw materials. These groups may have had different means of control, but they shared some common ideologies and specific economic systems that are reflected in styles of seals, ornaments, ceramics and other artifacts. This ideology would have been shared by occupational specialists and service communities, who appear to have been organized in loosely stratified groups.

It is probable that populations within the cities were more rigidly stratified and segregated than the rural settlements, which would have included larger numbers of farmers, pastoralists, fishers, miners, hunters and gatherers, etc. (Lamberg-Karlovsky 1981). Many of these lower level communities may have been internally organized as chiefdoms, or even as tribes, but were periodically integrated into the overall structure of the dominant urban centers.

In conclusion, I would reemphasize the need to break out of the inappropriate older models and develop more complex frameworks that can be refined through problem oriented archaeological research.

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REFERENCES

Adams, Robert. Mc.
1966 *The Evolution of Urban Society: Early Mesopotamia and prehispanic Mexico.* Aldine, Chicago.
1984 Mesopotamian Social Evolution: Old Outlooks, New Goals. In *On the Evolution of Complex Societies: Essays in honor of Harry Hoijer 1982*, edited by T. Earle, pp. 79-129. Undena Publishers, Malibu.

Allchin, Bridget
1977 Hunters, Pastoralists and Early Agriculturalists in South Asia. In *Hunters, Gatherers and First Farmers Beyond Europe*, edited by J. V. S. Megaw, pp. 127-144. Leicester University Press, Surrey.

Allchin, Fridget and F. Raymond Allchin
1982 *The Rise of Civilization in India and Pakistan.* Cambridge University Press, Cambridge.

Blackman, M. James and Massimo Vidale
1992 The Production and Distribution of Stoneware Bangles at Mohenjo-daro and Harappa as Monitored by Chemical Characterization Studies. In *South Asian Archaeology, 1989*, edited by C. Jarrige. Prehistory Press, Madison, WI.

Butzer, Karl. W.
1982 *Archaeology as Human Ecology.* Cambridge University Press, Cambridge.

Childe, V. Gordon
1952 *New Light on the Most Ancient Near East.* (4th edition). Routledge and Kegan Paul, New York.

Claessen, Henri J. M. and Peter Skalník (Editors)
1978 *The Early State*. Mouton Publishers, The Hague.

Dales, George F.
1973 Archaeological and Radiocarbon Chronologies for Protohistoric South Asia. In *South Asian Archaeology 1973*, edited by N. Hammond, pp. 157-170. Duckworth, London.
1974 Excavations at Balakot, Pakistan 1973. *Journal of Field Archaeology* 1(1-2): 1-22.
1976 Shifting Trade Patterns Between the Iranian Plateau and the Indus Valley in the Third Millennium B.C. In *Le plateau iranien et l"Asie Centrale des origines à la conquête islmique*, edited by J. Deshayes, pp. 67-78. C.N.R.S., Paris.

Dales, George F. and J. Mark Kenoyer
1990a Excavation at Harappa - 1988. *Pakistan Archaeology* 24:68-176.
1990b *Preliminary Report on the Fifth Season at Harappa, Pakistan, January 1 - March 31, 1990*. U. C. Berkeley and U. W. Madison, WI.
1991 Summaries of Five Seasons of Research at Harappa (District Sahiwal, Punjab, Pakistan) 1986-1990. In *Harappa Excavations 1986-1990*, edited by R. H. Meadow. Prehistory Press, Madison, WI.

Dupree, Louis (Editor)
1972 *Prehistoric Research in Afghanistan 1959-1966*. Transactions of the American Philosophical Society. The American Philosophical Society, Philadelphia.

Durrani, Farzand A.
1988 Excavations in the Gomal Valley: Rehman Dheri Excavation Report No. 1. *Ancient Pakistan* 6:1-232.

Fairservis, Walter A. Jr.
1961 The Harappan Civilization: New Evidence and More Theory. *American Museum Novitates* 2055.
1967 The Origin, Character and Decline of an Early Civilization. *Novitates* 2302: 1-48.
1986 Cattle and the Harappan Chiefdoms of the Indus Valley. *Expedition* 28(2): 43-50.
1989 An epigenetic view of the Harappan culture. In *Archaeological Thought in America*, edited by C. C. Lamberg-Karlovsky, pp. 205-217. Cambridge University Press, New York.

