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*Trading in prehistory
and protohistory:
Perspectives from the
eastern Aegean and beyond*

*Dedicated to the memory of Alike Michailidou
one of the first women students of her time
in the Aristotle University of Thessaloniki.*

*PART I: TRACING TRADE ACTIVITIES IN THE ARCHAEOLOGICAL
RECORD*

IT IS WELL KNOWN that from the Upper Paleolithic onward, various items moved over long distances. The question arises, however, as to whether these items were "traded" or travelled by some other mechanism. We shall attempt to outline the concept of *trade* and *exchange*, and to discuss various criteria for determining traces of the acquisition or provision of goods (or services) in an archaeological context. We append some examples on the subject.

In all trade and exchange studies, we face a semantic problem. There is no single concept of trade in prehistory that is unanimously accepted. Consequently, any scholar who studies trade and exchange needs to define what he means by the term "trade", something that is too seldom done. Most authors assume that they are dealing with trade when considering the long-distance movement of some object¹. However, "trade" in prehistoric times is not so obvious. Besides archaeological evidence, ethnographic data also offer a rich range of alternative models for trade and exchange, which should be borne in mind when searching for trade in prehistory.

¹ Bloedow 1987, 60.

On the definition of trade

Although there are numerous studies on the subject, few of these are systematic and comprehensive. Opinions are contradictory and therefore confusing. Jahn² has already described the situation:

Diese auffallenden Gegensätze in der Frage eines vorgeschichtlichen Handels sind nur möglich, weil die verschiedenen Forscher den Begriff Handel ganz verschieden auslegen. Es kommt also darauf an, eine Klärung über den Begriff Handel herbeizuführen.

Since the problem has remained for fifty years, it is clearly useful to take a look at the definitions given by the most frequently cited researchers.

One of these, Polanyi³, offers two different definitions of trade. The first is that: "from the institutional point of view, trade is a method of acquiring goods that are not available on the spot". Trade is an activity which is external to the group, like hunting, undertaking an expedition or raiding. Although all these activities are means of procuring and transporting goods from a distance, trade is distinguished by its bilateral and peaceful nature. The second definition relates to the market: "Trade is the movement of goods on their way through the market, that is, an institution embodying a supply-demand-price mechanism"⁴. Polanyi's view is that in primitive conditions, different communities meet to exchange their goods, although these meetings do not produce rates of exchange. Indeed, they presuppose them. No individual motives of gain are involved⁵.

From the anthropological viewpoint, material relations are rarely regarded as "trade". Anthropologists tend to use the term "exchange", which derives from the concept of "gift exchange", developed in Mauss's essay "The Gift"⁶. Mauss observed that in a range of societies, exchanges and contracts take place in the form of gifts. Although these may be seen as voluntary, in reality, they are given and reciprocated as an obligation⁷. This acceptance leads us to the notion of reciprocity, which is fundamental to trade and exchange studies. We should remember that Mauss does not attempt to embrace and analyse all forms of exchange in primitive and archaic societies. Rather, he focuses on one particular form of exchange in all societies, including our

² Jahn 1956, 5.

³ Polanyi was an economist and the founder of substantivism, a cultural approach to economics which emphasizes the fact that economies are embedded in society and culture.

⁴ Polanyi 1975, 133.

⁵ Polanyi 1975, 134; For a recent discussion on Polanyi's contribution to trade studies, cf. Clancier et al. 2005.

⁶ Mauss 2002.

⁷ Mauss 2002, 3.

own⁸. Anthropologists tend to concentrate on "primitive" communities, in most of which face-to-face exchange activities take place. The interesting point is that archaeologists often use the anthropological terms without fully examining them. In pre-monetary communities, the social aspect of exchange is sometimes more important than economic relations as a whole. To quote Sahlins: "A material transaction is usually a momentary episode in a continuous social relation"⁹.

Among archaeologists, Renfrew has stated that professional trade was probably absent from most prehistoric communities. In his view, "trade" is to be understood in its broadest sense, as the reciprocal traffic, exchange, or movement of materials or goods through peaceful human agency¹⁰. Elsewhere, Renfrew has written that trade is the "procurement of materials from a distance, by whatever mechanism"¹¹. The crucial point is that goods change hands. The terms "trade" and "exchange" are employed interchangeably¹². In a later study, the same scholar defines trade and exchange as follows¹³:

... When exchange is referring to material goods, it means much the same as trade. But exchange can have a wider meaning, being used by sociologists to describe all interpersonal contacts, so that all social behaviour can be viewed as an exchange of goods, non-material as well as material. Exchange in this broader sense includes the exchange of information.

In the view of the archaeologists Runnels and Van Andel, the term "trade" has hitherto been applied somewhat loosely and interchangeably with the term "exchange", to describe the general process of transferring commodities from one person or group to another¹⁴. Although some analyses of spatial distribution of commodities present problems of equifinality¹⁵, we should not be too pessimistic about the possibility of tracing the movement of objects, because the problems will remain, even if some other term is adopted, such as

⁸ Panoff 1970, 60.

⁹ Sahlins 1998, 82.

¹⁰ Renfrew 1969, 152.

¹¹ Renfrew 1977, 72.

¹² Knapp 1985, 1.

¹³ Renfrew and Bahn 1991, 307.

¹⁴ Runnels and Van Andel 1988, 92.

¹⁵ When Hodder (e.g. see Hodder 1974) tested various hypotheses about a particular spatial distribution, he sometimes found that more than one hypothesis could lead to exactly the same pattern. This phenomenon is called "equifinality". If even the most objective scientific testing could not always distinguish between two or more possibilities, he asked himself how archaeologists could be certain that their interpretations of the archaeological record were correct (Balter 2005, 68).

"exchange" or "interaction", instead of "trade"¹⁶. In any case, it should be borne in mind that "the artefacts in the archaeological record, when found as part of recognizable patterns of distribution, are the residues of trade, but they are only the material part of larger, rather complex processes involving social transfers"¹⁷.

Trade is often defined briefly as a large-scale, organized activity whose aim is profit or the accumulation of capital. This is undoubtedly true, but we should add to this definition that trade is also an activity which requires at least one middleman, who practises it as a profession, with a view to gaining profit, or at least a living. The accumulation of capital is the subject of another, separate, debate. Here I wish to emphasize the role of reciprocal exchange (e.g. barter) as an instrument of trade, something that is often underestimated. Ethnographic data make it clear that there are profitable transactions that can also be regarded as trade in some cases of reciprocal exchange. Moreover, barter is still engaged in as a type of trade in Anatolia.

When the problem of defining trade starts: identifying archaeological finds of foreign origin

Generally, the first stage in any study of trade and exchange in prehistory is to determine whether objects at a particular site are "foreign" or not¹⁸. Some criteria for identifying objects as "foreign" as opposed to local products in an archaeological context are the following:

1. A limited spatial distribution of the sources of a raw material.
Some raw materials, such as obsidian, amber and bitumen, originate from particular, limited sources and are chemically traceable. So, when they are found in an archaeological context at a distance from their source, they can be identified immediately as "foreign".
2. Stylistic elements or techniques differing from those of other objects of the same class at a site¹⁹.

In the case of pottery or of stone objects, merely examining the material by eye is often the best means of classing it as foreign or local. However, to document this ascertainment objectively, "characterization" studies are required, in order to identify characteristic properties of the material and thus to determine its source²⁰. In cases of objects made of material available

¹⁶ Runnels and Van Andel 1988, 93; Torrence 1986, 10-37.

¹⁷ Runnels and Van Andel 1988, 94.

¹⁸ Olausson 1988, 15.

¹⁹ Olausson 1988, 15.

²⁰ Renfrew and Bahn 1991, 314.

locally, the techniques used in their manufacture may be the imported, foreign element. For example, items of Halaf pottery or, in later periods, of Mycenaean pottery may be local imitations and therefore not in themselves items of trade.

3. The lack of a local precedent for a specific type of object²¹.
For example, the pottery of the earliest Pottery Neolithic (PN) level, phase IIC, from Mezraa-Teleilat, a site in South East Anatolia, on the left bank of the Euphrates, is very simple coarse ware, made of clay with straw temper, and has an unburnished surface, light buff in colour. However, the wares of the previous phase III, that is, of the transitional period from Pre-pottery Neolithic to Pottery Neolithic (PPN to PN) are made of clay with mineral temper, are well-burnished and brown in colour. Because of this striking difference in fabric and technique, it is assumed that the earliest fine pottery was produced elsewhere and imported to Mezraa-Teleilat²².
4. A lack of production steps for a specific type of object.
For example, at the site of Dja'de in North Syria, which is dated to the Pre-pottery Neolithic B (PPNB) period, obsidian is found only in form of bladelets made by the pressure-flaking technique. Both chemical analyses of the raw material and the production technique indicate that these bladelets come from Kömürcü-Kaletepe, a well-known source of obsidian in Central Anatolia. Since there is no evidence of production *in situ*, it is clear that the obsidian at Dja'de was imported into the settlement in the form of ready-made bladelets²³.

