

## CHAPTER 8



# The Substance and Symbolism of Long-distance Exchange: Textiles as Desired Trade Goods in the Bronze Age Middle Asian Interaction Sphere

Monica L. Smith

## Introduction

Long-distance trade in distinctive objects is a hallmark of human behavior. As early as 100,000 years ago, the transfer of both raw materials and finished objects over hundreds of kilometers can be archaeologically demonstrated in Europe, Africa, and Australia. Practiced long before the development of cities and states, long-distance exchange provided the visual and tactile expression of faraway places materialized in goods that were seen and used every day. In this chapter, I consider how the circulation of ordinary perishable goods such as textiles contributed to the establishment and maintenance of long-distance trade routes that also served to distribute small quantities of elite goods once political hierarchies emerged.

The relationship between long-distance exchange and the development of sociopolitical complexity has been discussed by numerous scholars who have observed that emergent leaders control the acquisition and display of unusual objects that symbolically bolster their political authority (e.g. Clark and Blake 1994; Goldstein 2000; Hayden 1998; Helms 1993). However, the value of long-distance goods for nonelites has not been discussed to the same extent. There are several reasons for this. One reason is that despite the increased amount of household

archaeology undertaken in many parts of the world, much evidence still comes from elite-related contexts, such as tombs and other special-purpose venues, with the result that our sample size for the distribution of long-distance goods in other contexts is small. Another reason is that researchers often assume that ordinary people had limited scope for consuming nonlocal goods, as such objects are viewed as having traveled only upon the demand of political authorities in fairly advanced states and empires. A corollary to this assumption is that nonelites, therefore, desired, acquired, and used only locally produced, abundant, and basic items. Finally, our understanding of ancient transportation systems, which is rarely documented in terms that would let us model the actual volume of trade, leads us to believe that transportation was arduous and difficult, that trade was limited to items that were light and easily transported, and that long-distance goods were always scarce.

Cognitive and historical perspectives on the exchange of goods indicate that many of these assumed conditions should be reevaluated. The characteristics by which objects are perceived as distinctive can be assessed by all viewers within a society, not just by elites. Many factors make similar objects distinguishable from each other, including visible physical characteristics such as color, embellishment, the use of unusual materials, and evidence of manufacturing skill. Selection among a group of similar items is done according to standards of value that are both negotiated among exchange participants and internalized by consumers. Even the mechanisms of transfer can be encoded into the perception of an object's worth, whether procured after many months of work or deliberation, or through acts of theft or other forms of prowess. Objects also can have histories attached to them that are repeated and enhanced at the time of transfer, encoding them with additional value in the course of the transaction (e.g. Malinowski 1950; Weiss 1997). Distinction can be further embellished through a retelling of the memories and genealogy attached to objects that are used as heirlooms, souvenirs, prizes, and gifts. Language embellishment can even increase the perceived distinction of an object in the absence of any specific physical characteristics. The source of the item may not be known except by the proclamation of the merchant or trader or by the connoisseurship of the consumer. Indeed, distance to the source of raw material or manufacturing locale may be the only aspect that makes a particular object stand out in a living repertoire of possessions.

### "Distance Value" and the Desire for Nonlocal Ordinary Goods

In an insightful paper on trade in the Aegean Late Bronze Age (2nd millennium BC), Eric Cline has examined the phenomenon of low-value

commodities that were transported long distances. He describes them as "ordinary, functional Eastern Mediterranean objects of non-exotic and non-precious material which hardly seem to have been worth the cost of transportation, but which somehow and for some reason made their way to Aegean sites" (1999, 119). Cline uses the example of unglamorous terracotta wall brackets, which appear both in locally made versions and in exemplars traded from a long distance, and which appear in both elite and nonelite contexts. Cline suggests that because the imported goods were made of cheap materials, "we might have here an example of a commodity which perhaps had increased in value and desirability simply because of the distance which it travelled—a quality which one might usefully label distance value" (1999, 122). Cline's observations show that the assignment of value by consumers can be done along several rubrics, with some long-distance goods valued because they are scarce, some because they are labor intensive, and some because they appeal to and can be acquired by all social classes.

In both prestate and nonstate systems, individual and household desire for distance-value goods promoted the development of regional exchange networks for finished products and raw materials, even when there were local technological equivalents that could serve as a substitute (e.g. Smith 2001). Ethnographic examples illustrate that people even rely on trade mechanisms to acquire necessary goods for which there are no local substitutes, as Bronislaw Malinowski noted for the outlying islands of New Guinea in the early 20th century in which "the manufacturing centres of important articles, such as pottery, stone implements, canoes, fine baskets, valued ornaments, are localised in several places, according to the skill of the inhabitants, their inherited tribal tradition, and special facilities offered by the district; thence they are traded over wide areas, sometimes travelling more than hundreds of miles" (1950[1922], 1). This example illustrates how long-distance goods become part of a routine domestic repertoire when such goods can be reliably obtained despite the long travel distance involved.

Recent archaeological studies of nonelite contexts further indicate the role of long-distance goods in ordinary households. Research in the Maya region on so-called "commoner" households reveals that there is much more diversity among such households than previously appreciated. "The excavation of middens around households at other Maya sites like Tikal now makes it clear that commoners *did* obtain some of the goods formerly labeled "high status" or "exotic," such as obsidian and shell" (Marcus 2004, 268, citing Haviland and Moholy-Nagy 1992, 54; emphasis in original). Payson Sheets (2000, 217) has observed a similar phenomenon at the small site of Ceren in El Salvador, where Classic period households each "obtained distant exotic items,

such as obsidian tools, jade axes, and polychrome serving ceramics, by exchanging their household surplus commodities in elite centers." Elite and ordinary economies are thus mapped onto one another, both in terms of desired items and in the logistics of trade (cf. Geary 1986).