Flam, Louis
1981 *The Paleography and Prehistoric Settlement Patterns in Sind, Pakistan (ca. 4000-2000 B.C.)*. PhD. University of Pennsylvania.

Flannery, Kent V.
1973 The Origins of Agriculture. *Annual Review of Anthropology* 2:271-310.
1979 The Cultural Evolution of Civilizations. In *Ancient Cities of the Indus*, edited by G. L. Possehl, pp. 27-46. Vikas Publishing House PVT LTD, New Delhi.

Fried, Morton H.
1978 The State, the Chicken, and the Egg: or, What Came First? In *Origins of the State: The Anthropology of Political Evolution*, edited by R. Cohen and E. R. Service, pp. 35-48. Institute for the Study of Human Issues, Philadelphia.

Gailey, C. W. and T. C. Patterson
1987 Power Relations and State Formation. In *Power Relations and State Formation*, edited by T. C. Patterson and C. W. Gailey, pp. 1-26. American Anthropological Association, Washington, D. C.

Gledhill, J.
1988 State and Society. Introduction: the comparative analysis of social and political transitions. In *State and Society*, edited by J. Gledhill, B. Bender and M. T. Larsen, pp. 1-29. Unwin Hyman, London.

Gledhill, J., B. Bender and M. T. Larsen (Editors)
1988 *State and Society*. Unwin Hyman, London.

Haas, Jonathan
1982 *The Evolution of the Prehistoric State*. Columbia University Press, New York.

Halim, M. A. and Massimo Vidale
1984 Kilns, Bangles and Coated Vessels: Ceramic Production in Closed Containers at Moenjodaro. In *Interim Reports Vol. 1*, RWTH-IsMEO, edited by M. Jansen and G. Urban, pp. 63-97. Aachen.

Jacobson, Jerome
1986 The Harappan Civilization: An Early State. In *Studies in the Archaeology of India and Pakistan*, edited by J. Jacobson, pp. 137-174. Oxford and IBH, New Delhi.

Jansen, Michael
1987 Mohenjo-Daro - Stadt am Indus. In *Vergessen Städt am Indus*, edited by M. Jansen and G. Urban, pp. 119-136. Phillip von Zabern, Mainz am Rhein.
1989 Early Cities - A Comparative Study of Urban Development. *Lahore Museum Bulletin* 11(1):5-14.

Jarrige, Jean-François
1977 La Civilisation de l'Indus. *La Recherche No. 76* 8:245-ff.
1983a The Beginning of Pottery in Baluchistan. *B. De Cardi Felicitation Volume, ms.*
1983b *New Trends in the Archaeology of Greater Indus in the Light of Recent Excavations at Mehrgarh, Baluchistan*. International Seminar of Peshawar, ms.
1984 Towns and Villages of Hill and Plain. In *Frontiers of the Indus Civilization*, edited by B. B. Lal and S. P. Gupta, pp. 289-300. Books and Books, New Delhi.
1985 Continuity and Change in the North Kachi Plain (Baluchistan, Pakistan) at the Beginning of the Second Millennium B.C. In *South Asian Archaeology 1983*, edited by J. Shotsmans and M. Taddei, pp. 35-68. Istituto Universitario Orientale, Naples.

1988a Excavations at Nausharo. *Pakistan Archaeology* 23:149-203.
1988b Les Cités oubliées de l'Indus: Introduction. In *Les Cités oubliées de l'Indus*, edited by J.-F. Jarrige, pp. 13-37. Musée National des Arts Asiatiques Guimet, Paris.

Jarrige, Jean-François and Richard H. Meadow
1980 The Antecedents of Civilization in the Indus Valley. *Scientific American* 243(2):122-133.

Kenoyer, Jonathan Mark
1984 Shell Working Industries of the Indus Civilization: A Summary. *Paléorient* 10(1):49-63.
1986 The Indus Bead Industry: Contributions to Bead Technology. *Ornament* 10(1):18-23.
1989 Socio-Economic Structures as reflected in Specialized Crafts and the Question of Ritual Segregation. In *Old Problems and New Perspectives in the Archaeology of South Asia* , edited by J. M. Kenoyer, pp. 183-192. Wisconsin Archaeological Reports. 2. Dept. of Anthropology, U.W.-Madison, Madison, WI.
1991a The Indus Valley Tradition of Pakistan and Western India. *Journal of World Prehistory* 5(4):331-385.
1991b Urban Process in the Indus Tradition: A Preliminary Model from Harappa. In *Harappa Excavations 1986-1990: A Multidisciplinary Approach to Third Millennium Urbanism,* edited by R. H. Meadow, pp. 29-60. Prehistory Press, Madison, WI.
1992 Ornament Styles of the Indus Tradition: Evidence from recent excavations in Pakistan and India. *Paléorient* 17(2): 79-98.

