

## THE HARAPPANS AND THE WEST : SOME REFLECTIONS ON MELUHHA'S RELATIONS TO MAGAN, DILMUN AND MESOPOTAMIA<sup>1</sup>

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The topic of this contribution are some reflections about the organization of trade which during the 3rd millennium BC, and especially after the emergence of the Indus Civilization at about 2600 BC, connected the Indus with Arabia, Iran, Southern Turkmenia and Mesopotamia (Fig. 1). Since cultural links between Pakistan, Mesopotamia and Iran were discovered in the early 20ties, the material remains of this interaction, have been discussed by several scholars. In addition, the information available from the Sumerian and Akkadian cuneiform tablets about these eastern countries have been mined. Altogether, an impressive corpus of information has been piled up and the corpus of literature on Bronze Age trade between the above countries is rapidly growing.

This interest is mainly due to two points. First, since the 70ties intensive archaeological explorations and excavations in Pakistan, Iran, Turkmenia, Afghanistan and especially along the coasts of the Gulf and the Indian Ocean, led to the discovery of new cultures and required the re-thinking of previously established cultural models. These discoveries, in connection with the growing interest in the "how" and "why" of human interaction, pushed the region of concern into the focus of scientific interest covering the time from the 5th millennium BC until to the coming of Islam in the 7th century AD. Second, the archaeological evidence for far-distance trade and trade outposts from Mesopotamia, Syria, Iran and Turkey is supplemented by written documents dating back to about 3200 BC. This combination has given rise to a growing corpus of papers on the organization and mechanisms of trade and on its economic and socio-cultural implications<sup>2</sup>.

It is not my intension to add to the immense body of literature yet another catalogue of the various archaeological indicators for cultural exchange nor will the written documents be discussed in extenso. Instead, I wish to put forward for discussion some reflections on the mechanisms of the trade which connected

these countries and on its changing patterns through time. The position is developed that the differences recognized in the trade patterns of the Early Harappan as against the Harappan Period are mainly located on the operational and dimensional level and that they are less related to the types of the commodities involved. It is further proposed that the interaction between Meluhha and Magan on one hand and Meluhha and Dilmun and Mesopotamia on the other followed different patterns of communication.

Throughout this paper, the identification of Meluhha with the Indus Valley, of Magan with the Oman Peninsula and possibly the shores of Eastern Iran and of Dilmun with Bahrain, including at certain times the Arabian mainland and Failaka, is accepted.

The first half of the 3rd millennium BC is a period of intensive cultural dynamics throughout the Indo-Iranian Borderlands and the Greater Indus Valley. Excavations at Mehrgarh have unfolded a long, local development of technologies related to subsistence, arts and crafts (Jarrige 1982). At various sites, as e.g. Nausharo ID, Harappa Periods 1 and 2, Kot Diji (later Kot Dijian levels), and Amri ID, a number of features like pottery shapes and designs, foreshadow the mature Harappan style (Mughal 1970, Jarrige 1986, 1987, 1989; Kenoyer 1989, 1991). The production of pottery, metal, stone and shell objects, incl. beads and ornaments, demonstrates the continuation of previous traditions and underlines the local, indigenous roots of the first urban civilization on Indian soil (cp. Kenoyer n.d.1).

Yet, at around 2600 BC some rather rapid transformations led to the formation of the Harappan cultural complex. Many of the previous technologies continued, but were elaborated, refined or underwent stylistical modifications, giving them their definitely Harappan appearance. Others, like e.g. the production of stone-ware bangles and etched carnelian beads and a distinguished fayence or frit technology were newly created (Vidale 1987). Animal and human figurines, clay cones and gamesman, toy carts, etched carnelian beads, pottery designs and many other artistic expressions demonstrate a widespread ideological system in common to a previously varied area, incorporating the Amrian, Kot Dijian and Sothi-complexes of the Early Harappan phase. Although regional differences are known - cp. e.g. the distribution of human figurines or copper tablets - the impression of a cultural oneness is by far predominant<sup>3</sup>. Despite the general continuity, however, this entity is also characterized by the sudden appearance of some features considered as typical Harappan, as e.g. seals, a

weight system, and huge urban centers with distinguished architecture and settlement pattern. The latter expressions belong to the culturally more complex level and are related to the socio-political organization and to administration (Franke-Vogt n.d.1). Unlike in case of other artefacts, the degree of standardization inherent to these objects cannot merely be adduced to the learning of the manufacturing processes<sup>4</sup>, but was probably controlled by an authoritative institution which it represents at the same time.

It can be summarized that among the most significant achievements during this time are the final shaping of the artistic expressions into the distinctive Harappan style and its expansion, marking the cultural integration of ecologically and culturally diverse areas, regional variation notwithstanding. A script and a language in common over the huge area of concern, in addition to other material remains, indicates that integration also took place on the political and administrative level. The appearance of centralised standardized systems (seals, weights) at a date slightly later than other, more "common" Harappan artefacts indicates that they were created and used by the established organization of society and state rather than playing a constituent role in its emergence. They can be considered, however, as a major factor for the maintenance of the system behind.

The presence of a homogenous material culture linking various social groups into a distinct cultural entity has been taken as an indication for intensive communication/interaction systems (Shaffer 1988, 1317). Major means of interaction are ideology and trade. An ideology in common to different social groups can be expressed by a partly shared stylistic material culture. Instead, trade is mainly connected with intrusive materials and is a kind of interaction which may or may not provoke active cultural exchange (see below)<sup>5</sup>. It has been maintained (Kenoyer n.d.1, 10) that the basic mechanisms for the Harappan integration were already established by 3500 - 3000 BC. However, as mentioned above, a number of differences are apparent between the Early and mature Harappan Phase, indicating that the avenues of interaction had changed.