Two mechanisms of long-distance trade can be identified: direct long-distance contacts across large expanses (particularly across oceans and other water bodies), and repeated short-distance contacts that have a cumulative effect. Direct long-distance contacts would have been initiated and operationalized through activities such as formal trade missions as well as by political envoys and adventurers with armed accompaniment. Because of their unfamiliar culture and obvious foreignness, it is not surprising that Philip Curtin (1984) proposes that long-distance traders often were viewed with suspicion and mistrust. However, this mechanism probably characterizes relatively few long-distance transfers; instead, much economic activity was achieved through short-distance transfers undertaken in the context of other social engagements and in which traders were part of the local culture. This model of interaction, encompassed in Renfrew's (1975) expression of down-the-line trade, is one in which the effect of long-distance trade is achieved by a chain of short-distance transactions in which the eventual destination of the exchanged goods may be unknown to the majority of participants.

Ethnographic and archaeological studies indicate that ancient transport systems were capable of distributing large quantities of bulk goods through both direct and down-the-line mechanisms. For example, the Late Bronze Age (c. 14th century BC) Mediterranean shipwreck at Uluburun contained a cargo of impressive magnitude with 10 tons of raw copper, one ton of tin, 175 glass ingots, and 149 Canaanite jars along with thousands of beads (summarized in Pulak 1998). The cumulative effect of overland travel might have been even greater, particularly in perishable goods that no longer survive. The specter of transport by pack animals or by human head-load or back-load strikes the modern researcher as arduous, unpleasant, and inefficient, but it was probably responsible for the incremental movement of vast quantities of goods. In her examination of the realities of human portage, Nancy Malville (2001) utilized ethnographic observations of Nepalese porters to evaluate the potential volume of trade. She found that the average load in relation to body weight was 137–154% for adult males, with those individuals who worked for themselves carrying loads that were the heaviest (2001). Evidence for the transportation of large quantities of items supports a view of ancient trade as having been comprised not only of small, light objects but also bulky goods and those that might otherwise be viewed as redundant of local production. With the capacity for distance value to enhance the perceived worth of objects, the transfer

of perishable goods from one region to another becomes an economically viable impetus for trade.

### Long-distance Exchange in Perishable Goods

What was the role of perishable goods in ancient trade networks? This question should first be addressed by a careful consideration of what is meant by "perishable." As archaeologists, we are accustomed to thinking of items such as grain and textiles as perishable—and ceramics and stone as durable—because of preservation factors that lead to the differential recovery of these items in archaeological sites. However, to ancient people brittle objects such as ceramics and stone flakes might well have been viewed as perishable, and other objects such as wood and cloth viewed as durable. Wooden objects and textiles easily can be used for a generation or longer, constituting a significant source of value through both daily use and intergenerational inheritance. The replacement of the archaeological criterion of perishability with a consumer-initiated perception of utility and durability means that we can fruitfully develop a model of long-distance trade in organically derived goods that traversed cultural spheres through down-the-line exchange.

Examples of trade in food—too numerous to examine here—show that edible items did move around the landscape, sometimes at considerable distances and in considerable amounts. Textiles are another ubiquitous item, with near universal use after the beginning of the Holocene (for the textile tradition of the preceding Upper Paleolithic, see Soffer *et al.* 2000). Textiles are not just for keeping warm; they also are the means for quotidian public display, providing the opportunity to demonstrate identity, belonging, and savoir faire through a socially necessary possession. Textiles are a manufactured item with a high potential for diversity in many different types of objective criteria that can be readily discerned, such as the raw material used (flax, cotton, wool, silk), thickness of thread, tightness of weave, weight of the finished product, width of the cloth, and the color and style of the finished garment, as well as design elements achieved through dyeing and appliqué.

As a consumer good, textiles can be relatively long lived, providing many years of service from the time of initial acquisition; they also have the potential for sustained use through patching and repairs. They do eventually need to be replaced, which is a factor that is important for producers as an incentive for sustained production. Like ceramics, textile manufacturing is a rich realm for innovation as well as tradition, providing the consumer with opportunities for decision making at every acquisition event in which choice is "forever dynamic, never at rest" (Bianchi 1997, 284). However, textiles provide some important distinctions in use

strategies compared with pottery. Ceramics are displayed only in certain contexts, usually having to do with the storage or presentation of food that may be witnessed by relatively few individuals. By contrast, textiles worn as clothing are constantly in motion and in public view, providing a daily expression of identity inside and outside the household (cf. Smith 2007).

The principal challenge to the study of ancient textiles is that they rarely survive in the material record. Archaeologists have devised a variety of proxy methods for evaluating textile production, including the analysis of the durable tools (spindle whorls, knives, awls) and the facilities used in manufacturing (e.g. dyeing vats, loom anchors). The history of textile use has been undertaken through the study of impressions left on durable material such as clay (e.g. Soffer *et al.* 2000), organic materials preserved through contact with metals or salt (e.g. Compagnoni and Tosi 1978; Good *et al.* 2009; Reade and Potts 1993) and even through changes in the DNA of commensal species adapted to the human use of clothing (Kittler *et al.* 2003). Another important means of understanding textile use in antiquity is through the study of figurines, rock art, sculpture, and other representations of the human form that preserve information about clothing and coverings through painted or incised decorations. These studies, along with the relatively rare recovery of actual textiles in arid or anaerobic environments, suggest that textiles can be substantiated as a component of many ancient trade networks.