The problem of tracing trade in the archaeological record

Economic infrastructure

It is generally assumed that trade and exchange studies deal with mapping the distribution of particular materials or artefacts. However, when attempting to trace trade in the archaeological record, the relationship between this problem and the four steps involved in an economic system, namely raw material procurement, production, distribution and consumption, should be taken into consideration.

In regard to raw material procurement, the processes of acquisition and diffusion of obsidian, for example, are now better understood thanks to the excavations at the site of Kömürcü-Kaletepe. Although no remains of a set-

²¹ Olausson 1988, 15.

²² Karul et al. 2002, 138.

²³ Balkan-Atlı 2003, 12.

tlement have yet come to light, there is evidence of workshops dated within the Early and Middle PPNB period (8600–7500 cal. BC). Research on this raw material resource indicates that the exploitation of obsidian at this site was organized by highly-skilled craftsmen, that the products were rigorously selected in the *chaîne opératoire* and that they were diffused over very long distances, up to 900 km (e.g. at the sites of Beidha or Nahal Lavan in Levant²⁴), whilst even maritime routes were used (e.g. at the site of Shillourokambos in Cyprus²⁵)²⁶.

In regard to production, an example is the shell of the mollusc *Spondylus gaederopus*, a large and durable bivalve of Mediterranean origin²⁷, which Neolithic peoples used to make various objects, especially ornaments. Spondylus shells, either as raw material or as finished products²⁸, were transported far inland and are one of the most spectacular indicators of large-scale trade in Neolithic Europe²⁹. The evidence of the large-scale manufacture of spondylus shell objects at Dimini, a Late Neolithic settlement near Volos in Greece, suggests that there were various trade routes from the Aegean coast into the Balkans. It is presumed that the spondylus shell objects found in the Aegean region during the Neolithic periods, especially in Thessaly and Macedonia, were produced intentionally for trade with more distant regions, rather than as goods for local consumption³⁰.

In regard to distribution, the presence of a raw or manufactured material from a known source constitutes indirect evidence of trade. However, it should be borne in mind that trade is only one of various distribution mechanisms, such as the following³¹:

- a. The movement of objects through the agency of traders, itinerant vendors or craftsmen.
- b. The movement of objects through the agency of individuals or groups (such as gifts, dowries, blood-price) in a more or less momentary context.
- c. The movement of objects through the agency of social groups engaged in specific organized activities, such as colonization, warfare, raiding.
- d. The circulation of technical expertise and ideas in general, since objects can be imitated and ideas adopted.

²⁴ See Cauvin and Chataigner 1998, 334–5.

²⁵ See Briois et al. 1997, 105.

²⁶ Binder 2002, 79–80.

²⁷ Sfériadès 1995, 238.

²⁸ Clark 1966, 241.

²⁹ Tsuneki 1989, 1.

³⁰ Tsuneki 1989, 18.

³¹ Olausson 1988, 18.

Furthermore, a dichotomy may be observed between staples and luxury goods, which are often distributed separately in local and long-distance exchanges respectively, although there are exceptions to this norm. Local exchanges tend to be customary and reliant on established, known conditions, whereas long-distance exchanges require security, accommodation, food and the fulfilment of other needs, and are therefore more collective and organized in character.

The distribution map of a particular material in no way constitutes a *cultural* region. Distribution of a material is independent of cultural borders.

In regard to consumption, this has been traced, particularly of exotic items, even in Upper Paleolithic contexts³², wherever social networks are thought to have provided an effective mechanism for distribution over extensive territories³³. Most exotic materials are used for ornaments. White has studied ornaments, such as pendants and beads, at three important Aurignacian areas (Abri Blanchard, Castanet and La Souquette) in the Vézère valley in southwest France. Although mammoths are very rare in French Aurignacian areas (and at most Upper Paleolithic sites in general), hundreds of sticks of mammoth ivory, the raw material for bead production, have been found in the Vézère valley, where mammoth bones are totally absent. These sticks are thought to have been imported, in exchange for shells, from the region that is now Germany, where this semi-finished form of ivory was very probably produced³⁴.

Parameters influencing interpretation

If we accept that the first law of the exchange is reciprocity, we should remember that technical or medical knowledge and skills or, indeed, any kind of service, could have been given in return for goods. There are other parameters, too, to our discussion of possibilities of trade:

a. The concept of "foreign origin".

When we look for items of foreign origin, small-scale acts of exchange and/or gift-giving are not likely to be archaeologically visible, although they may have been of great importance to the society in question. Large-scale patterns, rather than smaller discrete events, are more visible in any identification of trade³⁵.

³² White 1982, 172.

³³ Mellars 1989, 360.

³⁴ Lewin 1998, 182.

³⁵ Olausson 1988, 22.

- b. The distance between raw material source and the site.
Any consideration of the distance between raw material source and the site, with regard to trade, should discount the probability of "direct access". A good example is the case of obsidian and flint found at Aşıklı, a settlement in Central Anatolia, a region rich in obsidian sources. Whereas obsidian was an exotic material for most settlements in the Near East, it was a common material at Aşıklı, dominating the tool/weapon industries at the site³⁶. Since only five tools of flint have been recovered from the settlement, it is deduced that flint counted as an import from other regions³⁷. Obsidian was brought to Aşıklı in the form of nodules and flaking and shaping took place within the settlement. Examination of the obsidian products shows that they were all consumed within the settlement. These findings present a very simple model, whereby the inhabitants of Aşıklı exploited and consumed the material they needed themselves³⁸.
- c. Unavailability of various objects in the local environment.
- d. Continuity of an object of foreign type in the stratigraphical sequence.
The presence of one "foreign" object in one stratigraphical level probably reflects some mechanism other than trade. Trade is to be regarded as a large-scale, continuous operation, as is the case with the large quantities of obsidian found in successive levels at Akarçay Tepe in South East Anatolia. Considering the distance of the site from the nearest source, which is 300 km away, the quantity of material found is considerable. More important is the fact that obsidian exists in all phases of the settlement. However, while the percentage in phases VI and V is around 76%, a progressive decrease is observed from phase IV onward. In the opinion of the excavators of the site, this most probably reflects a change in the status of obsidian as an exchange commodity throughout the life of the settlement³⁹.
- e. The existence of workshops producing more artefacts than are consumed at the site.
For example, in the fourth level of the site at Aşağı Pınar, in the province of Kırklareli in Eastern Thrace, a workshop has been uncovered, in which pendants were made from materials such as spondylus shell, malachite and rock crystal, whose products reached as far as Romania⁴⁰.

³⁶ Geochemical analysis indicates that much of the obsidian came from the sources at Kayırlı and Nenezi near Göllüdağ (Esin and Harmankaya 1999, 130).

³⁷ Esin and Harmankaya 1999, 130.

³⁸ Balkan-Atlı 2003, 10-1.

³⁹ Arimura et al. 2001, 352.

⁴⁰ Özdoğan 2007, 486.

- f. Centres for rituals or other gatherings as places of exchange.
Göbekli Tepe is a monumental and enigmatic PPN site located on top of a high limestone ridge, northeast of the town of Şanlıurfa (Urfa) in Upper Mesopotamia. No comparable sites from the Neolithic period are known so far. It consists of circular enclosures, in which stand monumental T-shaped pillars adorned with reliefs of animals and signs⁴¹. To date, no traces of daily life have been found⁴² and the site is thought to have been a place where the inhabitants of villages in vicinity gathered on special occasions. Such gatherings were an excellent occasion for exchange of goods and ideas⁴³.
- g. Special geographical locations facilitating trade.
A geographical location on, for example, a water transportation system, such as the banks of the Euphrates, or at a pass, such as the "Cilician Gates" in the Taurus Mountains, is an important parameter that should obviously be considered, when studying trade.
- h. Proximity of the site to an important resource.
The proximity of a site to some important resource does not necessarily preclude trade. In addition to what has been said above under b, "direct access" may occasionally indicate the involvement of nearby settlements in export-oriented trade. A revealing example comes from Neolithic Poland. Two important sources of flint in Poland are at Świeciechów and Krzemionki. Flint from Świeciechów, white on a grey ground, is high quality and suitable for knapping flakes. Flint from Krzemionki is striped and of poor quality, but when polished is most attractive and so suitable for celts⁴⁴. Balcer showed that at the site of Cmielów, only 22 km from Świeciechów and 8 km from Krzemionki, where over 40,000 flint artefacts have been unearthed, 62% of flints are from Krzemionki and 38% from Świeciechów. At this and other sites near flint resources, flints were prepared for hafting, polishing and reshaping with the intention of putting the implements into circulation once more⁴⁵.
- i. The level of developed skills in art and handicraft.
An ethnographic study of the Anuak people in Ethiopia has shown that in order to obtain salt, rifles, iron tools, utensils and even modern clothes, they traded fish, firewood, honey, basketwork and adornments made of materials such as pearls, shells, ivory and giraffe tails. Their highly devel-

⁴¹ Schmidt 2002, 8.