The Indus Valley proper is land without local resources but clay, vast pastures and farmlands (cp. Ahmad 1969, Asthana 1982). Certainly, already during the Early Harappan phase a well organized system was established to secure access to precious resources like lazurite<sup>6</sup>, carnelian, metals, and sea shells. These networks of exchange connected especially the northern parts of Baluchistan and the piedmont area with Badakhshan, with Mundigak in the Kandahar region, with Shahr-e Sokhta in Iran Sistan, and finally, western Iran

and Sumer. On the other hand, interaction took place between the Indus Valley proper and the Baluchi highlands, especially in central and southern Baluchistan<sup>7</sup>, and, to the east, with the Sothi-sites. Beside more exotic or luxurious items which were highly valued and therefore status-related, more ordinary commodities like stone and timber, and necessities like garments, food-stuffs, household and subsistence-related equipments presumably were also circulated. The distribution of the various categories of commodities probably followed different patterns of exchange, depending on the commodity and the distances involved.

On the local and regional scale of the internal trade, reciprocal exchange systems and down-the-line or pedlar trade can be assumed to have prevailed for all commodities. The same principles may have been at work on the far-distance level (Possehl 1986), which, however, is likely to have involved mainly precious items and raw materials. The information from Mundigak, Shahr-e Sokhta and Tepe Yayha, however, seems to indicate that some kind of more directed trade already existed with Mesopotamia and Susa. There is evidence of a tiered settlement hierarchy (Mughal 1990) in Cholistan, but Possehl (1990) denies its statistical validity<sup>8</sup>. In any case, it can be assumed that some sites developed into central market places. In as far this is, at the same time, related to a redistributive system still remains an open question (cp. Yoffee 1981, 20).

It is assumed (Kenoyer n.d.3, 20; Possehl 1986, 5, 76ss) that the operational basis for these exchange systems were - especially in case of restricted raw-materials or exotica - kin-relations or/and alliances within or between societies, between producers and consumers. In addition, encounters of a more or less occasional character may additionally have taken place between customers and pedlars in addition to associations which were fixed along a social chain or firmly embedded into established social configurations. Such mechanisms may well have continued into Harappan times. There is evidence, however, that beside them, and in cases of certain commodities probably superimposed to them a more centralized kind of trade existed on the regional as well as on the far-distance scale. This type of trade is assumed to be represented by the standardized weight-system, by seals and seal-impressions, considered as tools to control and administer trade and being themselves tokens of the authoritative power.

### The Written Evidence

From the cuneiform sources, *Dilmun* is the best known entity. First mentioned in the archaic texts of Uruk III (Englund 1983)<sup>9</sup>, it appears frequently at

different sites and in different types of documents, including lexical texts, name lists, administrative and economic tablets as well as royal inscriptions and personal names and, of course, the literary texts, the epics<sup>10</sup>. It disappears from the records in the old-Babylonian period and is mentioned for the last time during the 21st year of Samsu-iluna (1728 BC; Leemans 1960, 141s). These records testify to an intensive contact between Mesopotamia and Dilmun the nature of which, however, was subject to change through time. Dilmun was most important as an entrepot for goods going to or coming from Mesopotamia, and in fact as far as Mari<sup>11</sup>, during the pre-Sargonic period and again after Ur-III times, when it regained its trade monopoly. The texts refer to a number of goods or raw materials, partly in conjunction with the toponym of Dilmun, like e.g. Dilmun-harp, -beerbread, -onions, -datepalm, -garments, -axes, -tin, -copper and ivory, which certainly arrived to their destination not from Dilmun itself, but from a point of origin farther east (Potts (ed. 1983, 1990b, Ratnagar 1981).

From the Akkadian through Ur-III period, however, Mesopotamia was also engaged in direct trade with Magan and Meluhha. Both countries were first mentioned by Sargon of Agade in his famous boast that he made ships from Meluhha, Magan and Dilmun anchor at the docks of his capital Agade (Sargon b 2. Glassner 1986, 1989, Hirsch 1963, Kienast/Gelb 1990). After Sargon, Magan is mentioned until to the 4th year of Ibbi-Sin from Ur (2025 BC). There is little doubt that copper is the most prominent commodity in the texts. We know, however, that also finished copper objects, gold dust, diorite, olivin gabbro, alabaster, reeds or bamboo, wood and timber, furniture, goats, kids and pigs were imported from Magan (Leemans 1960, Heimpel 1987). Carnelian and ivory are also mentioned, but their point of origin was most probably further east, in India. In return, Magan and Meluhha received wool, clothes, garments, leather and leather products, essences, oil, barley and cedar wood (ibd.).

One of the most striking differences to Dilmun is that beside its occurrence in economic documents and royal inscriptions, Magan is frequently mentioned in connection with warfare<sup>12</sup>. Whereas Dilmun, together with Magan and Meluhha, is only once mentioned to have brought tribute to Gudea from Lagash (2144-2124 BC), Magan is referred to various times by the rulers of Agade and Lagash (Thureau-Dangin 1907, Heimpel 1987). Beside commercial activities, tributes and booties moved goods to Mesopotamia (Braun-Holzinger 1987, Potts 1986c). Magan was still part of the center-periphery framework (cp. Edens 1992) and, probably due to its far distant location, a quite fragile and unreliable trade partner, probing surrection repeatedly. In fact, it is quite unlikely that the toponym "Magan"

refers to anything similar to a politically clearly defined entity: Manishtusu subjected the 32 cities of Magan and their lords (cp. Glassner 1989, Heimpel 1982). The fact that Naram-Sin subjugated and captured a king (en) of Magan (who bore a semitic name. Glassner 1989) and that an ensi and a lugal-Magan.ki are mentioned by Shulgi (34th year, 2061 BC) and Amar-Sin (4th year, 2042 BC; cp. Potts 1990b, 144s.) does not necessarily indicate a politically unified polity for which there is little archaeological support. In any case, in the geographical conception of the Mesopotamians, "Magan with all their provinces" was located in the wild, peripheral regions (Glassner 1989, 183).

This situation may indicate that there was no major change in Mesopotamian-Maganian political relations since the earlier 3rd millennium BC. According to Possehl (1986), the Dilmun trade was promoted by Sumerians who were frustrated over refractory lords residing in Southeastern Iran who did not supply the exotic goods requested, as mirrored in the story of "Enmerkar and the Lord of Aratta", which probably dates back as early as the Early Dynastic period (Kramer 1952).