### Trade in the Middle Asian Interaction Sphere

Turning our attention to the third-millennium Bronze Age in Asia, the objects and mechanisms of exchange provide support for a model of trade in “perishable” goods that underwrote the long-distance transfer of exotica among elites (Figure 8.1). Gregory L. Possehl (2002) described the Middle Asian Interaction Sphere as comprising Mesopotamia, the Turanian Basin, the Iranian Plateau, the Arabian Gulf, and the Indus region linked in a large-scale economic phenomenon that he characterizes as “a complex mosaic of urban centers and regional polities all seemingly linked by an economic vitality that is both new and impressive” (2002, 217). Trade in the ancient Middle Asian Interaction Sphere took place among distinct cultural and political groups, and scholars initially focused on its elite connotations. Possehl himself has proposed that it was limited to exotic goods destined for elite and cult purposes, what he calls the “classic ‘long-distance trade in luxury products’ that V. G. Childe used as one of his markers of Bronze Age urbanization. It is the trade for aggrandizement of elites and their cult system, not the common peoples of the Middle Asian Interaction Sphere” (Possehl 2002, 218).

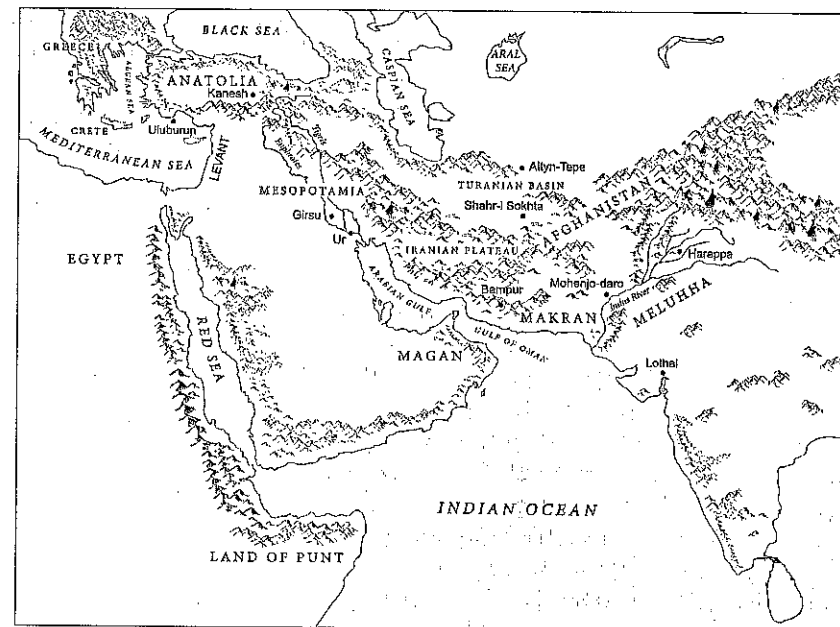


Figure 8.1 Sites and regions discussed in the text (figure by Robert Mion).

The most distinctive finds associated with this trade are testimony to the concept of elite participation, such as the Indus-style stamp seals found at Ur, the Gulf seals found at the Indus site of Lothal, and the long-barrel carnelian beads among the finds at the Royal Cemetery at Ur (for seals, see Parpola 1986; for beads, see Pittman 1998). However, the amount of information that is forthcoming from the region has increased dramatically in the last 30 years (a point made recently by Daniel Potts [2008] and Andrew Lawler [2008] and echoing earlier comments by Possehl [2002]). Ongoing research has revealed a distribution of objects that is more diverse than the few items recovered in special-purpose elite contexts. It therefore seems appropriate to propose that trade networks had more local impact than is suggested by the reliance on Childe's model of elite/cult exchange.

Examination of the archaeological record of the Middle Asian Interaction Sphere reveals a variety of traded goods. The best-known commodity was carved soft-stone bowls, fragments of which are found from Mesopotamia to Mohenjo-daro and constitute the “most widely scattered single artifact type in 3rd millennium Mesopotamia-Iranian Plateau” (Lamberg-Karlovsky 1975, 350; see also Kohl 1978; Potts 2003, 2008). Archaeological evidence demonstrates the trade in marine

shells from the Indian Ocean to sites such as Shahr-i Sokhta, which is over 500 km inland (Durante 1979 reported in Good 2006). There also is evidence for the movement of lapis lazuli throughout the Middle Asian Interaction Sphere (Casanova 2008), as well as trade in ivory that is likely to have come from South Asian sources (e.g. the ivory from Altyn-Tepe in Turkmenistan; Possehl 2002). Pottery, stone weights, and dice of Indus origin all are found in sites along the Arabian Gulf and in the Gulf of Oman (Dales 1968; Possehl 2002; Ratnagar 2001).

Because the Indus script remains undeciphered (and is unlikely to provide us with detailed lists of traded commodities in any case), the written record that is of the greatest assistance comes from Mesopotamia where texts mention the products coming from Meluhha, identified today with the Indus region. These products included stones such as carnelian and lapis, wood and plants, metals such as copper and gold, and animals that appear to have included both live specimens and figurines (Possehl 2002). The sources indicate that Mesopotamian leaders of the Bronze Age were particularly interested in acquiring metals, such as copper and tin (Meyer 2006), although these would not have been available in the alluvial Indus Valley. Tin from Afghanistan may have reached Mesopotamia either overland or down the Indus River (Meyer 2006); if tin came east from Afghanistan to the Indus and then downstream, those traders would have been available for moving other goods as well. Similarly, gold and silver are associated with boats from Meluhha, although it is not clear whether it is simply the boats, or also the precious metals, that came from the Indus area (see Meyer 2006).