Kenoyer, J. Mark and Heather M.-L. Miller
1995 Metal Technologies of the Indus Valley Tradition in Pakistan and Western India. In *The Emergence and Development of Metallurgy,* edited by V. C. Pigott, University Monographs No. 89 University of Pennsylvania, Philadelphia. In Press.

Khan, Farid, J. Robert Knox and Kenneth D. Thomas
1989 New Perspectives on early Settlement in Bannu District, Pakistan. In *South Asian Archaeology, 1985*, edited by K. Frifelt and P. Sørensen, pp. 281-291. Curzon Press, London.
1990 Sheri Khan Tarakai: A Neolithic Village in Bannu District, NWFP. In *South Asian Archaeology 1987*, edited by M. Taddei and P. Callieri, pp. 111-127. Is. M. E. O., Rome.

Kohl, Phillip L.
1987 State Formation: Useful Concept or Idée Fixe? In *Power Relations and State Formation*, edited by T. C. Patterson and C. W. Gailey, pp. 27-34. American Anthropological Association, Washington, D. C.

Kristiansen, K.
1991 Chiefdoms, states, and systems of social evolution. In *Chiefdoms: Power, Economy, and Ideology*, edited by T. K. Earle, pp. 16-43. Cambridge University Press, New York.

Lamberg-Karlovsky, C. C.
1981 Afterword. In *The Bronze Age Civilization of Central Asia: Recent Soviet Discoveries*, edited by P. L. Kohl, pp. 386-397. M.E. Sharpe, Armonk, NY.
1989 Mesopotamia, Central Asia and the Indus Valley: so the kings were killed. In *Archaeological Thought in America*, edited by C. C. Lamberg-Karlovsky, pp. 241-267. Cambridge University Press, New York.

Mann, Michael
1986 *The sources of social power: a history of power from the beginning to A. D. 1760.* Cambridge University Press, Cambridge.

Meadow, Richard H.
1979 Prehistoric Subsistence at Balakot: Initial Considerations of the Faunal Remains. In *South Asian Archaeology 1977*, edited by M. Taddei, pp. 275-315. Istituto Universitario Orientale, Naples.
1991 Animal Domestication in the Middle East: a Revised View from the Eastern Margin. In *Harappan Civilization: A Contemporary Perspective. 2nd Edition*, edited by G. L. Possehl. Oxford and IBH Pub. Co., New Delhi.

Miller, Daniel
1985 Ideology and the Indus Civilization. *Journal of Anthropological Archaeology* 4(1):34-71.

Misra, Virendra N.
1973 Bagor: A Late Mesolithic Settlement in Northwest India. *World Archaeology* 5(1):92-110.

Mughal, M. Rafique
1970 *The Early Harappan Period in the Greater Indus Valley and Northern Baluchistan.* PhD. University of Pennsylvania, Dept. of Anthropology.
1990 Further Evidence of the Early Harappan Culture in the Greater Indus Valley: 1971-90. *South Asian Studies* 6:175-200.

Nissen, Hans J.
1988 *The Early History of the Ancient Near East: 9000-2000 B. C.* University of Chicago Press, Chicago.

Piperno, Marcello
1973 The Lithic Industry of Tepe Yahya: A Preliminary Typological Analysis. *East and West* 23(1-2).

Possehl, Gregory L. and Kenneth A. R. Kennedy
1979 Hunter-Gatherer/Agriculturalist Exchange in Prehistory: An Indian Example. *Current Anthropology* 20(3):592-593.

Possehl, Gregory L. and Paul C. Rissman
1991 The Chronology of Prehistoric India: From Earliest Times to the Iron Age. In *Chronologies in Old World Archaeology (3rd Editition)*, edited by R. Ehrich. University of Chicago Press, Chicago.

Redman, C.
1978 *The Rise of Civilization.* W. H. Freeman and Co., San Francisco.