Meluhha was even further apart and its relations to Mesopotamia are more obscure. Obviously, it was outside the political sphere of interest and certainly a centre itself. It is rarely mentioned in literary, legal and economic texts or lists of Akkadian or later date. Gudea from Lagash (2144-2124 BC) is the only ruler who twice referred to Magan, Meluhha, Gubin and Tilmun as subjugated countries (cp. Potts 1990b, 142). Magan and Meluhha even came to Girsu (to pay tribute?). Meluhha-ships, which were quite large and had a name on their own right - meaning something like "cargo" (magillu, Glassner 1989) - transported gold-dust, tin, carnelian, lazurite, antimony, ebony, sea-wood, timber, shells, ivory, pearls (?), two varieties of birds, buffaloes (?), a red dog (?), a carnelian monkey and the multi-coloured bird from Meluhha<sup>13</sup> (Leemans 1960). Tin and bronze is mentioned as coming from Meluhha, but this region is not thought of in the texts as a country of copper-mines like Magan<sup>14</sup>.

### The Archaeological Evidence

Turning to the archaeology of Meluhhan trade, one point deserves emphasis (cp. also Shaffer 1980). The vast literature concerned with this topic deals with mainly two different types of indicators: with objects of truly intrusive character and with stylistic similarities. Some authors treat only one type, but especially in monographs, however, usually both are discussed without differentiation (Asthana 1976, Chakrabarti 1990, Ratnagar 1981). They are, however, connected with different modes, or levels, of interaction: intrusive objects can

be related to gift-exchange or trade. They can also be moved as souvenirs, along the gift-giving chain<sup>15</sup>, or as part of a booty or tribute. These types of interaction may, but need not reflect active cultural interchange. Especially booty and tribute are tools of demonstrating dominance and power. Stylistic similarities, on the other hand, attest to the diffusion and adaptation of certain features from one distinctive culture into another. They testify to copying as a result of a different type of communication. Such inter-cultural contacts can take place in connection with trade, but do not not require transactions of predominantly economical character. Instead, they reflect spheres of technological ("Know-How" transfer) or ideological exchange. Further, the diffusion of foreign symbols does not immediately imply, however, that their symbolic content was also adopted.

From Magan, i.e. the Umm an-Nar sites of the Oman Peninsula, artefacts of Harappan origin and style have increasingly been reported during the recent years. Actual imports include four weights, etched carnelian beads, ivory combs, pottery containers of yet unknown contents (but cp. Gouin 1990), one with Indus graffiti (Tosi 1987), and possibly one copper seal from Ras al-Junayz (Cleuziou/Tosi (eds.) 1987, pers. comm.). Stylistic similarities are many, viz. pottery decorations, shapes, string cutting (?) as well as the shapes of metal blades<sup>16</sup>. Some of the etched beads rather appear as imitations of the Indian technique than actual imports. In the Indus Valley, nothing of a certainly Omani origin is known with the sole exception of a chlorite bowl with double-dotted circle design from Mohenjo-Daro (Vergessene Städte ... Abb. 93). Most probably copper was brought from the Omani mountains, but there are also several other known sources on the Subcontinent (Asthana 1982, cp. note 14). The pertinent impression is that of probably very active barter-deals<sup>17</sup> and trade run by entrepreneurs who shipped e.g. food-stuffs or liquids, grain (?) and a few prestigious ornaments towards Oman and returned home with copper. That this trade was bi-directional might be inferred from the many similarities on the stylistic level. It has also to be recalled that, at the same time, this type of contacts connected Oman with Iran Makran (cp. Wright 1984). This picture fits the impression of a number of polities, loosely connected by lineages or purposive alliances as invoked by the written documents (see above). There seems to be a slight possibility that something like a small Harappan outpost existed at Ras al-Hadd (Reade/Méry 1987), but conclusive evidence has yet to be awaited.

Recent evidence from the Umm an-Nar site of Tell Abraç (pers. comm. D.Potts) seems to indicate, however, that at least this site at the coast of the

Arabian Gulf played a more active part: in addition to two weights from a tower, a further piece was recovered from a tomb along with an ivory comb and Harappan pottery of the type found frequently in Magan. If these coastal settlements show a stronger presence of Indus-related items than other places, this might reflect an attempt of the Harappans to better regulate the flow of goods into their homeland and to create, or retain, a market for their own exports. There can be no doubt, however, that after 2400 BC the Mesopotamian influence so strongly reflected in the earlier Hafit-related horizon (Frifelt 1979b. Cp. Tab. 1) vanished in favour of the Indus Civilization.

Turning to **Dilmun** which during the Akkadian time designated Bahrain and from the Ur-III period on also included Failaka, stylistic resemblances are strikingly few<sup>18</sup>. Actual imports consist of six Indus weights and possibly a few carnelian beads which replace the turquoise beads of the earlier levels of City I (25-22) in City II (levels 21-9; Bibby 1986), roughly dated to the time between 2300-1800 BC (Mortensen 1986, Hojlund 1986<sup>19</sup>). No actual Dilmunite exports to the Indus Valley are known, except on Dilmun-seal (No. 1. See below, note 20).

A feature shared between Dilmun, Sumer, Luristan (?) and the Indus Valley, however, are tiny round seals of the Persian Gulf type. 33 seals of this type are known so far, 21 of which come from Bahrain, the Saudi mainland or Failaka, 5 from Ur and 4 from the Indus Valley (Nos. 2-4). 11 of the seals found outside the Indus Valley proper carry an Indus inscription, mostly combined with the Indian motif of a bull in profile (Potts 1990 Tab. 2). Six of these were found in Mesopotamia (Ur), two on the Qala'at al-Bahrain, one on Failaka and one is said to come from Luristan (Brunswig et al. 1983). A prismatic seal from Hajjar carries an Indus inscription (Rice 1988). These circular seals were probably, like their square or cylindrical counterparts in India, Mesopotamia, and Iran, administrative devices for the organization of the flow of goods. If this assumption is accepted, it appears that trade patterns between Meluhha and Magan differed from the trade relations connecting Meluhha with Dilmun and Mesopotamia and the latter with Dilmun and Magan. Magan is strikingly absent from the above list of distribution. Here, only one sample of the later (post-2000 BC) Dilmun-type<sup>20</sup> seals was found at Mazyad.