The infrastructure of trade known through Near Eastern texts suggests that it was much more robust than would have been required for the small amount of elite goods found outside of Mesopotamia. Merchant communities were active, and the “investments based on accumulations in the private sector came to play a more and more important role” (Larsen 1987, 49; see also Crawford 1973). Merchants had an interest in exchanging goods across cultural zones, especially given that the political climate in Mesopotamia certainly fluctuated (Larsen 1987) so that the entire impetus to trade could not have been sustained through elite demands alone. Textual references to stockpiled commodities show that there was a massive scale of transport and accumulation, as seen for example in the store account of the Mesopotamian governor of Girsu which listed 951,000 liters of purified bitumen (Meyer 2006). Nor was the distance value achieved by comestibles reserved to items of limited supply; Christopher Edens (1992) has calculated that barley was exported from Mesopotamia to the Gulf region in the late 3rd millennium BC in quantities sufficient to feed thousands of people at a time.

The written record of textile production in Mesopotamia similarly indicates a significant scale of production and distribution. Mogens Larsen has discussed the potential for cloth production to transform local economies into regional ones, making a historical analogy that “the Italian and the Flemish cities built their wealth on trade in cloth” and proposing that there was similar potential for cloth as an important component of trade in the Mesopotamian Bronze Age (1987, 55). He cites the archives of ancient Kanesh to show that in the Old Assyrian period (around 1900 BC)<sup>1</sup> there was a significant overland trade in textiles even though the inhabitants could well have produced the same textiles themselves. He asks himself, with some degree of astonishment, “how was it possible to send woolen cloth all the way from southern Mesopotamia to central Anatolia, in fact to the Black Sea coast, when such textiles could in principle be produced anywhere in the region?” (Larsen 1987, 55).

Complementing Larsen’s focus on the trade between Mesopotamia and its western neighbors, Irene Good (2006) has discussed textile production on the eastern side of the Middle Asian Interaction Sphere. She reports on archaeologically recovered cloth remains from the site of Shahr-i Sokhta, where specimens of linen, woolen, and sunn hemp thread and/or cloth were recovered (Good 2006). Good suggests that the trade would have involved either raw fibers or finished products and that the source areas could have been quite distant: the southern Indus or coastal Makran areas for the sunn hemp and Mesopotamia for the linen (for linen appearing in the Arabian peninsula, see Reade and Potts 1993). Recent research on fiber availability in the Indus region illustrates that silk was known and used there (Good *et al.* 2009) in addition to other fibers, such as cotton preserved by contact with metal vessels at Harappa and Mohenjo-daro (Kenoyer 1998, 159) and jute preserved on a ceramic sherd (Wright *et al.* 2012).

Archaeological evidence suggests that the Indus had a high level of sophistication in textile manufacture and use. Fabric impressions in faience vessels indicate the use of spinning wheels which produce a much finer thread than hand spinning. Other indirect evidence for textile production consists of knives similar to the ones used today for cutting carpet fibers (Kenoyer 1998). From observations of pictorial and physical remains, we can propose that Indus peoples discerned differences in styles, weights, durability, and appearance of different textiles. Iconographic representations show a diversity of textile consumption. Mark Kenoyer notes that “the wide variety of dress depicted on terracotta figurines and carved onto seals indicates that clothing was an important part of Harappan cultural identity” (2004, 3 citing C. Jarrige 1997). Moreover, he suggests that the production of textiles in the Indus region “may have contributed to the exports traded to Mesopotamia and neighboring

regions" (Kenoyer 1998, 159). If so, trade in textiles was going in both directions, indicating that exchange involved more than just the provisioning of needed items and included the movement of different styles of goods.

In addition to textiles, the Near Eastern written record includes other "invisible exports" from Mesopotamia (Crawford 1973; see also Dales 1968 and Ratnagar 2001 on the subject of Mesopotamian perishables as the commodity of export). Crawford (1973) notes that in addition to wool, exports would have likely included leather, grain, and dried and salted fish. We know that fish was widely exchanged within the Indus sphere, and that trade networks may have sent fish to the Arabian Gulf and to Mesopotamia (Belcher 2000). Just like textiles which could be duplicated locally but which were enhanced by distance value, specialty fish products may have been highly desired across the Middle Asian Interaction Sphere (much as today wines are traded among California, Australia, France, and Italy even though each of these areas could be self-sustaining by means of their own produce). Foods also were introduced from west to east, with East African millets cultivated in the Indus indicative of either direct or down-the-line transfer of this staple grain (Weber 1990). Gregory Possehl mentions an item called "Magan onion" (2002, 220), suggesting that food was a perishable good that received a regional reputation and was sought after. In any case, we know that there was the cachet of distance, as exhibited by the placename "Magan" (identified today with southeastern Arabia), which is attached to "a large number of expressions, which have not necessarily anything to do with the region, like Magan goat and Magan chair" (Meyer 2006, 94).

Some years ago, C. C. Lamberg-Karlovsky (1975, 361) suggested that "it is possible that the Mesopotamian capacity to produce *surplus* grain, textiles, and perishables (such as fish)—the commodities which, the texts inform us, were traded for the mineral wealth of the Iranian Plateau (Crawford 1973)—assisted the Mesopotamians in their exploitation of the Iranian Plateau." Similarly, James Shaffer (1992) has proposed that trade networks were principally created to move ordinary goods such as food, textiles, and wood. Even Possehl's own earlier work on the trade of the region that he would eventually call the Middle Asian Interaction Sphere supports this view of local and regional trade in archaeologically invisible items. In his book on the Kulli culture, Possehl (1986, 73) proposed that sites such as Bampur (now in southern Iran) "may have concentrated on the exploitation of some organic product, wood or cloth for example, which has since largely vanished. It should not be forgotten that trade in the ancient world was founded on the movement of such commodities." Insights from the limited quantity of archaeological data from Mesopotamia, the Iranian Plateau, and the Indus suggest that

textiles might well have been produced and consumed at a high enough rate to support dense networks of down-the-line exchange throughout the region.