⁴² Schmidt 2007

⁴³ Schmidt 2002, 12.

⁴⁴ Balcer 1999, 310.

⁴⁵ Balcer 1999, 314.

oped techniques were much appreciated in the area⁴⁶, but most of these traded materials, especially the handicrafts, would leave little or no trace in the archaeological record.

The importance of ethnographic data in trade studies: inland Anatolia

Archaeologists often employ Malinowski's, Mauss's or Sahlins's exchange models of "contemporary" pre-industrial societies in their studies of trade in antiquity. Ethnographic data on trade and exchange activities are significant because they reveal how rich an array of alternatives we may have in our interpretation. However, they also show that it is not possible to draw any direct analogies, even in cases of similar ecological conditions and/or production structures. Trade and exchange activities depend mostly on cultural practices and social organization. Although every region should rely on its own ethnographic data, there is so far little ethnographic data for economic practices in Anatolia. Evedik⁴⁷, a village near Ankara, is a rare example, which illustrates the conservatism of the rural economy and how heavily it is based on local exchanges, rather than on market transactions. Like many other places in Anatolia, although Evedik is set in a monetary economy, the villagers find barter more profitable than buying and selling, and it is widely used because it does not involve commission for middlemen or any transport costs⁴⁸. Barter also enhances the cohesiveness of social relations, in cases where people are deeply in need of such relations. The inhabitants of rural areas depend on each other⁴⁹. So, villagers who cultivate potatoes and onions, for instance, are aware of those who can offer wild plants, should they be needed, but who do not possess money to purchase their necessities. There is a strong belief that one should not deny those in need, if one possesses what is required. Thus, the people of the plains accept the wild plants brought by mountain villagers and offer as much as they can in return⁵⁰. In times of scarcity, especially during winter, dried foods or fuels may be traded with the inhabitants of areas where these commodities are in short supply, while professionals, such as potters, prefer to trade their products during late autumn, when every household has a quantity of grain to exchange for the pots⁵¹.

⁴⁶ Akalu and Stjernquist 1988, 9.

⁴⁷ Aran 1938.

⁴⁸ Aran 1938, 129.

⁴⁹ Ertuğ-Yaraş 1997, 95.

⁵⁰ Ertuğ-Yaraş 1997, 96.

⁵¹ Ertuğ-Yaraş 1997, 95.

Some unit of measure is also used for bartering in villages. In the case of wild plants traded for marketable goods, such as onions and potatoes, the sieve was used as a unit of measure. One sieveful of onions or potatoes was exchanged for 12 broom plants, and two sievefuls were given in exchange for one animal load of fuel plants⁵². In the case of marketable goods such as pottery, the volume of grain that filled the pot was given in exchange for it. It was also said that if a pedlar brought oranges, the villagers paid, volume for volume, with some other foodstuff, such as potatoes or onions; one bucket of apples was exchanged for one bucket of potatoes⁵³.

Until the 1970s, long-distance trade was carried out by camel caravans, which followed old routes, such as part of the Silk Route, from south to West Anatolia. They brought salt, roughly-shaped wood for threshing sledges, and metal tools, which were exchanged for cereals. Nowadays, only salt and some fruits are sometimes exchanged for certain cereals⁵⁴.

We may conclude that in harsh topographical conditions, such as in Anatolia, two trade models can be distinguished as probable in prehistory⁵⁵.

1. Exchange in gathering places.

In view of what has been said about Göbekli Tepe, it should be noted that some gathering places in Anatolia were used by the nomads until the late 1960s⁵⁶.

2. Exchanges made by itinerant vendors and craftsmen (whether repairmen or specialists).

In addition to individuals who exchanged their products within their own village or in nearby villages, until the recent past there were also pedlars who bartered professionally. The pedlar usually used donkeys or mules, even carts when possible. Other itinerant craftsmen, such as horseshoemakers, often accepted goods rather than money⁵⁷.

For thousands of years, distance was no barrier to the procurement of necessities. Language, ethnic origin, units of measurement, technical differences and lack of pack animals were no obstacle either. These differences and constraints made things difficult, but did not impede them completely.

⁵² Ertuğ-Yaraş 1997, 95.

⁵³ Ertuğ-Yaraş 1997, 95.

⁵⁴ Ertuğ-Yaraş 1997, 96.

⁵⁵ Doğan 2006, 212-213.

⁵⁶ Personal communication with Mehmet Özdoğan in 2005.

⁵⁷ Ertuğ-Yaraş 1997, 95.

Sea trade in the Aegean from both sides: the case of obsidian

Obsidian is a volcanic glass, which was one of the most appreciated raw materials in prehistory⁵⁸. Among the most easily detectable raw materials that are evidence of long-distance trade, or at least of contact, such as lapis lazuli, amber and shells, obsidian⁵⁹ is of a particular interest because of the following:

- a. It has a limited occurrence throughout the world. Apart from the Americas, Africa and a few other places, obsidian exists in Armenia, various western and central Mediterranean islands (Lipari, Pantellaria, Pontine islands, Sardinia), in islands in the Cyclades and the Dodecanese in the Aegean (Melos, Giali), and in Anatolia (Cappadocia: Acıgöl, Göllü Dağ, Nenezi Dağ, etc., Eastern Anatolia: Lake Van, Nemrut Dağ, etc.)⁶⁰.
- b. Due to its volcanic origin, its physical properties and chemical composition are determined by the magma formation at its source⁶¹. That is, each volcano and, in some cases, each volcanic eruption produces a distinguishable type of obsidian, making it possible to trace the provenance of the obsidian used for a particular artefact.
- c. It was clearly not a luxury commodity, for it was consumed in large quantities, even in places far distant from the particular source. Moreover, it was not indispensable, for other alternative materials (flint or chert) were available for use⁶².
- d. Its physical and chemical properties are not altered during the production and use of artefacts made from it⁶³.

In the Aegean, the earliest evidence of Melian obsidian found at distance from the source comes from Franchthi Cave, in late Upper Paleolithic levels (c. 11th millennium BC.)⁶⁴ In Western Anatolia, pieces of Melian obsidian found in Neolithic levels at sites such as Altinkum Plajı⁶⁵ near Didyma or Dedecik-Heybelitepe⁶⁶, some 35 km south of Izmir, demonstrate contact with the Aegean. Results of recent analyses of obsidian artefacts from the region of Caria⁶⁷, specifically from Loryma on the southwest coast of Turkey and from

⁵⁸ Balkan-Atlı 1999, 134.

⁵⁹ Obsidian characterization studies represent one of the great success studies of Archaeometry" say Carter and Kilikoglou (2007, 115); their article includes the most recent information on characterization studies of obsidian.

⁶⁰ Özdoğan 1994, 424; Torrence 1986, 11; Balkan-Atlı 1999, 135.

⁶¹ Özdoğan 1994, 424.

⁶² Özdoğan 1994, 424.

⁶³ Özdoğan 1994, 424.

⁶⁴ Perlès 1987, 143.

⁶⁵ Mosheim and Althaus 1984, 26-8.

⁶⁶ Lichter 2005, 61.

⁶⁷ Schüssler et al. 2006.

Latmos, a mountain in the hinterland of Miletos, show that Melian obsidian, rather than obsidian of Cappadocian provenance, was used along the west coast of Anatolia in the Neolithic Age.

On the other hand, as already mentioned, Cappadocian obsidian was found at the site of Shillourokambos on Cyprus⁶⁸, in contexts dated to the second half of the 9th millennium cal. BC. Although obsidian in this phase comprises only 2% of the stone artefact assemblage, it is important in that it reflects contacts with the mainland at the time⁶⁹. And although the widespread distribution of obsidian in the Aegean is centred on the Melos source, this is not to the exclusion of Anatolian obsidian. At Knossos, for example, where in the Central Palace Sanctuary Area, the "Vat Room Deposit" yielded 119 pieces of obsidian, this included some blades and one nodule from Central Anatolia⁷⁰, dating from the Middle Minoan (MM) IB period⁷¹.