In **Mesopotamia** and western Iran (Susa), we find among the actual imports from Meluhha two types of beads (etched and long-barrel shaped carnelian beads. No. 5), ivory, weights, square Indus-seals, and one seal-impression of such a seal (No. 6)<sup>21</sup>. Induced from the archaeological record is the import of water buffaloes (Boehmer 1975). Stylistic similarities include "indianized" motifs



on cylinder-seals found at Ur, Tell Asmar and Susa (Nos. 7-10), and possibly dice and figurines (Dales 1968, Franke-Vogt 1991). On the Indian side, actual Mesopotamian imports are rare, but we may refer to a number of possibly Babylonian weights from Mohenjo-Daro (Gadd/Smith 1924). On the level of style and iconography, resemblances are too plentiful, and often doubtful, to be discussed here<sup>22</sup>. Mention shall be made, however, of the presence of a few cylinder seals and the so-called "Gilgamesh"- and "Enkidu"-motifs.

Finally, eastern Iran, Afghanistan and southern Turkmenistan will briefly be discussed. It has been pointed out above that during the first half of the 3rd millennium intensive interaction connected northern Baluchistan with the Hilmand civilization and Turkmenia (Jarrige 1985b, Lamberg-Karlovsky 1986, Tosi 1979). During Harappan times, however, there is little evidence for contacts between southeastern Iran, Afghanistan and Baluchistan and the Indus valley.

A Harappan inscription and a figure scratched into a pottery vessel along with two etched beads is all we know from Tepe Yahya Period IVA (Lamberg-Karlovsky 1972b). At Shahr-e Sokhta, evidence is restricted to a shankh shell from the surface (Ratnagar 1981). Mundigak IV, 2 yielded a tiny etched carnelian bead (Casal 1961). Etched beads are also reported from Shahdad, Tepe Hissar IIIB-C, Jalalabad and Kalleh Nissar (Luristan. Reade 1979). Possible imports from Iran to the Indus Valley are restricted to a fragment of a chlorite sherd with mat-weave design and two compartmented vessels (Franke-Vogt 1991, n.d. 2). This rather scanty evidence for Harappan contacts with Iran and, in fact, the very limited evidence of Harappan penetration into Baluchistan, has been noted before (Wheeler 1968, Fairservis 1975, Shaffer 1980). Still, the absence of Harappan interaction with the Indo-Iranian Borderlands is striking, especially as we know that southeastern Iran was involved in exchange networks with southern Iraq, western Iran and the Gulf from the earlier half of the 3rd millennium until to the Harappan period (Lamberg-Karlovsky 1982, 1986, T.F. Potts 1993, Wright 1984). The limited evidence for interaction with the Kulli who occupied the southern parts of the Baluchi highlands and the impression that the Harappan outposts of Sutkagen Dor and Sutka Koh were not involved in these interaction systems remains enigmatic. To assume that fixed boundaries between these areas prevented human contacts appears rather unlikely (Shaffer 1980). On the basis of the present evidence, however, Shaffer (1980) rightly concluded that the raw materials consumed by the Harappans were not obtained from sources in Baluchistan. This assumption gains further support from the fact that, instead, during the Harappan period the eastern regions, where many resources

are located (cp. Asthana 1982 and note 14), came into the focus of Harappan interest and integration.

More evidence both for intrusive objects and stylistic similarities is available from late Namazga V-levels at Altyn depe: an ivory stick, a perforated jar, etched carnelian and segmented fayence beads, and two Indus-seals as well as trefoil motifs, a seal shaped as a three-headed animal, and an ithyphallic terracotta figurine (Gupta 1979, Kohl 1981, Sarianidi 1986). Objects imported from these regions to the Indus Valley may include copper shaft-hole axes and two copper compartmented seals (Franke-Vogt 1991, 48). Among the stylistic similarities, a stepped motifs on pendants and inlay-work, a stepped seal with an eagle from Harappa, and sculptures in the round have to be mentioned (cp. Amiet 1986, Gupta 1979). The impression emerges that contacts between the Indus Valley and southern Turkmenia were more intensive than to eastern Iran and Murgap. We have also to consider that almost all artefacts mentioned above come from one site. This, however, as a matter of fact needs not to reflect anything like (archaeological) reality and this picture may be subject to change soon<sup>23</sup>. The above view is also supported by the evidence from Shortughai (Francfort 1989). This site, however, is peculiar as it does not fit into the common interaction patterns. It represents a truly Harappan outpost and thus has rather to be interpreted within the framework of regional integration. Situated close to the sources of lapislazuli in Badakhshan, its location seems to be directed more by economic than by political considerations<sup>24</sup>.

### Trade Patterns

Trade between the regions in question flourished already before the emergence of the Harappan state, in fact its main outgoing routes seem to have by-passed the central Indus Valley during the early 3rd millennium BC. The export of agricultural surplus to the east and the demand for status items in the west most probably promoted new social relationships, invoking the emergence of a new elite or its consolidation within the socio-political framework. It was of outmost interest of these groups to maintain the status quo: to keep the routes open and the goods moving. Any change in the taste or patterns of consumption or the loss of goods due to political unrest along the routes would have had a bearing on their social position. The fact that prior to the formation of the Harappan state, some of the most important suppliers and producers of status items, Shahr-e Sokhta and Tepe Yahya, were for a short period integrated into the proto-elamite civilization (Lamberg-Karlovsky 1982, 1986), may also have

played a role in these shifts of trade routes and its patterns of organization because it certainly disturbed the established networks of communications and interests. Although maritime trade and exchange took place along the Gulf-shores since the Ubaid-period (Oppenheim 1954, Oates et al. 1977), during the first half of the 3rd millennium west-bound overland trade from India, crossing Iran, was certainly more important than maritime trade until to ca. 2500 BC. This view is sustained by both the texts and the archaeological record.