If we combine Cline's assignment of "distance value" to ordinary, locally replicable goods with Larsen's observation of the high volume of overland trade in textiles in Mesopotamia, we can model Bronze Age trade in the area between Mesopotamia and the Indus as one in which bulk goods for regional consumption were the driving force of trade networks on which elite-destined special goods served as a grace note of consumption. Such trade networks would have included both maritime and overland routes. The maritime routes included shorelines and islands throughout the Gulf region and the Indian Ocean and have been the subject of extensive scholarly treatments (e.g. Boivin and Fuller 2009; Potts 1990, 2009). Overland trade through the rugged terrain of the Iranian Plateau may have been more daunting than sea travel, but there would have been at least two transport mechanisms: donkeys (Algaze 2008; Potts 2011) and human portage. The subject of camels as a potential source of transport is contested (Crawford 1973). Shaffer (1988) suggests the possibility of camel transport by the middle of the 3rd millennium BC. Meadow (1996) sees the camel emerging in the mid 2nd millennium BC at the earliest. In the Gulf, the earliest domesticated camels appear in the 1st millennium BC (Uerpmann and Uerpmann 2002).

### The Comparison of Mesopotamia-Indus Trade with Mesopotamia-Egypt Trade

During the Middle Bronze Age, which dates from about 2100 to 1700 BC and encompasses the Third Dynasty of Ur and the Old Babylonian period, there was a large amount of trade between Mesopotamia and Anatolia, a large amount of trade between Mesopotamia and the Gulf, and a reasonable amount of trade between Mesopotamia and the Iranian Plateau stretching to the Indus. One place in which there was *not* significant evidence of trade in the Middle Bronze Age period, however, was between Mesopotamia and Egypt. Why did Egypt—which was certainly in the same range of political complexity as any of those areas—not become part of that trading sphere?

The lack of trade between Mesopotamia and Egypt in the Middle Bronze Age is made more curious by the archaeological evidence of contacts both before and after this era. A very limited amount of trade is seen via the Levantine Coast in the late Prehistoric period (Naqada I and Naqada II, 4000–3200 BC; Hendrickx and Laurent 2002; Ward 1964)<sup>2</sup>. Trade in the subsequent period appears to be virtually nonexistent, with

exchange only evident again after the middle of the 2nd millennium BC when it emerged with a strong political component. By this era, also known as the Late Bronze Age, there was a substantial trade between Egypt and Mesopotamia that occurred in the context of “elite groups who chose to express allegiances through competitive gift exchange of prestigious artifacts” (Jackson 2005, 1750). Here we can immediately think of famous examples such as the mask of Tutankhamen (1323 BC) with its lapis lazuli bands inlaid into the gold of the headdress, and the Uluburun shipwreck with its tons of diverse cargo. Other spectacular Egyptian royal investments in trade include the famous expedition(s) to the land of Punt sponsored by Hatshepsut in the 15th century BC and the political investment in trade between the Egyptian pharaohs and Sumerian leaders as documented in the Amarna letters of the 14th century BC. Egyptian external trade continued strongly afterwards as well, and by the Ptolemaic and Roman periods of the late centuries BC and early centuries AD, there is striking evidence of exchange not only via the Mediterranean but along the Red Sea (e.g. Sidebotham 1989).

The technological conditions of trade known for the predynastic era and the Late Bronze Age were present in the intervening period as well. Moreover, in the Middle Bronze Age and particularly at the end of the 3rd millennium BC, states developed in Egypt and Mesopotamia that should have been, in the Childean model of early long-distance trade, a sufficient stimulus for the exchange of objects by elites. Instead, “direct Egyptian relations with Asia never extended beyond Palestine and western Syria from prehistoric times to the end of the Middle Kingdom” (c. 1700 BC; Ward 1964, 2). Richard N. Frye (2009, 21) states the contrast even more starkly. “There is no evidence of any relations with Egypt, either in Ur III or in the Old Babylonian period [2100–1600 BC]. It is odd if no contacts existed at the end of the 3rd millennium between the two great civilizations of the ancient Middle East.”

The curious lack of trade with Egypt at the time of the Middle Bronze Age when Mesopotamian groups were trading with every other complex society in the same distance radius merits careful consideration. The case of Mesopotamia and Egypt shows that the presence of states is not enough to ensure the development or maintenance of long-distance exchange networks. Leaving aside the untestable proposition that the Egyptians elected to be isolationist, what appears to have been missing in the Egyptian case was the presence of a series of overlapping down-the-line trade networks that would have supported the transfer of many types of ordinary goods from place to place within regions and that would have incidentally supported the transfer of elite-destined goods. By the Late Bronze Age (mid 2nd millennium BC), coincident with the development of complex polities in Greece, Crete and Anatolia, new trade networks

developed in the eastern Mediterranean. These robust networks, which moved consumer durables in large quantity, subsequently became the backbone of elite trade systems and provided the mechanisms for linking the political elites of Egypt and Mesopotamia through the exchange of valuables.