Renfrew, C.
1972 *The Emergence of Civilization: The Cyclades and the Aegean in the Third Millennium B. C.* London.

Rissman, P. C.
1989 The Organization of Seal Production in the Harappan Civilization. In *Old Problems and New Perspectives in the Archaeology of South Asia*, vol. 2, edited by J. M. Kenoyer, pp. 159-170. Wisconsin Archaeological Reports 2, Department of Anthropology, U. W.-Madison, Madison, WI.

Service, E. R.
1978 Classical and Modern Theories of the Origins of Government. In *Origins of the State: The Anthropology of Political Evolution*, edited by R. Cohen and E. R. Service, pp. 21-34. Institute for the Study of Human Issues, Philadelphia.

Shaffer, J. G.
1982 Harappan Culture: A Reconsideration. In *Harappan Civilization*, edited by G. L. Possehl, pp. 41-50. Oxford and IBH Publishing, New Delhi.
1988 Reurbanization: The Eastern Punjab and Beyond. In *Studies in the History of Art*, pp. 1-40. National Gallery of Art, Washington, D.C.
1992 The Indus Valley, Baluchistan and Helmand Traditions: Neolithic Through Bronze Age. In *Chronologies in Old World Archaeology (3rd Edition)*, vol 1, edited by R. Ehrich, pp. 441-464. University of Chicago Press, Chicago.

Shaffer, J. G. and D. A. Lichtenstein
1989 Ethnicity and Change in the Indus Valley Cultural Tradition. In *Old Problems and New Perspectives in the Archaeology of South Asia*, vol. 2, edited by J. M. Kenoyer, pp. 117-126. Wisconsin Archaeological Reports 2, Department of Anthropology, U. W. Madison, Madison, WI.

Stein, G. J. and P. Wattenmaker
1990 Settlement Trends and the Emergence of Social Complexity in the Leilan Region of the Habur Plains (Syria) from the Fourth to the Third Millennium B.C. In *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, edited by H. Weiss. Yale University Press, New Haven.

Thapar, B. K.
1982 The Harappan Civilization: Some Reflections on its Environments and Resources and Their Exploitation. In *Harappan Civilization*, edited by G. L. Possehl. Oxford and IBH Publishing, New Delhi.

Thapar, R.
1984 *From Lineage to State: Social Formations in the Mid-First Millennium B.C. in the Ganga Valley.* Oxford University Press, Bombay.

Trigger, B.
1972 Determinants of Urban Growth in Pre-industrial Societies. In *Man, Settlement and Urbanism*, edited by P. J. Ucko, R. Tringham and G. W. Dimbley, pp. 575-599. Duckworth, London.

Vidale, M.
1989a Specialized Producers and Urban Elites: on the Role of Craft Industries in Mature Harappan Urban Contexts. In *Old Problems and New Perspectives in the Archaeology of South Asia*, vol. 2, edited by J. M. Kenoyer, pp. 171-182. Wisconsin Archaeological Reports, Madison, WI.
1989b A Steatite-Cutting Atelier on the Surface of Moenjodaro *ANNALI* 49:29-51.

Watson, P. J., S. A. LeBlanc and C. L. Redman
1984 *Archaeological Explanation: The Scientific Method in Archaeology.* Columbia University Press, New York.

Willey, G. R. and P. Phillips
1958 *Method and Theory in American Archaeology.* University of Chicago Press, Chicago.

Wright, H. T.
1986 The Evolution of Civilizations. In *American Archaeology: Past and Future*, edited by D. J. Meltzer, D. D. Fowler and J. A. Sabloff, pp. 323-365. Smithsonian Inst. Press, Washington, D. C.

Wright, R. P.
1989 The Indus Valley and Mesopotamian Civilizations: A Comparative View of Ceramic Technology. In *Old Problems and New Perspectives in the Archaeology of South Asia*, vol. 2, edited by J. M. Kenoyer, pp. 145-156. Wisconsin Archaeological Reports 2, Department of Anthropology, U. W. Madison, Madison, WI.
1991 Patterns of Technology and the Organization of Production at Harappa. In *Harappa Excavations 1986-1990: A Multidisciplinary Approach to Third Millennium Urbanism*, edited by R. H. Meadow, pp. 71-88. Prehistory Press, Madison, WI.