Another interesting case is Quartier Mu⁷², an important Middle Bronze Age complex at Malia in central Crete (MM II period), where east Göllü Dağ material accounts for only 0.3 % of the total amount of obsidian. In sum, although the quantities of east Göllü Dağ obsidian entering Crete (Knossos, Phaistos and Malia) are very limited, in fact only a few nodules, they nonetheless indicate contact between the two regions, Central Anatolia and Crete⁷³. Carter and Kilikoglou argue that the Cappadocian obsidian was embedded in the metals trade between the above regions⁷⁴ and they suggest, furthermore, that Anatolian obsidian came as a form of royal gift, which established relations between Cretan elites and inhabitants of the Anatolian kingdoms⁷⁵, though they admit that such a direct connection might still represent "wishful thinking". They further remark⁷⁶ that the first, major use in Crete of the obsidian from Giali, the volcanic island in the east Aegean (Dodecanese), coincides with the Cretan overseas interest in Western Anatolia, attested by the finds at the Middle Bronze Age site of Miletus⁷⁷, a gateway to the Meander river. The Meander valley is part of the Early Bronze Age network of trade

⁶⁸ Briois et al. 1997, 105.

⁶⁹ Guilaine and Briois 2001, 37, 47.

⁷⁰ Panagiotaki 1999, 25-27; Renfrew 1965, 239.

⁷¹ See also Panagiotaki 1998 and Carter and Kilikoglou 2007, 130, for references to Knossos and also to Platanos (area of Phaistos Palace).

⁷² Carter and Kilikoglou 2007, 115.

⁷³ Carter and Kilikoglou 2007, 135.

⁷⁴ Carter and Kilikoglou 2007, 132.

⁷⁵ Carter and Kilikoglou 2007, 133.

⁷⁶ Carter and Kilikoglou 2007, 136.

⁷⁷ The finds point to a Minoan settlement : Niemeier and Niemeier 1999, 545-546.

routes, from Central Anatolia to the Aegean coast and beyond⁷⁸. The preference for Melian obsidian at sites in Western Anatolia in the Neolithic period is evidence of the very early contacts of the central Aegean islands with the east coast. The important element for our joint paper here is that sea trade routes from the Aegean meet with land trade routes from Central Anatolia; one of the bridges suggested for this contact was the Izmir region⁷⁹, opposite the island of Chios.

⁷⁸ Called by Şahoğlu (2005) as Anatolian Trade Network: cf. the map of fig. 1 in pages 342-343.

⁷⁹ Şahoğlu 2005, 339.

PART II: TRACING TRADE AND TRADERS THROUGH TEXTUAL EVIDENCE

TRENDS AND THEORIES in the study of trade activities are discussed by Doğan mainly in connection with the Neolithic Age, during which most of the traceable items of long-distance circulation were produced from obsidian or spondylus shells. As is evident from the last chapter of Part I, obsidian continues to be traded in the Bronze Age. However, when the invention of alloys gave rise to metal technology, the procurement of metals, such as copper and tin, became the main motive for long-distance trade. Thus, it is in regard to the third and second millennia BC that Postgate notes: "foreign ventures were specialized in terms of the commodities handled and routes followed"⁸⁰.

Literary tradition

In the *Oxford Classical Dictionary*⁸¹, *trade* (or *commerce*), whether local, regional or "international", is viewed as a much later development of exchange; in particular professional trading and traders are regarded as equivalent to the ancient Greek terms *ἐμπορία* (*emporía*) and *ἐμποροί* (*émporoi*). The word *ἐμπορία* is first found in Hesiod in connection with seafaring⁸². In Aristotle, *ἐμπορία* is defined as the most important form of exchange:

τῆς δὲ μεταβλητικῆς μέγιστον μὲν ἐμπορία καὶ ταύτης μέρη τρία, ναυκληρία φορτηγία παράστασις... δεύτερον δὲ τοκισμός, τρίτον δὲ μισθαρνία...⁸³.

There is a passage in Thucydides, in the first twenty chapters known to classical scholars as "*The Archaeology*" (meaning the *λόγος* [discourse] on the *ἀρχαῖα* [ancient history]), where we read:

τῆς γὰρ ἐμπορίας οὐκ οὔσης οὐδ' ἐπιμιγνύντες ἀδεῶς ἀλλήλους οὔτε κατὰ γῆν οὔτε διὰ θαλάσσης, νεμόμενοί τε τὰ αὐτῶν ἕκαστοι

⁸⁰ Postgate 2003, 5.

⁸¹ Hornblower and Spawforth 1996, *s.v.* trade, commerce.

⁸² Hesiod, *Work and Days*, l. 646–650.

⁸³ *Of the kind that deals with exchange, the largest branch is commerce (which has three departments, ship-owing, transport and marketing...) the second branch is money-lending, and the third labour for hire...*" (Aristotle, *Politics* I iv, 2–3, The Loeb Classical Library); cf. Casevitz 1993, 14–15.

ὅσον ἀποζῆν καὶ περιουσίαν χρημάτων οὐκ ἔχοντες...⁸⁴.

As Gomme comments, Thucydides, who is well aware of the importance of economic factors in history, in this passage is primarily thinking of the pre-Trojan era. He regards commerce as the first sign of a settled way of life and of higher standards of living. He also understands the significance of the accumulation of capital (*περιουσία χρημάτων*) and the opportunity this affords for planning ahead⁸⁵. Our conclusion from this passage is that it was the motive of *commerce* that finally made people *unafraid* of each other.

Similar stories about ancient times when no trade relations existed among people, are evidently part of the tradition of other cultures too. In the Sumerian poem of the twenty-first century BC, entitled "Enmerkar and the Lord of Aratta" the story again tells of a primeval stage in man's history when no trade existed between Uruk in Mesopotamia (rich in grain) and Aratta somewhere in Iran (blessed with metal and stone)⁸⁶, and so neither valuable materials, such as gold, silver, copper, tin and lapis lazuli, nor craftsmanship are available to lower Mesopotamia. The lord of Uruk therefore sends a messenger to the country of Aratta, to demand these commodities. There follows a series of moves and counter-moves by both sides, in which, in Zaccagnini's view, we notice a shift from a "redistributive" approach to a "reciprocal" pattern of interaction, which is gradually but firmly imposed by the lord of Aratta. The story ends with the establishment of peaceful "commercial" relations between the two countries, which thereby ensures deliveries of figs and grapes from Uruk in exchange for valuables to be sent by the lord of Aratta. Zaccagnini further comments that since figs and grapes, unlike barley or sesame, were not typical southern Mesopotamian products but exotic foodstuffs imported to Sumer, "this is a clear hint that the exchanges between Uruk and Aratta are also eventually arranged on a true parity level with respect to the 'market' qualifications of goods"⁸⁷. Thus, mutuality, a peaceful approach and the exchange value of commodities gradually form the context in which the messenger of the lord of Uruk moves, as he mediates a "trade" connection between the two countries⁸⁸. Furthermore, we know that in later periods the

⁸⁴ "For there was no mercantile traffic and the people did not mingle with one another without fear, either on land or by sea, and they each tilled their own land only enough to obtain a livelihood from it, having no surplus of wealth..." (Thucydides A.II. 2, The Loeb Classical Library).

⁸⁵ Gomme 1971 (1945), 92.

⁸⁶ Hallo 1992, 353.

⁸⁷ Zaccagnini 1993, 34-42, our quotation being from page 42.

⁸⁸ Kramer draws attention to the use in this text of the professional term *nam-garāš-ag* in order "to exercise the profession of travelling merchant" (Kramer 1977, 61).

term "messenger" is occasionally used as a synonym for "merchant"⁸⁹; such is the case in some of the letters found at Amarna in Egypt. One then wonders what the meaning of the word ἄγγελος (messenger?) in Mycenaean Linear B tablets might be, for when turning from Mesopotamia to the Aegean, the literary documents of Mycenaean Greek use no specific term for "merchant"⁹⁰. In Linear B texts there is only indirect evidence for commerce, which has been gathered together in an article by Olivier⁹¹. Perhaps, as already mentioned elsewhere⁹², the fact that this trade is not recorded in Linear B tablets may indicate that in Mycenaean times there was no official specialization in regard to this area of activity.

As is obvious from the Sumerian epic tale discussed above, there is indeed a need for at least one middleman to carry merchandise or/and messages. What, then, of the Greek epic of Homer? There, the term ἔμπορος (*émporos*) refers only to the passenger of a ship not owned by him⁹³. Transportation of merchandise by water is far easier than transportation by land. One may recall the "downstream and upstream" movement of the *šwty* (merchants?), who carried goods along the Nile, as mentioned in the following Egyptian text, from the New Kingdom period:

*The merchants fare downstream and upstream, as they do business with copper, carrying goods [from] one town to another and supplying him that has not*⁹⁴.

Overseas business involving the offering of iron to obtain copper is mentioned in the Homeric passage where Mentis, king of the Taphians, is sailing over the wine-dark sea *to men of strange speech* (my emphasis), on his way to Temese for copper, bearing with him shining iron⁹⁵.