## Discussion and Conclusion

The demonstrated connections between the Indus region, Central Asia, Mesopotamia, and the Arabian Gulf in the Middle Bronze Age show that there was the potential for a great deal more exchange than what is evident in the archaeological record. From the perspective of the ordinary person, trade was likely to have been an opportunity not only to pass along precious goods to elite members of society, but also items that acquired distance value through transportation. Objects that are traditionally viewed as “perishable” by archaeologists would have included items of varying but perceptible durability ranging from food to medicines, leather, and textiles. Of these, textiles were perhaps the most versatile and durable commodity. Whether worn on the body or used for household furnishings, textiles are highly useful in temperate climates and serve as long-lasting symbols of exchange and identity.

For Mesopotamia, trade in any direction was likely to have been characterized by a “fluctuating relationship between a central authority and a private sector” (Larsen 1987, 49). The Indus culture, however it may be described politically, was one in which merchant groups appear to have played a strong role in civic organization (Kenoyer 1998). Throughout other parts of the Middle Asian Interaction Sphere as well, merchants with their connections across the landscape would have provided the links from the boundaries of one cultural group to the next. One good example of a connective site is Qala’at al-Bahrain in the Gulf, which used its maritime location to serve as a transfer point between copper from the Arabian Peninsula with grain coming from Mesopotamia (Edens 1992; Potts 2009). Another good example is Kulli in modern-day western Pakistan, seat of a distinct culture that may have served as a merchant interface between the Indus, the Iranian Plateau, and the Persian Gulf (Dales 1968; Possehl 1986; Ratnagar 2001). What sustained these merchant groups probably was not the occasional export of long-barrel carnelian beads or transshipment of tin from the nearby mountains, but the regular regional exchange of massive quantities of locally produced perishable goods such as grain, fish, and textiles. Within a social milieu dominated by the consumption of these local items, and given the human propensity to favor the unusual, the movement of long-distance goods sustained the local demand for items that acquired cachet simply through



the added labor of transport, the “distance value” cited by Cline (1999). The robusticity of trade between Mesopotamia, the Iranian Plateau, and the Indus region compared to the paucity of trade between Mesopotamia and Egypt indicates that rather than focusing on elite contact, we can and should build models of long-distance trade that involve a large number of goods of widespread use. In addition to providing a general rubric for the development of exchange networks, the long-distance perishable goods model provides answers to two important issues of chronology and the development of trade networks in the Middle Asian Interaction Sphere. First, it explains why there was no apparent trade between Egypt and Mesopotamia in the Middle Bronze Age, although there were state-level political entities in both places and although such trade occurred under the same conditions of technology in the Late Bronze Age. Leaders were certainly present who would have wanted the elite trappings of authority in the form of scarce, nonlocal materials, but there was no extant series of down-the-line exchange networks that could incidentally support the transfer of small quantities of elite goods.

The second issue addressed by the long-distance perishable goods model concerns the manner in which new exchange systems come into existence. Trade between Mesopotamia and Egypt may have developed precisely because of the rapid demise of the Indus culture, which broke the chain of trade eastwards from Mesopotamia after about 1800 BC. The emergence of new trade routes and new markets for Mesopotamian textiles would have been aided and abetted by the nascent polities of the Mediterranean seaboard, which would have drawn Mesopotamian goods toward a western venue where they would have been encountered by traders who plied the seas back and forth to Egypt. The market for Mesopotamian goods would have comprised part of a newly developed eastern Mediterranean economic sphere culminating in the lively, politically-charged exchanges documented in the Amarna Letters and substantiated by the finds of the Uluburun shipwreck.

Perishables often are invisible in the archaeological record, but they are not invisible to archaeological theory. The record of durable goods is evidence for the exchange of materials across and around the Iranian Plateau from Mesopotamia to the Indus. The textual record of Mesopotamia further suggests that trade infrastructure included boats with considerable tonnage and that trade in textiles was a voluminous one. An understanding of the role of material culture in human-identity formation provides the explanation for large-scale trade in what would seem to be the illogic of perishable duplicative goods, in which distance value was the motivating factor for both overland and maritime trade. Wool textiles moving out of Mesopotamia and cotton and/or silk textiles moving out of the Indus region would have crossed in trade across the

Iranian Plateau, leaving many opportunities for down-the-line consumers to also partake of the goods passing through.

## Acknowledgments

This paper is offered in appreciative tribute to Gregory L. Possehl. I would like to thank the organizers of the volume—Shinu Abraham, Praveena Gullapalli, Uzma Rizvi, and Teresa Raczek—for the opportunity to honor his memory and his many contributions to South Asian archaeology. Thanks are also due to Mark Kenoyer for providing me with a typescript of the hard-to-find, 2004, article from the *Tana Bana* volume, and to Giorgio Buccellati, Marilyn Kelly-Buccellati, Elizabeth Carter and Abigail Levine for discussions and references. I also greatly appreciate the insightful written comments on an earlier draft by Dan Potts. All remaining errors and omissions remain my responsibility.