This shift of trade routes, and trade patterns, is probably closely related to the political processes taking place in most regions involved. The Akkadian period is characterized by the formation of the first imperialistic state in Mesopotamia around 2300 BC. In Dilmun, the island of Bahrain obtained its central position from the mainland (Potts 1983), and in Meluhha, the Harappan integration was established by this time. Thus, conditions for directed far-distance trade were certainly good. Evidence for direct contacts between Meluhha and Mesopotamia is only from now on provided by the cuneiform sources (see above). The existence of a Meluhha-translator in the Akkadian period indicates the repeated need for communication between people speaking different languages. Su-ilusu bears a classic Akkadian name and one can assume that he was a native Akkadian (No. 11). An old-Akkadian legal text reports that a man from Meluhha was fined to pay 10 shekel of silver to a local named Urur as compensation for a broken tooth (Leemans 1969). A text from Umma says that oil was distributed to a gendarm and a passenger of a Meluhha-ship. During the Ur-III period, a Meluhha-village close to Lagash is mentioned by Shulgi (in his 34th year, 2061 BC. Parpola et al. 1977)<sup>25</sup>. Although cuneiform references to Meluhha are not frequent, along with the archaeological evidence they seem to indicate regular contacts. The impression arises that travelling and communication between these two countries was well organized and established.

The Ur-III period is a period of a strong state controlled regulation of production, consumption and distribution of goods. But, even under this centralization, the socio-economic system was not entirely monopolized by the state (Yoffee 1981, 23). Although outgoing Sumerian merchants were mainly employed or capitalized by the temple estates, they also received funds from private creditors, incl. local corporate (kinship) groups (Yoffee 1981, 7s). There is no indication for a likewise strict attempt of a crown - or even its mere existence - or of a similar institution to control the in- and output of state-owned workshops in Meluhha. As pointed out above, some types of production seem to have been subjected to a certain degree of control, either guaranteeing measures or con-

tents or, possibly, also quality and quantity (stoneware production, sealed goods). If there was a state-like institution in the Indus Valley<sup>26</sup>, one of its responsibilities - serving also its own interests - must have been to keep the roads open and to maintain international contacts, thereby providing the framework for a functioning far-distance trade. This was especially important in case of remote customers like Dilmun and Agade where, at the same time, trade involved huge quantities of cargo. Funding and a system of risk-sharing alliances could have been practised by the parties involved.

The documents leave little doubt that the goods traded between Sumer and the eastern countries fall mainly into the categories of luxury items, although some might be considered as necessities. Edens (1992) considers the copper bound for Mesopotamia and grain supplied to Magan among the latter. These two commodities were probably the basic staple goods. During the Ur-III period, all garments and the wool shipped eastward to Dilmun and Magan from Mesopotamia were of inferior quality (Waetzold 1972, 72), but they still might have been considered as values in Magan<sup>27</sup>. These contacts were slowly decreasing in intensity during the Ur-III period. Then, the landroute was blocked by Marhashi (Steinkeller 1982, 1988<sup>28</sup>), leaving open to the traffic only the maritime route. As evidence for overland trade on a larger scale during the Harappan period is limited (see above), however, presumably this did not affect economic transactions substantially. During the second half of the 3rd millennium, the goods reached Mesopotamia either via Dilmun or directly from Magan and Meluhha. In any case, the maritime route appears to be more suited to guarantee a reliable and rewarding supply.

Magan takes a place on its own. It appears as an entity much less nucleated than the above regions. Like in southeastern Iran, the same pattern of a number of co-existing social groups engaged in a regional interaction involving both sides of the Lower Sea might have persisted from earlier times. Trade appears to have been less centrally and directly organized. Concerning Meluhha, it possibly involved smaller shipments and left room for entrepreneurial barter-transactions beside the more institutionalized enterprises of established corporate groups or large estates. This hypothesis gains support by the fact that following the disruption of the direct large-scale Meluhha-trade after the Ur-III period still some goods were moved from India to Magan, Dilmun and Mesopotamia. It has to be noted, however, that after the Umm an-Nar cultural complex came to an end at about 2000 BC, stylistic parallels or intrusive Indian objects largely vanish<sup>29</sup>. During the Harappan phase, trade appears reduced in volume and

frequency compared to Dilmun and Mesopotamia. This impression further increases concerning post-2000 BC interactions, which seem to have involved mainly the eastern periphery of the Indus Civilization. At this time, after Meluhha also Magan disappeared as trade partner from the cuneiform texts when the Mesopotamian demand for copper was satisfied by Alasia on Cyprus. Whether this development is a consequence of the situation in Meluhha, where the central integrative forces ceased to exist by 2000/1900 BC, and Magan, where, on a lower level, a similar development took place during the Wadi Suq period<sup>30</sup>, or whether it was simply easier for the old-Assyrian and old-Babylonian empires to procure copper from the more near-by sources also remains an open question.

### Conclusion

Recapitulating the evidence discussed above and considering the datings provided by the comparative archaeological evidence, viz. Shortughai Periods I and II, the sites in Magan and Dilmun, and - although less reliable - by the cuneiform texts, two points become apparent. First, there is a chronological gap of a couple of centuries between the disappearance of the Mesopotamian influence in Oman and the first appearance of the Harappans. During this time, i.e. around 2700-2500 BC the local cultures consolidated. At the same time, in the Greater Indus Valley the Harappan state formation took place. Second, the political integration and the economic expansion of the Harappans post-dates the genesis of a culturally homogeneous entity. In contrast to other frequently stated examples of expansion (cf. Hiebert/Lamberg-Karlovsky 1992) there is very little evidence that military conflicts or warfare were involved in this process. In absence of any other likely explanation, usually emphasis is put on trade (Possehl 1990).