⁸⁹ Cf. indicatively Bachhuber 2006, 351 with references; Zaccagnini 1977, 171-172.

⁹⁰ The idea here is that in Mycenaean times the term *a-ke-ro* might have been used for the envoy of the palace carrying messages and escorting items sent as gifts. The word *a-ke-ro* is found in Pylos tablets Cn 1287, Ea 136, Vn 493; also in Jo 438.20 (as an anthroponym, according to Lejeune 1997, 127 note 9); in the list of professions by Lejeune (1997, 131-133) one *a-ke-ro* with the name of *wa-tu-o-ko* (Ἀστύοχος) is listed among professionals such as priests, tailors, shepherds, etc. In Homer ἄγγελος is often the messenger of gods (as e.g. Iris).

⁹¹ Olivier 1996-97.

⁹² Michailidou in press; for more on the subject of trade and traders, see Kopcke 1990; cf. Michailidou 2000.

⁹³ *Od.* 2, 318-320 and 24, 229-301; Casevitz 1993, 12.

⁹⁴ Castle 1992, 257; Michailidou 2000, 202-205.

⁹⁵ *Od.* 1. 183-184: «πλέων ἐπὶ οἴνοπα πόντον ἐπ' ἄλλοθρούους ἀνθρώπους, ἐς Τεμέσην μετὰ χαλκόν, ἄγω δ' αἰθῶνα σίδηρον». According to the Commentary to *Odyssey*, the Taphians are mentioned elsewhere in the epic as slave-traders and raiders. Perhaps "Temese" is Tamassos (pres. Politiko) in Cyprus, not a port itself but possibly noted by the poet because it is a place associated with copper (Heubeck et al. 1988, 88 and 100).

As Michel has pointed out, the status and name of the merchant need not be the same everywhere. For instance, the Akkadian term for merchant, *tam-kārum*, is not used for any official function in Old Assyrian texts, in contrast to the situation in the case of the Old Babylonian or Nuzi evidence⁹⁶. Furthermore, Postgate notes that in the earlier, Sumerian, texts, there is a distinction between the ordinary merchant (*dam-gar*) and the foreign trader termed *gaeš* or *garas*⁹⁷, a somewhat similar distinction being later in use in ancient Greek, between *κάπηλος* (*kápēlos*) and *ἔμπορος* (*émporos*)⁹⁸.

The vocabulary of commerce

In Benveniste's book on the vocabulary of the Indo-European institutions, there is a chapter suggestively entitled "A trade without name: Commerce", in which we read⁹⁹:

La notion de *commerce* doit être distinguée de celles d'*achat* et de *vente* (my emphasis). Le cultivateur qui travaille le sol songe à lui-même. S'il a un surplus, il le porte au lieu où se réunissent les autres cultivateurs pour le même cas et aussi ceux qui ont à acheter pour leur propre subsistance : c'est pas du commerce.

This passage would be most suitable as a caption to the so-called "scenes of the market" of the Old Kingdom Egyptian tomb paintings. Such scenes mainly depict the exchange at local markets of the surplus of the producers, though the appearance of a few craft items, such as sandals, in some of these scenes, points also to a stage of "producing for the market"¹⁰⁰. Benveniste clearly states that:

vendre son surplus, acheter pour sa subsistance personnelle est une chose; acheter, vendre pour d'autres, est autre chose. Le marchand, le commerçant, est un intermédiaire dans la circulation des produits, de la richesse. De fait, il n'y a pas en indo-européen de mots communs pour désigner le commerce et les commerçants¹⁰¹.

⁹⁶ Michel 2005, 128; Zaccagnini 1977 (for the merchant at Nuzi).

⁹⁷ Postgate 1992, 211.

⁹⁸ Liddel-Scott Lexicon, *s.v.* *Κάπηλος*; In Aristotle, *καπηλική* is the profit-oriented exchange in contrast to the natural exchange named *μεταβλητική* (*Politics* I, iii, 15, The Loeb Classical Library), cf. Michailidou 2005, 24–32.

⁹⁹ Un métier sans nom: le commerce" (Benveniste 1969, 139–140).

¹⁰⁰ Cf. Michailidou 2005, 24–27 with references; See also the ancient Greek word *αὐτοπώλης*, meaning he who is selling his own produce in his land (Liddel-Scott Lexicon *s.v.* *αὐτοπώλης*).

¹⁰¹ Benveniste 1969, 140; For the terms used in the Classical Greek world, cf. Reed 2003, 6–14.

Commerce is further defined as the handling of merchandise, and in Greek the verb *ἐμπορεύομαι* (*emporeúomai*) meaning "voyager par mer", is used "pour grandes affaires, nécessairement les affaires maritimes" and this is the difference between *ἐμπορος* and *κάπηλος* the latter being defined as "petit marchand, brocanteur"¹⁰². *Κάπηλος* (a non-Greek word according to Chantraine, unless it is connected to *κάπη*, meaning box), is also connected with the trade of the tavern-keeper¹⁰³.

The difficulty of finding an early term for "merchant" is best put by Benveniste's statement that the mercantile exchange does not constitute a unique and homogeneous act, which certainly agrees with what we have said above in regard to Mycenaean texts. Another indication is given by a Homeric passage in which the action of obtaining wine through barter is specifically rendered by a single word, deriving from the commodity of wine: *οἰνίζω* (*oinízō*). The wine is sent by ships by the king of Lemnos in exchange for the following goods given by the Achaeans:

ἔνθεν οἰνίζοντο κάρη κομόωντες Ἀχαιοί,
 ἄλλοι μὲν χαλκῶ, ἄλλοι δ' αἶθωνι σιδήρῳ,
 ἄλλοι δὲ ῥινοῖς, ἄλλοι δ' αὐτῆσι βόεσσιν,
 ἄλλοι δ' ἀνδραπόδεσσι...¹⁰⁴.

Such were the means of payment for the wine, with the metals mentioned in first place. Homeric economy is defined as "une économie à monnaie multiple" (*cf.* the Homeric formula *priasthai ktéassi*, "acheter avec des biens")¹⁰⁵ and in this passage what is given in return to Lemnians are the commodities metal, hides, bovines and *slaves* (my emphasis).

One of the differences between trade activities before and after expansion in the use of metals is that, once metals were in use, simple barter could be replaced by exchanges in which both sides made a reference to the value of the exchanged commodities expressed in terms of metal. Metal, in particular silver, is textually documented in the Near East as the chief index of value, though not as frequently used for payment. In regard to the words used for "value" and for "buy" and "sell", we may consult Benveniste again, turning to the chapter entitled "Achat et rachat"¹⁰⁶: There is a rather rare Indo-European

¹⁰² Benveniste 1969, 141; In Herodotus *κάπηλος* is called the retail-dealer (Hdt. I. 94, II. 141) while *ἐμπορος* is the foreign merchant (Hdt. II. 39, IV. 154).

¹⁰³ Casevitz 1993, 8; also Chantraine Dictionary and Liddel-Scott Lexicon, *s.v.* *κάπηλος*.

¹⁰⁴ From these ships the long-haired Achaeans bought wine, some for bronze, some for gleaming iron, some for hides, some for live cattle, and some for slaves" (*Il.* 7: 472-475, The Loeb Classical Library); Alexiou 1953-54, 143; Kopcke 1990.

¹⁰⁵ Descat 2006, 24-25.

¹⁰⁶ Benveniste 1969, 129.

term for value, ἀλφή¹⁰⁷ (*alphé*), preserved in Classical Greek in the adjective τιμαλφής (*timalphés*) whose literary meaning is "that which sets a price". The relevant verb ἀλφάνω¹⁰⁸ (*alphánō*) is found in Homer in a few passages, where, according to Benveniste it signifies:

rappoter un bénéfice en parlant d'un homme mis en vente par son propriétaire. Tel est le sens propre du verbe valoir...dans le monde homérique *alphánō* se dit exclusivement du profit que procurait la vente d'un prisonnier de guerre¹⁰⁹.

Benveniste notes that in one passage in particular, in regard to a boy who is to be sold, the connection between the verb ἀλφάνω (*alphánō*) and the word ὄνος (*ōnos* meaning "price") is evident:

τόν κεν ἄγοιμι ἐπὶ νηός, ὃ δ' ὕμῖν μυρίον ὄνον
ἄλφοι, ὅπη περάσητε κατ' ἄλλοθρούους ἀνθρώπους¹¹⁰.

In this passage *alphánō* is also connected with the verb περάω (*peráō*), meaning "to transport in order to sell", the transportation being by ship. A similar connection is also evident in the passage in which the son of Priam, Lycaon, addresses Achilles as follows:

ἤματι τῷ ὅτε μ' εἶλες εὐκτιμένην ἐν ἄλωῃ,
καί με πέρασσας ἀνευθεν ἄγων πατρός τε φίλων τε
Λῆμνον ἐς ἡγαθέην, ἑκατόμβοιον δέ τοι ἤλφον¹¹¹.