## Notes

1. [http://www.sron.nl/~jheise/akkadian/bronze\\_age.html](http://www.sron.nl/~jheise/akkadian/bronze_age.html)
2. <http://www.digitalegypt.ucl.ac.uk/chronology/index.html>

## References

- Algaze, G. 2008. *Ancient Mesopotamia at the Dawn of Civilization: The Evolution of an Urban Landscape*. Chicago, University of Chicago Press.
- Belcher, W. R. 2000. Marine subsistence of the Indus Valley Tradition: Fish remains from Balakot. In M. Taddei and G. de Marco (eds.), *South Asian Archaeology 1997*, 3–16. Rome, Istituto Italiano per l’Africa e l’Oriente.
- Bianchi, M. 1997. Collecting as a paradigm of consumption. *Journal of Cultural Economics* 21: 275–89.
- Boivin, N. and Fuller, D. Q. 2009. Shell middens, ships and seeds: Exploring coastal subsistence, maritime trade and the dispersal of domesticates in and around the ancient Arabian peninsula. *Journal of World Prehistory* 22: 113–80.
- Casanova, M. 2008. Lapis lazuli. In J. Aruz, K. Benzel, and J. M. Evans (eds.), *Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium B.C.*, 68–9. New York, The Metropolitan Museum of Art.
- Clark, J. E. and Blake, M. 1994. The power of prestige: Competitive generosity and the emergence of rank societies in lowland Mesoamerica. In E. M. Brumfiel and J. W. Fox (eds.), *Factional Competition and Political Development in the New World*, 17–30. Cambridge, Cambridge University Press.
- Cline, E. H. 1999. Coals to Newcastle, wallbrackets to Tiryns: Irrationality, gift exchange, and distance value. In P. B. Betancourt, V. Karageorghis, R. Laffineur, and W. -D. Niemeier (eds.), *Meletemata: Studies in Aegean Archaeology Presented to Malcolm H. Wiener*, 119–23. Belgium, Université de Liège.
- Compagnoni, B. and Tosi, M. 1978. The camel: Its distribution and state of domestication in the Middle East during the third millennium B.C. in light of finds from Shahr-i Sokhta. In R. H. Meadow and M. A. Zeder (eds.), *Approaches to Faunal Analysis in the Middle East*, 91–103. Cambridge MA, Peabody Museum of Archaeology and Ethnology, Harvard University.