The assumption that trade was a major constituent factor in the rise and final shaping of the Harappan civilization (Possehl 1986) can be questioned on the basis of the available evidence. It can certainly be assumed, however, that the continuation of trade - and the participation in its revenues - was among the essential interests of the political backbone of the Harappan state. The establishment of trading outposts, the transference of the bulk of the cargo to the maritime route, away from the difficult overland passages which had to cross foreign countries, can be seen in connection with the efforts of the groups involved to maintain and expand their tools of power. The role of trade as a major factor of urbanization and growth is undisputed. Urbanization, however, does not per se equal the formation of expanding states. In any case, both internal

and external trade certainly were important economic and therefore social and political factors (contra Shaffer 1982). The demand for exotic goods on the local markets and in the west increased the volume of the commerce and required a functioning network of supply systems, for raw materials as well as for finished items. To guarantee a continuous flow of goods and to control it at the same time, outposts like Shortughai and possibly Ras al-Hadd in Oman were established. Likewise, the foundation of Sutkagen Dor and Sutka Koh during the mature Harappan phase can be seen as an attempt to better organize the trade with Magan and the far west. In contrast to previous times, during the Harappan phase this commerce was organized from the Indus heartland. Goods reached first the Indus Valley proper and were re-directed from there. Baluchistan has lost most of its importance as a passageway. Instead, the eastern domain developed into a major gateway. The basic difference in the organization of trade during the Early as compared to the mature Harappan phase may, therefore, not lie in the types of goods moved, but in its volume, routes and modes. In fact, the establishment of a high volume maritime trade between the suppliers in the west and the main consumers in the east belongs to the main characteristics of the Harappan period.

Trade with Mesopotamia and Dilmun appears to have been a direct far-distance undertaking, basically following market principles but possibly involving also some kind of centralization. Instead, it is assumed that trade with Magan was based more on individual activities, following a pattern of free interplay of demand and supply. There may have been attempts for regulation, but the continuation of sporadic trade encounters between Magan and Gujrat beyond the decline of the cities in the heartland actually underlines the proposed differences in the trade relations between Meluhha and Dilmun and Mesopotamia on one hand, and Magan on the other: in contrast to the latter, the former came to end at about the same time as the integrative forces ceased to function which before had delineated the Harappan entity. This coincidence can be taken as an indication for a strong inter-dependency between the central authorities and the direct far-distance trade. At the same time, regional exchange and small-scale inter-regional trade and barter persisted from the onset of civilization onwards throughout time. A state monopoly of trade was never established at the Indus. At a certain moment in history, a more governed trade may have overshadowed small-scale entrepreneurial activities as far as the commercial volume and certain markets are concerned. However, the former never completely dominated the

economic transactions and, finally, it was outlasted by the latter, because it was not likewise deeply affected by the collapse of the political system.

### Notes

1. This paper was written during the first half of my one years' stay at Kanazawa University. I am very grateful to Prof. Watanabe, Dean of the Faculty of Letters, and to Prof. Sasaki, Dept. of Archaeology, for inviting me to teach at Kanazawa. I am indebted to T. and H.Sasaki for their continuous support. I also wish to extend my thanks to M.Shimura and Dr.G.Fiedler for their help, to the administrative staff of the University for their patience and to my students for their endurance.

This contribution is based on a lecture given on 26 February 1993 at Tokyo University for the Monbusho Research Project "Indus and Gulf" in conjunction with the Indian Archaeological Society. My sincerest thanks are due to Prof.M.Konishi and the organizers of this meeting for their invitation to deliver a paper.

2. Compare the selected bibliography of this paper. The most recent contributions are Edens (1992), Hiebert/Lamberg-Karlovsky (1992), D.T.Potts (1990b, 1993) and T.F. Potts (1993).

3. Ardeleanu-Jansen (n.d.1), Franke-Vogt (1991, 1992).

4. See on this topic Kenoyer (1989, n.d.2).

5. Intrusive objects, however, may also be related to other spheres of contact, like movement of people (to be differentiated from movements of "pots").

6. Known sources are located in Badakhshan (Kokcha Valley), in the Lake Baikal and Ural regions and in the Quetta District (Chagai Hills). See on lazurite most recently Casanova (1992).

7. See on this topic in general Asthana (1979, 1982), Dales (1971, 1977), Gupta (1984), Jarrige (1985b), Lamberg-Karlovsky (1972a), Mughal (1971), Shaffer (1978, 1980, 1982, 1988), Tosi (1977), and Wright (1984).

8. This procedure, however, is hampered by highly selective archaeological information. The high sedimentation rate of the Indus which buried many sites in the active flood-plain and restricted archaeological investigations in many regions are the main problems.

9. The identification of this toponym as the Dilmun of later times has been challenged recently (Michalowski 1988, Glassner n.d., quoted in T.F.Potts 1993, 384).

10. See Alster (1983), Bibby (1970), Cornwall (1946), Jacobsen (1957), Kramer (1944, 1964), and Leemans (1960). Further references can be found in Potts (ed.) 1983 and Potts (1990b).

11. The previously held view about trade relations between Mari and Dilmun during the old-Babylonian were recently - and quite convincingly - challenged by Eidem and Hojlund (1993) on the basis of new texts published by Gronenberg (1992).
12. Warfare, however, seems to be a dominant theme of the Akkadian documents.
13. See on the latter topic especially During Caspers (1990).
14. According to Asthana (1982, Fig. 25.1), tin occurs in Baluchistan, Khorasan and Central Asia as well as in present-day India (Gujrat, Bihar).
15. We know that beside that actual merchandise merchants carried different types of gifts with them; for the local prince, for the trading partners, to open roads etc. (Glassner 1989, 188).
16. See Cleuziou (1984), Cleuziou/Tosi eds. (1986, 1987), Cleuziou/Vogt (1985), During Caspers (1970), and Edens (n.d.1, 1992).
17. On barter see Humphrey/Hugh-Jones (1992).
18. The sherds mentioned by Hojlund (1989) are suspicious.
19. The most recently published date, however, gives the twenty-first century BC for the beginning of City II (Eidem/Hojlund 1993).
20. One specimen of this type was also found at the surface of Lothal (Rao 1963), witnessing not only the continuation of trade relations well into the 2nd millennium B.C., but also demonstrating a shift away from the Indus heartland - where the cities ceased to flourish at around 2000/1900 BC - to the former centers at the eastern periphery. That trade persisted into the 2nd millennium BC is also documented by the mentioning of ivory and a carnelian monkey in Isin-Larsa period texts from Ur. One round seal with a pierced knob - the shape typical for the earlier Persian Gulf type-seals - from Mohenjo-Daro carries the whirl-motif occurring frequently on the Dilmun-type seals (Franke-Vogt 1991, 99).
21. For detailed discussions of the specific objects see Chakrabarti (1990), D.T.Potts (1990b), T.F.Potts (1993), and Ratnagar (1981).
22. Refer to the bibliography for articles by E.During Caspers and A.Parpolala.
23. See e.g. Hiebert/Lambert-Karlovsky 1992. Re-opened excavations at Gonur will contribute much to our knowledge.
24. Recently, Hiebert and Lamberg-Karlovsky (1992, 3) put forward the hypothesis - based on the Bactrian-Margiana Archaeological Complex - that territorial expansion, whether colonial - like Shortughai -, imperial, or military, is embedded in the process of emerging state polities. On the other hand, it is argued that trade and commerce was an effect rather than a cause of territorial expansion (ibd., 4). In case of the Harappan civilization, a case is also made here for the latter assumption.