It is notable that the island of Lemnos is the place where the profit is made¹¹². The question remains, however, as to whether the means of payment indeed consisted of oxen or of a mixture of goods equivalent to the value of the boy.

In regard to the words used for selling, in Greek there are verbs connected with the root **per* as *peráō* (cf. above), *pérnēmi* (*pérnēmi*) and *pipráskwō* (*πιπράσκω*) and, according to Benveniste, this group of words:

évoque non l'idée d'une opération commerciale, mais le fait de transférer...ainsi *epérasa*, avec un nom de personne comme objet, signifie

¹⁰⁷ Liddel-Scott Lexicon, s.v. ἀλφή: produce, gain (*παραγωγή, κτήσις, κέρδος*).

¹⁰⁸ Liddel-Scott Lexicon, s.v. ἀλφάνω: bring in, yield.

¹⁰⁹ Benveniste 1969, 130-132, where the relevant passages from Homer.

¹¹⁰ Him would I bring on board, and he would fetch you a vast price, wherever you might take him for sale among men of strange speech." (*Od.* 15, 453, The Loeb Classical Library).

¹¹¹ On the day when you took me captive in the well-ordered orchard, and led me far from father and from friends, and sold me into sacred Lemnos, and I fetched you the price of one hundred oxen" (*Il.* 21, 77-79, The Loeb Classical Library).

¹¹² For the importance of the island of Lemnos for the sea-trade activities, cf. the volume by Doumas and La Rosa 1997 (in particular the papers by Boulotis 1997, Papageorgiou 1997 and Sotirakopoulou 1997).

‘transférer’ ou, comme nous disons ‘exporter’ (cf. *Iliade* 24, 752 où la liaison entre *pérnēmi* et *péran*, est visible)¹¹³.

In the following passage from Homer, Hecuba is mourning for the future of her children in the hands of Achilles:

Ἄλλους μὲν γὰρ παιδάς ἐμοὺς πόδας ὠκὺς Ἀχιλλεὺς
πέρνασχε, ὄν τιν' ἔλεσκε, πέρην ἄλως ἀτρυγέτοιο,
ἔς Σάμον ἔς τ' Ἴμβρον καὶ Λῆμνον ἀμιχθαλόεσσαν¹¹⁴.

In Homer, commerce is called *prexis*, to distinguish it from the act of acquiring goods by piracy (*Od.* 3, 70-74) and it is carried out by the *prekteres* (*Od.* 8, 161-164) in distinction to the *lēistēres* (pirates)¹¹⁵:

ὃς θ' ἄμα νηὶ πολυκλήιδι θαμιζων,
ἀρχὸς ναυτῶων οἱ τε πρηκτῆρες ἔασιν,
φόρτου τε μνήμων καὶ ἐπίσκοπος ἧσιν ὁδαίων
κερδέων θ' ἀρπαλέων¹¹⁶.

In regard to the words used for buying, Benveniste remarks:

Pour la notion d'‘acheter’, on trouve les deux verbes ensemble, *priámenos* *ōneîsthai* (*πριάμενος ὠνεῖσθαι*) ‘acheter et payer le prix’. On a également deux termes pour vendre, *pōleîn* ‘mettre à prix, chercher un gain’ et *pipraskō* ou *pérnēmi* ‘vendre en transférant l’objet (au marché)’, généralement au-delà des mers¹¹⁷.

Most interesting for our discussion here is Benveniste’s conclusion:

Si l’on regarde les emplois de *ōnéomai* ‘acheter’ chez Homère, on voit que tous les exemples s’appliquent à *des personnes*: on achète des esclaves, des prisonniers qui deviennent des esclaves, qui sont offerts comme tels...Entre les mains de celui qui l’a capturé ou du marchand, le captif n’a pas encore la condition de serviteur, d’esclave, pourvue tout de même de certaines garanties; il l’obtient quand il est acheté...Symétriquement *peráō*, *pipraskō*, etc., ‘vendre’, proprement ‘transférer’, s’applique aux prisonniers, aux captifs¹¹⁸.

¹¹³ Benveniste 1969, 133.

¹¹⁴ For other sons of mine whomever he took would swift-footed Achilles sell beyond the un-resting sea, to Samos and Imbros and Lemnos, shrouded in smoke" (*Il.* 24: 751-753, The Loeb Classical Library).

¹¹⁵ Descat 2006, 27; cf. also one of the least possible meanings for the Mycenaean word *pa-ra-ke-te-u* (as *πρηκτίρη*=merchant) in Aura Jorro Dictionary.

¹¹⁶ One who, faring to and fro with his benched ship, is a captain of sailors who are merchantmen, one who is mindful of his freight, and has charge of a home-borne cargo."

¹¹⁷ Benveniste 1969, 134; see also Descat 2006, 24: *priasthai ktēassi* =acheter avec des biens; *ibid*, 25: *ōnos* = l’opération qui termine la discussion de l’échange, c’est-à-dire le fait de donner un prix ou de rapporter un prix (*Od.* 15, 445).

¹¹⁸ Benveniste 1969, 137.

A particular type of merchandise: humans transported across the sea

From the Homeric texts quoted above we will retain two points for further discussion, namely (1) the selling of prisoners as slaves, by exporting them to 'markets' across the sea, and (2) the fact that these 'markets' for slaves are located on islands such as Lemnos, Samos, Imbros, that is islands along the coast of Asia Minor, suggesting that one possible place of origin for this human labour force is Anatolia.

We are reminded of a piece of possibly relevant evidence from Bronze Age Greece, that is, the period before Homer. In the lists of dependent personnel from Mycenaean Linear B archives, we find groups of women denoted by 'ethnic' designations which may be associated with islands in the north Aegean (Lemnos¹¹⁹ and Chios¹²⁰) and places in Asia Minor (Miletos¹²¹, Knidos¹²² and Halikarnassos¹²³). In Chadwick's view, "these places were Mycenaean trading posts, through which the luxuries produced in Greece were traded for Anatolian products such as slaves"¹²⁴. So it seems that at these sites on the east coast of the Aegean and on the nearby islands, Chios included, there were ἐμπόρια (*empória*). The first use of the term *empória* is attested in Herodotus¹²⁵. In Linear B texts, the merchandise transported consists of human labour, mainly specialized in weaving¹²⁶.

Furthermore, the verb *príasthai* is used in the Linear B texts, at least on present evidence, only in connection with the acquisition of slaves, as two surviving texts confirm, both referring to a *do-e-ro* (δοῦλος) whom one person has bought from another¹²⁷. In these "textes juridiques"¹²⁸ the price is not named, in my view because the palace is merely witnessing the act of transfer of a person, or his labour time, between two individuals and so what is given in exchange is not recorded¹²⁹. For this reason *príasthai* is used here without the Mycenaean word *o-no*, the latter term possibly meaning benefit

¹¹⁹ *ra-mi-ni-ja* : PY Ab 186. There is also the man's name *ra-mi-ni-jo*.

¹²⁰ *ki-si-wi-ja* : PY Aa 770; [Ab 194]; Ad 675.

¹²¹ *mi-ra-ti-ja* : PY Aa 798;1180; Ab 382; 573; Ad 380;689.

¹²² *ki-ni-di-ja* : PY Aa 792; Ab 189; [An 292]; Ad 683.

¹²³ *za-pu₂-ra₂* : PY Aa 61; Ad 664.

¹²⁴ Chadwick 1976, 80–81.

¹²⁵ Casevitz 1993, 15 with the references to Herodotus passages.

¹²⁶ On this subject, see also Michailidou and Voutsas 2005; Michailidou 2005, 33–45.

¹²⁷ Olivier 1987; Michailidou and Voutsas 2005; Sacconi 2005.

¹²⁸ Olivier 1987, 479.

¹²⁹ Michailidou 2005, 44–45.

in Linear B¹³⁰. Still, if we follow Homer, the presence of the verb used in these two tablets may indicate that it was also the act of payment that was witnessed by the palace, since in Homer, the adjective ἀπρίατη (*apriatē*) signifies a woman for whom no payment was given¹³¹.

