

Chapter XV

THE POLITICAL ECONOMY OF THE EARLY CENTRAL INSTITUTIONS AT ARSLANTEPE. CONCLUDING REMARKS

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The analyses undertaken in the preceding chapters to reconstruct the Arslantepe centralised economy and its governance (even though in some cases these have only been partially completed, and the results are still provisional) drew not only on the archaeological evidence from period VI A (chapters III, IV, V, VIII, XII) but, whenever possible, on comparable evidence taken both from the data on the previous period VII (chapters VI and IX), the following period VI B2 (chapters X and XI), and from both (chapters VII, XIII and XIV). The data, following the long and extensive excavations, while obviously only fragmentary, are of good quality on the whole, and have made it possible to draw well-founded comparisons among the three periods, which have sometimes proven very useful for an understanding of the fundamental features of the political economy during the palatial period.

The abrupt and final “collapse” of the 4th millennium centralised system, unlike what occurred on most sites in the Mesopotamian world, froze a situation at a particular moment of its development, blocking it for ever. This situation has offered a major opportunity for archaeological research, not only because the violent destruction of the public area by fire left, *in situ*, all the materials that had been present there at that precise moment in time, buried under the fallen débris (which can, and normally did, occur in the Near Eastern tells, even during the course of a process of uninterrupted historical development – occasional collapses and destruction occurred continuously on these sites for a variety of reasons, even contingent, such as earthquakes, occasional fires, etc), but above all because this collapse marked a radical crisis in the existing system of social, economic and political relations, stopping the ongoing progress permanently in its tracks, at a given stage of its development. This has given us what is a fairly rare opportunity to observe a snapshot of the “formation” period at the height of its still incomplete development, frozen in time.

For scholars who only observe the material ruins of history in the absence of any written sources – which alone are able to bequeath a well-articulated account across time even of things that disappear – the changes brought about by the evolving of history are in some respect the most definitive and obliterating form of “death”. What has been transformed disappears for ever, leaving behind only indirect evidence of its passing – if one is capable of recognising it – in the new situation which it generated, but which wiped out many, and sometimes important, features of it. This, in my opinion, is the great epistemological problem

of archaeology, particularly that kind of archaeology which aims to reconstruct evolutionary processes, since it can only identify history in fits and starts, where it was interrupted by episodes of destruction. What we observe from an archaeological point of view is indeed a momentary interruption in a continuing process of development, and only in rare instances does this interruption coincide with the final end of a particular process.

One such case is Arslantepe at the end of period VI A.

The interrupted image 'frozen' in time by the destruction of the palace at the end of the fourth millennium is made up of multiple activities blocked in their progress, which clearly illustrate that particular moment in the history of the site. We have however been able to extend the "snapshot" of that particular moment fixed by the fire to spread it across a much longer and fully historical time dimension through the comparative projection towards the previous and subsequent periods: on the one hand, a recent past (period VII) in historical continuity with the period studied and presumably at the origin of the centralised system which was established in it; on the other hand, a situation that had completely, or almost completely changed as a result of the crisis (period VI B2), when the centralised system that had seemed so powerful and stable collapsed in ruins. This has given us the possibility to view the object of our investigations from two perspectives: firstly from an "evolutionary" dynamic perspective, trying to identify the origin of the structural aspects of the centralised economic system by tracing back their roots in preceding formative situations; secondly, from a static analytical perspective, trying to outline the peculiar features of the 4th millennium centralised system by way of contrast, by analysing similarities and differences in comparison with the new and completely different situation that had arisen at the beginning of the 3rd millennium, when the system of economic and political centralisation underwent a radical breakdown. Naturally, the dynamic, and therefore historical approach, is present in the second perspective too: the re-emergence of some traditional relations identified in period VI B2 suggests that these relations could well have been present to some extent, albeit invisible to us, even during the development of centralisation. Whereas some of the features that disappeared entirely in the third millennium can indeed be considered to have been closely linked to the way of functioning of the economic centralised system of the end of the fourth, there were others, whether or not they originated from that system, which seemed to have been much more deeply rooted in the life of the population, and may have had their origins in the economic and social relations that existed outside the sphere of centralised intervention, being only partially or superficially influenced by the huge transformation that occurred in period VI A.

The picture that has emerged of period VI A is halfway between a model of society with emerging élites, ritualised or ceremonial food redistribution, power based on ideological consensus and prestige, and a more "evolved" system in which authority was exercised in more "secular" and "institutionalised" ways, with a larger economic state sector involving increasingly numerous production activities and an expanded labour force which played an increasingly important part in more regular redistribution circuits.