25. This, however, does not per se indicate a "Meluhhan-colony" as certain areas, including pastures, were occasionally named after other countries (Butz 1983).

26. See on this topic Jacobsen (1986, contra Fairservis 1986).

27. In the 14th year of Gudea of Lagash, 241 garments were given to a merchant destined for Magan (see Potts 1990b, 142). Edens (1992, 127) reports that usually quantities averaged 30-50 garments.

28. Steinkeller (1988) locates the kingdom of Marhashi in the area of Shadad and Tepe Yahya and assumes that an Elamite language was spoken (Hiebert/Lamberg-Karlovsky 1992, 9).

29. The single Indus-seal from a Wadi Suq collective tomb (de Cardi 1988, 1989) might be regarded as residual. The Dilmun-seal from Lothal (Rao 1963) certainly testifies to contacts, how sporadically they may have been. To this may be added the doubtful so-called Rangpur IIA-pot from Shimal (de Cardi 1988, 1989) and post-Harappan (?) pottery from Tell Abraq (pers. comm. D.Potts).

30. This view was first forwarded by Cleuziou (1981) and recently challenged by D.T. Potts (1993) who argued with the archaeological evidence from Tell Abraq (D.T. Potts 1990a, 1991) and Shimal (Vogt/Franke-Vogt 1987). Still, there is certainly a major discontinuity regarding domestic and tomb architecture, burial customs, ceramic and soft-stone technology and style, and possibly subsistence between the Umm an-Nar and Wadi Suq cultures.

#### Captions of illustrations No. 1 - 11:

1. Dilmun-seal from Lothal (Jansen 1986, Fig. 90)
2. Persian-Gulf seal from Mohenjo-Daro (Franke-Vogt 1991, Pl. XXV, 152)
3. Persian Gulf seal from Ur (Jansen 1986, Fig. 73)
4. Persian Gulf seal from Mohenjo-Daro (Franke-Vogt 1991, Pl. IX, 15)
5. Indus etched beads from Ur (Vergessene Städte am Indus, Abb. 27)
6. Impression of an Indus seal from Umma (?). Obverse and reverse. Vergessene Städte am Indus, Abb. 95-96)
- 7.-10. Impression of a cylinder seals showing "Indianized" motifs
7. From Tell Asmar (Franke-Vogt 1991 Pl. XLI, 316)
8. From Ur (Franke-Vogt 1991 Pl. XLI, 318)
9. Unknown (Franke-Vogt 1991 Pl. XLI, 319)
10. From Tell Suliemeh (Franke-Vogt 1991 Pl. XLI, 318)
11. Impression of an old-Akkadian cylinder seal showing Su-ilisu (sitting on the lap of a higher-ranked person. Vergessene Städte am Indus, Abb. 97)

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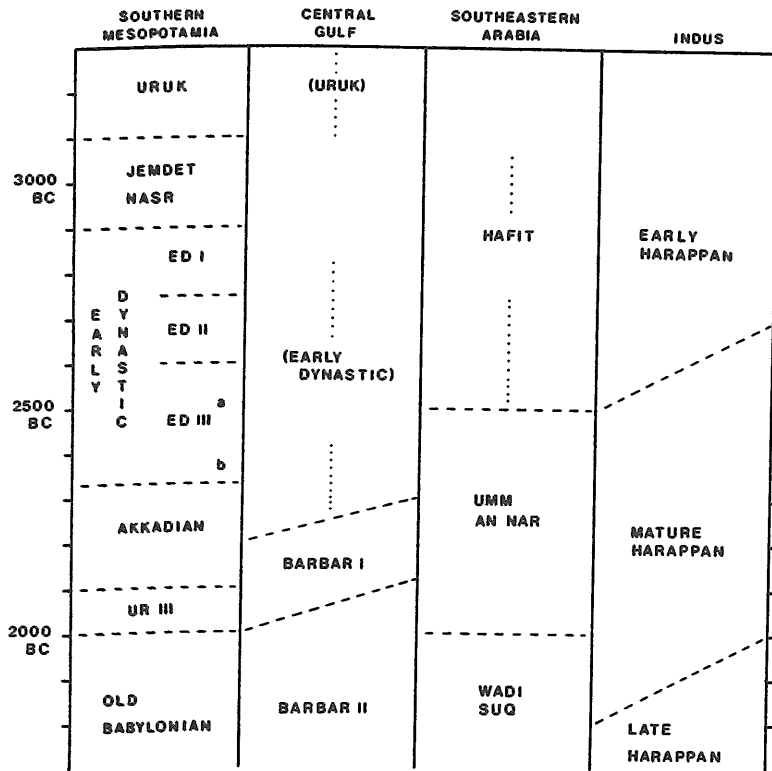
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Tab. 1 Chronological chart (Edens 1992, Fig. 2)