Humans bought with silver: ἀργυρώνητοι (argyrōnetoi)

There are circumstances in which silver, in addition to being an index of value, regularly functioned as a means of payment, in particular via the intermediary role of merchants, and we now consider these circumstances. It seems that the main merchandise both evaluated in and exchanged for silver was human labour, generally understood by scholars as "slaves"¹³². The Akkadian text RS 17.238, letter from the Hittite King Hattušiliš III (13th c. BC) to Niqmepa, king of Ugarit, refers to a special category defined as "people who are delivered for silver"; we know that in Ugarit, the average price is 30 shekels of silver per slave¹³³. If we search for a price of slaves in copper, we find that in a text from Nuzi a woman given by the palace as capital to the merchant of the caravan is valued at 5 talents of copper¹³⁴; if this capital was given in metal, it would have been at least two ass-loads, plus the expenses for the animals, therefore a preference for the payment in silver, rather than in copper, or worse still in oxen, is understandable for practical reasons, if for no other¹³⁵.

If we move to post-Homeric times, we find a very interesting passage from Athenaios, *Deipnosophistai*, cited and commented by Descat¹³⁶:

¹³⁰ Killen 1995, 219; Sacconi 2005; in Olivier 1996–97, 290 we read: "o-no puede ser puesto en relación con ὀνίνμη, con el sentido de 'beneficio' (y casi seguramente no con ὄνοζ 'venta' ni con ὄνοζ 'asno')"; also Olivier *ibid* 276, note 7: ὄνοζ = precio pagado, venta, ὄνον = ventaja, beneficio < de ὀνίνμη.

¹³¹ According to Descat 2006, 23 and 24, ὀνεῖσθαι "veut dire acheter", while "priasthai designe le paiement" and ὀνος "c'est l'opération qui termine la discussion de l'échange, c'est-à-dire le fait de donner un prix".

¹³² For the various terms used for serfdom, slavery etc, see e.g. Gelb 1979; Michailidou 2005, 33–45 (*passim*).

¹³³ The categories of people from Ugarit mentioned in this letter are: Sons of Ugarit, Servants of the King, Servants of the servants of the King, People who are delivered for silver: cf. Heltzer 1976, 4–5; Heltzer 1987, 247; Michailidou 2005, 42–44.

¹³⁴ Michailidou 2005, 42 from Zaccagnini 1984, 148; the price of a man is 30 shekels of silver, of a woman or a bride is 40 shekels of silver in comparison to 10 shekels of silver for an ox (Zaccagnini 1988, 49).

¹³⁵ It must be noted, however, that in intra-region sales of slaves, any commodity might also be given in exchange by ordinary people, cf. Michailidou 2005, 39–41.

¹³⁶ Descat 2006, 21 ff. (in French translation that I quote).

Les premiers Grecs à utiliser des esclaves achetés avec de l'argent (*argyrōnetois doulois*) furent les Chiotes comme le dit Théopompe au dix-septième livre de ses *Histoires*. Les Chiotes furent les premiers Grecs après les Thessaliens et les Lacédémoniens à utiliser des esclaves, mais ils n'en firent pas l'acquisition de la même manière que ces derniers. En effet, Lacédémoniens et Thessaliens ont, comme on le verra, constitué leur catégorie servile à partir de Grecs qui habitaient avant eux le pays qu'ils occupent maintenant... Quant aux Chiotes, ce sont des barbares dont ils ont fait leurs esclaves, et ils l'ont fait en payant pour cela un prix.

That there was an excess of slaves in Chios, is mentioned by Thucydides (8.40). However, what is of interest to us here is the statement by Descat that "l'abondance des esclaves à Chios n'est donc pas le fait du guerrier, mais du marchand"¹³⁷ and the specific reference to *argyrōnetos*, bought with silver, (in contrast e.g. to *alōnetos*, for slaves bought with salt in Thrace, or *chrysōnetos*, bought with gold in Crete)¹³⁸. In the Greek word *argyrōnetos* the action of *ōneisthai* relates directly to payment and so no difference exists here between the transaction and the payment and "la valeur et le prix ne forment plus qu'une seule action"¹³⁹. This ability to use silver as a means of payment is considered by Descat as a great transformation, a step forward from the function of silver merely as a "valeur dormante" and is further defined by him as an oriental and barbarian tradition¹⁴⁰.

The slaves located on Chios were bought in Asia Minor where the Chians had a greater presence than that of other Greeks, most probably because they had been granted by the authorities of Phrygia and Lydia the rights to commerce in this area¹⁴¹. That the islands near the coast were *emporía*, that is, places of commerce, is also evidenced by the importance that both Chians and Phoenicians accorded the small island of Oinoussa (*Hdt.* 1.165) in regard to the commerce with Lydia. Furthermore, Descat points out that the first named slave merchant was a certain Panionios from Chios, who bought slaves in Caria in order to re-sell them in Ephesos or in Sardes, at the end of the sixth century BC (*Hdt.* 8.104)¹⁴². In roughly the same geographical area, a certain Piyamaradu, according to Bronze Age texts, made raids on Lesbos, in order to kidnap craftsmen and transport them to Miletos¹⁴³; we are thus reminded of

¹³⁷ Descat 2006, 23.

¹³⁸ Descat 2006, 23

¹³⁹ Descat 2006, 30.

¹⁴⁰ Descat 2006, 31. Barbarian perhaps in the sense of "speaker of an incomprehensible language".

¹⁴¹ Descat 2006, 31.

¹⁴² Descat 2006, 32.

¹⁴³ Niemeier 1999, 143-144.

the Homeric terms of *prekteres* ('traders') versus *lēistēres* ('pirates') whose activities overlap in temporal terms¹⁴⁴.

Is *argyrōnetos* a mere regional usage restricted to Asia Minor and the eastern Aegean, like *alōnetos*, used in Thrace, or *chrysōnetos* in Crete? Descat remarks:

Come on le voit dans le cas de Chiotès, l'utilisation de l'argent s'est faite d'abord avec des étrangers d'Asie Mineure, donc qui n'étaient pas au départ des partenaires sociaux traditionnels. Dans ce cas la pratique dominante est celle du paiement immédiat¹⁴⁵.

Descat also comments that since merchants trading in slaves and horses did not enjoy exemption from tax in the city of Cyzicus of the mid-sixth century BC, this means that, in contrast to Finley's view, merchandise consisting of slaves is to be regarded as a luxury item¹⁴⁶. If slaves are to be regarded as luxury goods here, then, to return to our period, that is, mainly the second millennium BC, it seems, in Postgate's view, that such luxury goods were transported together with semi-staples, such as metals, textiles and wood. In his words, this trade:

was not some generalized whole, with an even lattice of similar ventures going in all directions, but was composed of a number, perhaps quite a small number, of precisely targeted ventures. They each followed well-tried routes, and had a well-defined range of commodities, but probably with one or two primary products and the others opportunistically attached. Just as in the north only Assur took the tin and textiles to Anatolia, at the south end Ur and earlier Lagaš specialized in the Dilmun copper trade, and the merchants operating this route were explicitly described as 'those who go to Dilmun'¹⁴⁷.

So we are back again at the definition of traders but this time posed in relation to Postgate's question, as to whether the use of silver as a medium of exchange did indeed bring about a significant difference¹⁴⁸. He emphasizes that silver mined in Anatolia and used as a medium of exchange there, too, was brought to Assur in the profit made by Old Assyrian merchants. There is also an interesting hypothesis by Weingarten, who thinks that the main sources of Early Helladic silver were in fact closer to the west coast of Asia Minor than were the mines of the Taurus Mountains: she suggests that an im-

¹⁴⁴ Cf. the reference by Descat (2006, 32) to a certain Dionysos "qui vend à Chios, comme esclave, une personne qu'il avait reçu dans le Pont de pirates".

¹⁴⁵ Descat 2006, 32.

¹⁴⁶ Descat 2006, 33.

¹⁴⁷ Postgate 2003, 10; Bahrein in the Persian Gulf is regarded as the site of ancient Dilmun.

¹⁴⁸ Postgate 2003, 5.

portant trade route was opened between Western Anatolia and Lerna (in Mainland Greece) sometime in the Lerna IIIC period and that the motive for this was the exploitation of metals of the Cycladic island of Siphnos¹⁴⁹. If silver from Siphnos and, in the Late Bronze Age, from Laurion in Attica, was in circulation among the eastern Aegean islands, it could also have been used as capital for merchants to obtain specialized labourers, in particular the *Asiatics* (?) recorded in Linear B texts¹⁵⁰. Silver would be the most convenient medium for physically compressing value and for carrying over long distances. It was also the most convenient for making accurate payment dependent on any regular "price". Such payment could be checked by the objective functioning of the set of scales by both partners involved in the exchange, even when neither could communicate verbally, since they were "speaking a strange language" (*ἄλλόθροοι ἄνθρωποι* in Homer¹⁵¹).