- Crawford, H. E. W. 1973. Mesopotamia's invisible exports in the third millennium B.C. *World Archaeology* 5(2): 232–41.
- Curtin, P. D. 1984. *Cross-Cultural Trade in World History*. Cambridge, Cambridge University Press.
- Dales, G. 1968. Of dice and men. *Journal of the American Oriental Society* 88(1): 14–23.
- Edens, C. 1992. Dynamics of trade in the ancient Mesopotamian "world system." *American Anthropologist* 94(1): 118–39.
- Frye, R. N. 2009. History of Mesopotamia, *Encyclopædia Britannica Online*. Accessed 24 Mar. 2009 <<http://www.search.eb.com/eb/article-55479>>
- Geary, P. 1986. Sacred commodities: The circulation of medieval relics. In A. Appadurai (ed.), *The Social Life of Things*, 169–91. Cambridge, Cambridge University Press.
- Goldstein, P. S. 2000. Exotic goods and everyday chiefs: Long-distance exchange and indigenous sociopolitical development. *Latin American Antiquity* 11(4): 335–61.
- Good, I. 2006. Textiles as a medium of exchange in third millennium BCE Western Asia. In V. H. Mair (ed.), *Contact and Exchange in the Ancient World*, 191–214. Honolulu, University of Hawai'i Press.
- Good, I. L., Kenoyer, J. M., and Meadow, R. H. 2009. New evidence for early silk in the Indus Civilization. *Archaeometry* 51(3): 457–66.
- Hayden, B. 1998. Practical and prestige technologies: The evolution of material systems. *Journal of Archaeological Method and Theory* 5(1): 1–55.
- Helms, M. W. 1993. *Craft and the Kingly Ideal: Art, Trade and Power*. Austin, University of Texas.
- Hendrickx, S. and Laurent, B. 2002. The relative chronological position of Egyptian Predynastic and Early Dynastic tombs with objects imported from the Near East and the nature of interregional contacts. In E. C. M. van den Brink and T. E. Levy (eds.), *Egypt and the Levant: Interrelations from the 4th through the Early 3rd Millennium BCE*, 58–80. Leicester, Leicester University Press.
- Jackson, C. M. 2005. Glassmaking in Bronze-Age Egypt. *Science* 301: 1750–2.
- Kenoyer, J. M. 1998. *Ancient Cities of the Indus Valley Civilization*. Karachi, Oxford University Press.
- . 2004. Ancient textiles of the Indus Valley region. In N. Bilgrami (ed.), *Tana Bana: The Woven Soul of Pakistan*, 18–31. Karachi, Koel Publications.
- Kittler, R., Kayser, M., and Stoneking, M. 2003. Molecular evolution of *Pediculus humanus* and the origin of clothing. *Current Biology* 13(16): 1414–17.
- Kohl, P. L. 1978. The balance of trade in southwestern Asia in the mid-third millennium BC. *Current Anthropology* 19(3): 463–92.
- Lamberg-Karlovsky, C. C. 1975. Third millennium modes of exchange and modes of production. In J. Sabloff and C. C. Lamberg-Karlovsky (eds.), *Ancient Civilization and Trade*, 341–68. Santa Fe, School of American Research.
- Larsen, M. T. 1987. Commercial networks in the ancient Near East. In M. Rowlands, M. Larsen, and K. Kristiansen (eds.), *Centre and Periphery in the Ancient World*, 47–56. Cambridge, Cambridge University Press.
- Lawler, A. 2008. Boring no more, a trade-savvy Indus emerges. *Science* 320: 1276–81.
- Malinowski, B. 1950. *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. New York, E. P. Dutton.
- Malville, N. J. 2001. Long-distance transport of bulk goods in the pre-Hispanic American Southwest. *Journal of Anthropological Archaeology* 20: 230–43.
- Marcus, J. 2004. Maya commoners: The stereotype and the reality. In J. C. Lohse and F. Valdez, Jr. (eds.), *Ancient Maya Commoners*, 255–83. Austin, University of Texas.
- Meadow, R. 1996. The origins and spread of agriculture and pastoralism in northwestern South Asia. In D. R. Harris (ed.), *The Origins and Spread of Agriculture and Pastoralism in Eurasia*, 390–412. Washington DC, Smithsonian Institution Press.
- Meyer, J. C. 2006. Trade in Bronze Age and Iron Age empires, a comparison. In P. F. Bang, M. Ikeguchi, and M. G. Ziche (eds.), *Ancient Economies, Modern Methodologies: Archaeology, Comparative History, Models and Institutions*, 89–106. Bari (Italy), Edipuglia.
- Parpola, A. 1986. The Indus script: A challenging puzzle. *World Archaeology* 17(3): 399–419.
- Pittman, H. 1998. Jewelry. In R. L. Zettler, L. Horne, D. P. Hansen, and H. Pittman (eds.), *Treasures from the Royal Tombs of Ur*, 87–123. Philadelphia, University of Pennsylvania Museum of Archaeology and Anthropology.
- Possehl, G. L. 1986. *Kulli: An Exploration of Ancient Civilization in Asia*. Durham, NC, Carolina Academic Press.
- . 2002. *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA, Altamira.
- Potts, D. T. 1990. *The Arabian Gulf in Antiquity*. Oxford, Clarendon.
- . 2003. A soft-stone genre' from southeastern Iran: 'Zig-zag' bowls from Magan to Margiana. In T. Potts, M. Roaf and D. Stein (eds.), *Ancient Near Eastern Culture through Objects: Festschrift for P. R. S. Moorey*, 77–91. Oxford, Griffith Institute.
- . 2008. An Umm an-Nar-type compartmented soft-stone vessel from Gonur Depe, Turkmenistan. *Arabian Archaeology and Epigraphy* 19: 168–81.
- . 2009. The archaeology and early history of the Persian Gulf. In L. G. Potter (ed.), *The Persian Gulf in History*, 27–56. New York, Palgrave Macmillan.
- . 2011. *Equus asinus* in highland Iran: Evidence old and new. In N. J. Conard, P. Drechsler, and A. Morales (eds.), *Between Sand and Sea: The Archaeology and Human Ecology of Southwestern Asia, Festschrift in honor of Hans-Peter Uerpmann*, 167–76. Tübingen, Kerns Verlag.
- Pulak, C. 1998. The Uluburun shipwreck: An overview. *International Journal of Nautical Archaeology* 27(3): 188–224.
- Ratnagar, S. 2001. The Bronze Age: Unique instance of a pre-industrial world system? *Current Anthropology* 42(3): 351–79.
- Reade, W. J. and Potts, D. T. 1993. New evidence for late third millennium linen from Tell Abraq, Umm al-Qaiwain, UAE. *Paléorient* 19(2): 99–106.
- Renfrew, C. 1975. Trade as action at a distance: Questions of integration and communication. In J. Sabloff and C. C. Lamberg-Karlovsky (eds.), *Ancient Civilization and Trade*, 3–59. Santa Fe, School of American Research.
- Shaffer, J. G. 1988. One hump or two: The impact of the camel on Harappan society. In G. Gnoli and L. Lanciotti (eds.), *Orientalia Iosephi Tucci Memoriae Dicata*, 1315–28. Rome, Istituto Italiano per il Medio ed Estremo Oriente.
- . 1992. The Indus Valley, Baluchistan, and Helmand traditions: Neolithic through Bronze Age. In R. W. Ehrich (ed.), *Chronologies in Old World Archaeology*, third edition, 441–64. Chicago, University of Chicago.
- Sheets, P. 2000. Provisioning the Ceren household: The vertical economy, village economy, and household economy in the Southeastern Maya periphery. *Ancient Mesoamerica* 11: 217–30.
- Sidebotham, S. E. 1989. Ports of the Red Sea and the Arabia-India trade. In T. Fahd (ed.), *L'Arabie Préislamique et son Environnement Historique et Culturel*, 195–223. Leiden, E.J. Brill.
- Smith, M. L. 2001. *The Archaeology of an Early Historic Town in Central India*. British Archaeological Report International Series 1002. Oxford, Archaeopress.
- . 2007. Inconspicuous consumption: Non-display goods and identity formation. *Journal of Archaeological Method and Theory* 14: 412–38.
- Soffer, O., Adovasio, J. M., Illingworth, J. S., Amirkhanov, H. A., Praslov, N. D., and Street, M. 2000. Palaeolithic perishables made permanent. *Antiquity* 74: 812–21.

- Uerpmann, H. -P. and Uerpmann, M. 2002. The appearance of the domestic camel in south-east Arabia. *The Journal of Oman Studies* 12: 235–60.
- Ward, W. A. 1964. Relations between Egypt and Mesopotamia from prehistoric times to the end of the Middle Kingdom. *Journal of the Economic and Social History of the Orient* 7(1): 1–45.
- Weber, S. A. 1990. Millets in South Asia: Rojdi as a case study. In M. Taddei and P. Callieri (eds.), *South Asian Archaeology 1987*, 333–48. Rome, Istituto per il Medio ed Estremo Oriente.
- Weiss, B. 1997. Forgetting your dead: Alienable and inalienable objects in northwest Tanzania. *Anthropological Quarterly* 70(4): 164–72.
- Wright, R. P., Lentz, D. L., Beaubien, H. F., and Kimbrough, C. K. 2012. New evidence for jute (*Corchorus capsularis* L.) in the Indus civilization. *Archaeological and Anthropological Sciences* 4(2):137–43.