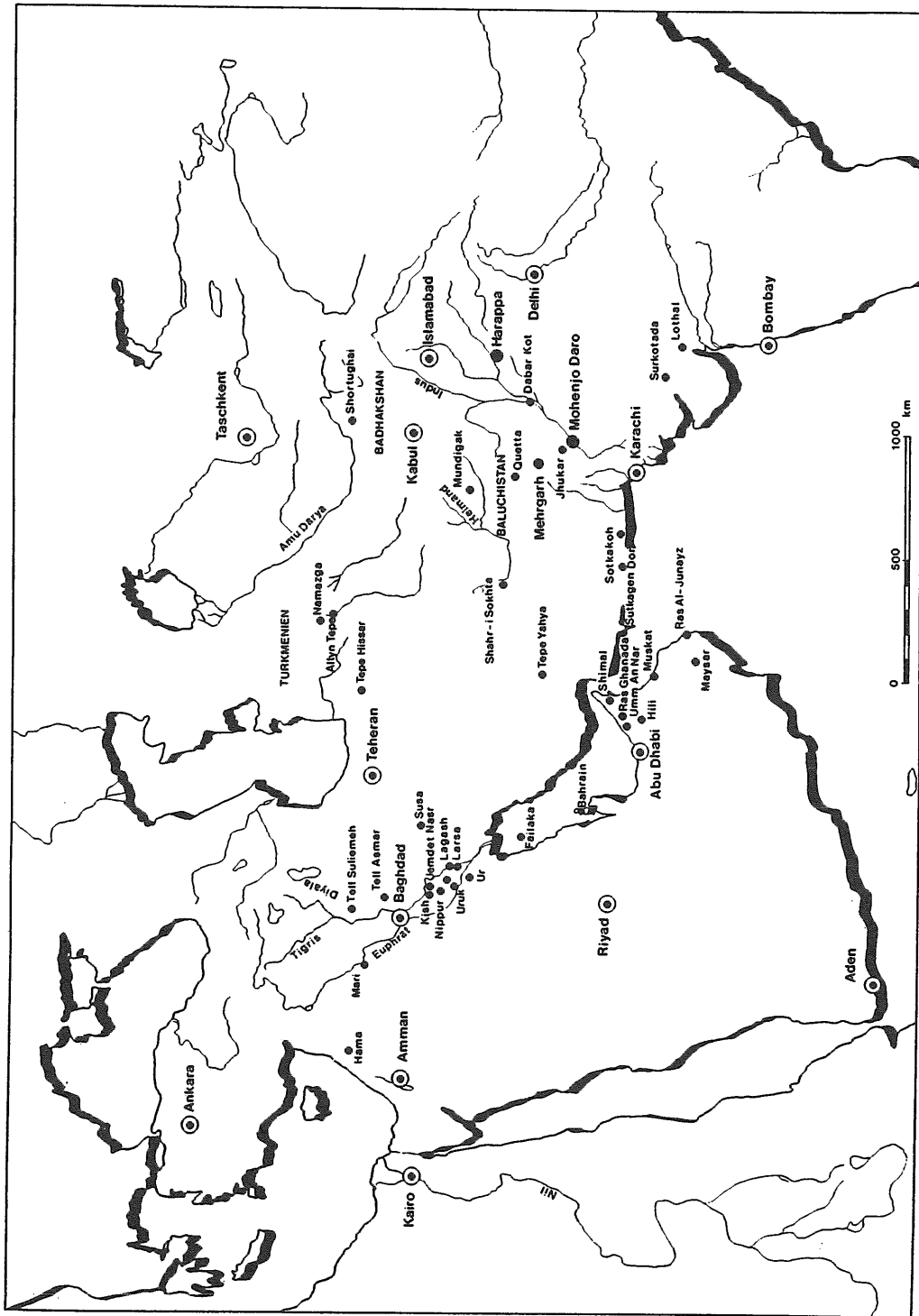


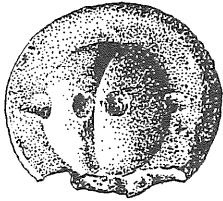
Fig. 1 Main sites mentioned in the paper (Franke-Vogt 1991, Karte 1)



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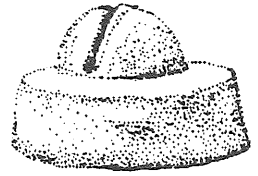
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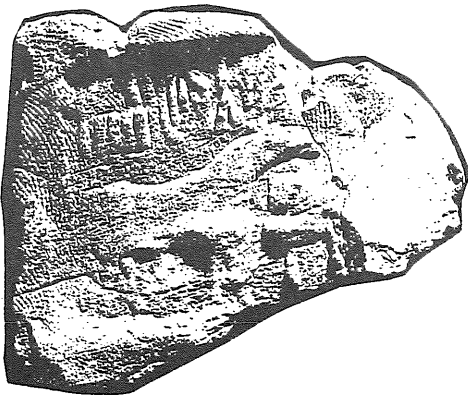
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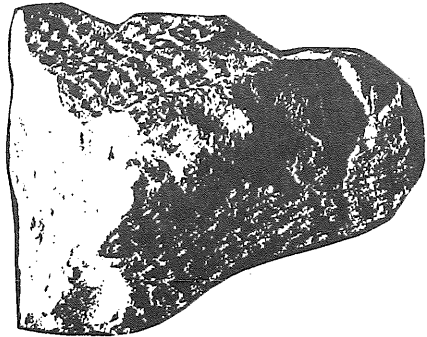
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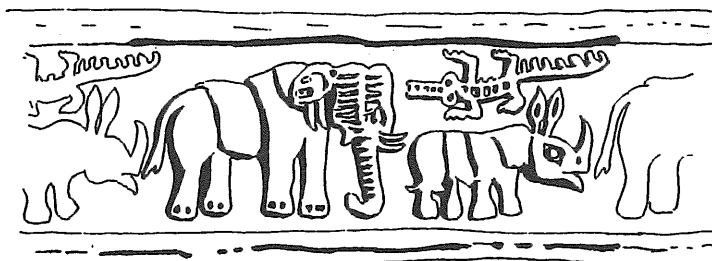


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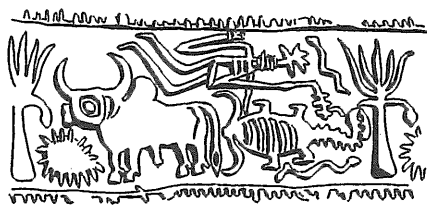


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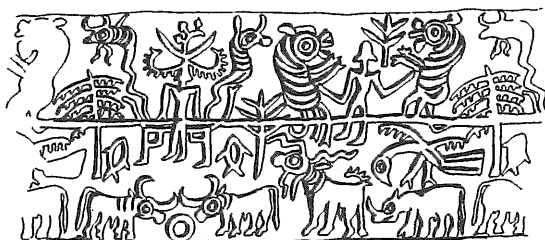




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