Furthermore, there is plenty of evidence in Near Eastern texts to the effect that merchants possessed silver. According to Hallo, the earliest lexically attested term for merchant in the Near East is associated with itinerant metalworkers; very early in prehistory, however, the trader's function passed "from the itinerant tinker to the emerging professional, wedded to his money-bag", since "the merchant seems to be identified in the popular imagination, and in popular etymology, with money"¹⁵². Even from the Ur III period, in the archive of a private merchant we have records of amounts of silver defined as e.g. "silver, trading stock for lambs, for reed, for bitumen, for a donkey, or for leek seed", although this does not mean that silver ever completely replaced the use of staples for barter¹⁵³. Hallo remarks that the association of the merchant with silver is almost a cliché in Sumerian proverbs; for this reason, perhaps, he is placed under the special supervision of deities charged with administering justice. The god Šamaš, for instance, is the protector and critical observer of the entrepreneur (the *ummānu*), the travelling merchant (the *tamkāru*) and his apprentice (the *šamallû*), the latter often being the carrier of the purse; thus the trade of the merchant is here divided among three persons involved in trade activities. On the other hand, in Ebla texts the merchant's two main functions, communication and trade, are combined in one logogram,

¹⁴⁹ Weingarten 2000, 116; for the idea of an "Anatolian Trade Network" during the Early Bronze Age (but excluding Lerna) cf. Şahoğlu 2005, 354.

¹⁵⁰ For the definition of labourers as *Asiatics* in Mycenaean and Egyptian texts, cf. Michailidou and Voutsas 2005.

¹⁵¹ See the Homeric passages above, notes 95 and 110.

¹⁵² Hallo 1992, 351–352: *tibira* = the metal worker while *dam-gār* (the merchant) has the pictogram for *gār* representing a pouch pulled shut by a drawstring around its neck.

¹⁵³ Postgate 2003, 17–18.

which is translated both as merchant and as messenger¹⁵⁴. Moreover, Hallo suggests that the functions of travelling merchant and of emissary or messenger converged; he emphasizes that in the epics, just as in the poem on the Lord of Arrata, "the real hero (or 'anti-hero') is the messenger even when the ostensible subject is trade"¹⁵⁵.

We are always seeking for this "anti-hero", who is often labelled, among others, Assyrian¹⁵⁶, Anatolian¹⁵⁷, Cycladic islander¹⁵⁸, Cretan¹⁵⁹, Mycenaean or Aegean¹⁶⁰, Syrian¹⁶¹, Cypriot¹⁶², etc. We should better leave aside any references to 'ethnicity' and confine ourselves to the geographical regions whence traders might start their mission¹⁶³. Starting with the "elite metalworkers-traders" from Lemnos, Lesbos, Chios and Samos, suggested by Kouka¹⁶⁴, and continuing on to persons specialized in transit transportation¹⁶⁵, we came upon *the trader in his capacity as a handler of silver, who transfers for profit, that is, exports, human labour across the sea*. This merchandise is perhaps initially transported tacked on to the cargo of metals¹⁶⁶ but gradually develops into a specific target for precisely oriented ventures. In various cultures, we notice a preference for regarding the source of this particular merchandise to be beyond their cultural borders. However, in addition to piracy or war, there were other ways of obtaining human capital, as, for example, when Ugaritian

¹⁵⁴ Hallo 1992, 354; Cf. the 'messengers' in the Amarna correspondence and perhaps also the word *a-ke-ro* in Mycenaean texts, pages 33-34 above.

¹⁵⁵ Hallo 1992, 354-356.

¹⁵⁶ The Old-Assyrian traders (deriving from Assur) are mostly attested as acting in Middle Bronze Age Cappadocia.

¹⁵⁷ Anatolian merchants are suggested by Şahoğlu 2005.

¹⁵⁸ Seafaring merchants from the Cyclades and other islanders are suggested mainly by Dumas (1982).

¹⁵⁹ In accordance with the view on Minoan Thalassocracy, first mentioned by Thucydides; Marinatos and Hägg 1984; Wiener 1990; Wiener 1999.

¹⁶⁰ Mycenaean are taken as the successors of Minoans in sea power; e.g. Pilali-Papasteriou 1998; For Aegeans, Bachuber 2006; cf. Michailidou (in press) on the definition of the role of the two Mycenaean passengers on board the Uluburun ship.

¹⁶¹ The views by Bass (1991; 1997) or by Pulak (more recently 2005).

¹⁶² As, e.g. the view by Kassianidou 2004.

¹⁶³ Although, in contrast to our habit, the opposite, that is their destination, may define them in the ancient sources (cf. "the people going to Dilmun", note 147).

¹⁶⁴ Kouka 2002, 192, 198, 238-47, 275, 297-99 (as cited by Şahoğlu 2005, 344 note 3); compare with the itinerant tinker *tibira* in the above note 152 and cf. indicatively Bloedow 1997, 441 ff., in particular 447, for itinerant craftsmen in the Aegean, from the Neolithic throughout the Bronze Age.

¹⁶⁵ Whether they were caravan leaders, captains and/or owners of ships, envoys as passengers, etc. all of them here regarded as acting during all periods.

¹⁶⁶ Cf. Postgate, page 41 above and also Doğan, the paragraph on obsidian in Part 1 above.

debtors are placed by the king in the hands of the Hittite merchants from the port of Ura or when texts from the wider Near Eastern era indicate cases of self-sale¹⁶⁷ or of following, willingly or otherwise, the nomads, the pirates of the desert¹⁶⁸. Raiding is not a species of commerce, in that it does not fulfil the criteria of reciprocity and peaceful conditions set forth by Doğan in the first part of our joint paper. After Doğan's discussion of Neolithic trade, my treatment of Bronze Age trade commences with Postgate's comment to the effect that foreign ventures by the second millennium BC are specialized in terms of targets and routes followed. However, the key concept distinguishing trade in the Bronze Age is "exchange-value", which is generated through the circulation of metals. We have seen that in Homer, the verb used in regard to value, *alphánō*, refers only to the sale of humans, which brings an immense profit to the seller¹⁶⁹. This must be the echo of the real motive that turned the Bronze Age raider into a professional merchant.

The islands of the eastern Aegean, located along a reachable *peraia* on the west coast of the mainland beyond, always played a significant role as *emporía*, that is, places for *émporoi* to conduct their business¹⁷⁰. Those across the water were often of another language and culture. However, as we read in Thucydides, trade made people unafraid of each other¹⁷¹. What brought people of "strange language"¹⁷² into peaceful contact with each other was trade. What drove the exploitation of maritime and land routes was trade. The land (and river) routes coming from Syria and Mesopotamia to Central Anatolia and thence to western Asia Minor were used by caravans, led by merchants. Merchandise was borne to and from the points where the sea routes from the

¹⁶⁷ There are also cases of children being sold by their parents, e.g. in a sale document of Ur-III period a priest is buying a girl from her mother, while the merchant also recorded is the person who "weighs out the silver" (Michailidou 2005, 41, fig. 4); such cases were not at all uncommon in antiquity, even in Athens: "C' est ainsi qu' à Athènes par exemple, Plutarque rapporte formellement que jusqu' à la législation de Solon, les Athéniens, lorsqu'ils se trouvaient en difficulté financière, vendaient leurs enfants comme esclaves" (Gofas and Hatzopoulos 1999, 9 and note 46).

¹⁶⁸ Michailidou 2005, 41–43.

¹⁶⁹ Homeric passages above, notes 109–110.

¹⁷⁰ By confining ourselves to this definition we avoid going into further detail on their particular character, which is beyond the scope of the present discussion. For example, we may start with Niemeier 2005, in regard to Minoans and Mycenaean in Western Asia Minor and follow his references to others. Both volumes on *Emporia* (Laffineur and Greco 2005) and the volume on *Sea Routes in the Mediterranean* (Stampolidis and Karageorghis 2003) contain valuable information. See also Zurbach 2006.

¹⁷¹ See above page 32.

¹⁷² As in the Homeric passages cited in this paper (pages 33 and 36).

Aegean terminate¹⁷³. Doğan has noted¹⁷⁴ that the distribution of archaeological material is independent of cultural borders. There were no borders for traders, as trade brought accumulation of material wealth and knowledge. Various script systems, "foreign" languages (initially the names of exotic items) and expertise in technologies were introduced by traders, bringing with them new ideas¹⁷⁵. As Wedde has so neatly put it, concepts travelled as ballast embodied in the traded items, or "in the minds of envoys, merchants, and craftsmen – as an intellectual stowaway"¹⁷⁶.

¹⁷³ For the Aegean routes and the stepping stones offered by the islands, such as e.g. Skyros, cf. Parlama 2007, 45, Kouka 2002, 295–302, Agouridis 1997, Sotirakopoulou 1997.

¹⁷⁴ On page 23 above.

¹⁷⁵ For more on the cognitive and ideological equipment of the merchants: Michailidou 2000, 205–209; Michailidou 2000–2001; Michailidou 2004, 320.

¹⁷⁶ Wedde 1997, 75.

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