I do not know whether we are authorised to talk, as we have done so far, of *early state*, and the legitimacy of such a term in our case naturally depends on what we mean by it. If we mean by 'early state' the centralised government of the community based on *a*) an institutionalised power, *b*) the use of sophisticated and complex instruments of administrative control to manage the centralised resources, *c*) a system of delegated tasks and powers to an emerging class of bureaucrats/administrators fully representing the 'central institution' and managing public goods and activities on its behalf, *d*) circuits of circulation of surpluses which are at least partially detached from the ideological-religious and prestige sphere, then Arslantepe VI A can, in my opinion, be considered to be a form of, albeit embryonic, early

state society. The same architectural layout of the public area, which acquired the form of a proto-palatial complex with numerous areas not intended for ceremonial or cultic acts (chapter II and III.2), would support this suggestion. But if we include in the definition of "state" all this plus *a*) the existence of a clearly defined territory with clearly identified borders linked to central government institutions by a relationship of political and jurisdictional "belonging", *b*) a regular and regulated system of tributes and services, *c*) the existence of "social classes" and highly specialised categories at a territorial level, and *d*) a rigid system of control – including military control – over the territory, then I believe that what we see at Arslantepe at the end of the fourth millennium BC does not provide sufficient evidence for it to be called a State in this sense of the term.

In reality, many different categories have been used to define the State, and in particular the 'Early or Archaic State'¹, and have concerned various aspects of community life: ceremonial-cultic, economic, social, governmental and legal. We have deliberately avoided entering this debate, primarily because it falls outside the scope of this book, then because many of these features describing the Early State are not clearly, or only partly, recognisable in archaeological terms, and require a thematic and methodological in-depth analysis, but above all because I believe that it is more useful, at the current state of research, to focus on a targeted analysis of particular societies and development processes, trying to recognise in each one of them their own distinctive features before moving on to generalisations. For it is now clear that there is a wide variety of different historical situations that can be traced back to this process of the formation of the structural basis of modern political societies, and they are infinitely more numerous and multifaceted than any type of fit-all definition or classification has been produced so far. A detailed analysis of these many different realities, without any conceptual pigeonholing to try to classify them, can in my view offer an interesting and complex account of the process, or processes, through which states are formed, making it possible subsequently to address the general theme on fresh bases.

Even though we have been dealing essentially with identifying the way in which the economy in the centralised society of Arslantepe VI A functioned, is necessary, perhaps crucial, to offer a short account of the nature of the power and hence of the characteristics of the dominant political system in that society, to be able to analyse the political economy of its élites and ruling classes. At the same time, conversely, it is precisely that information regarding the possible features of the political economy that will help us to define the underlying political system. In other words, by examining the activities that were performed or controlled from the centre, the circuits – whether centralised or not – within which the goods circulated, and the rules governing this circulation, we have been able to reflect on which sectors fell within the public sphere, the very concept of "public" in that society, the type and degree of interference by the central government in community life, and hence the fundamental issue of the capacity of Arslantepe VI A's central institutions to exercise control over its people and guarantee the regular flow of surpluses and manpower that was necessary to maintain the central organisation. I consider that our study of the data available has clearly shown that a public sector of the economy had already been established, capable of supporting administrators and ruler's delegates, as well as encouraging the accumulation of prestige, power, and wealth by the government élites.

¹ Some of the most interesting definitions and descriptions of State typologies are harmed in the book edited by Claessen, Skalnik (1978). See also: Claessen, Skalnik (eds.) 1981; Haas 1982; Gledhill *et al.* (eds.) 1988; Nichols, Charlton (eds.) 1997; Feinman, Marcus (eds.) 1998; Smith 2003.

Let us therefore begin by examining the salient features in various aspects of the economic life of the "palace" as they have emerged from the archaeological data analysed in the various chapters in this book.

The first and most substantive question we have tried to answer is: what was the economic basis of this archaic centralised structure? In other words, what kinds of goods circulated in the palace and were the source of financing of the élites and their public activities?

THE ECONOMY OF STAPLE PRODUCTS

The first, almost immediate, observation is that it was above all, and perhaps exclusively, food that was stored and accumulated in the areas of the palace complex at the end of the fourth millennium. But this was not so much to accumulate huge quantities of agricultural and livestock products in the form of raw materials, such as cereal grains or preserved meat, but commodities were rather stored to be continuously put back into circulation in the form of processed foodstuffs. The first evidence of this comes from the fact that the storage places that have been unearthed so far were small storerooms full of large, medium-sized and small ceramic containers, often accompanied by numerous, and sometimes very numerous (depending on the case), mass-produced bowls which, as we have seen, were almost certainly used for distributing food in the form of meals (chapter VIII). Many of these containers included narrow necked jars and bottles most probably holding liquids or semiliquid products, which would therefore certainly have been processed foodstuffs.

The second clues come from the fact that in these stores – that is to say the proper storage areas of the palace (A340, A364, A365) –, as well as in the temples and in the other buildings in the palatial complex, very occasional remains of grains have been found (chapter V); the lack of grains is significant when one considers that the whole complex was destroyed by a violent fire, as a result of which the botanical remains, if there were any present at the time, would have been preserved. Their absence is in contrast to the extraordinary abundance of charred seeds found in the later village from period VI B2, which was also destroyed by fire, and where there were conversely very few large containers (chapter X). In summary, the food stored in the domestic contexts of Period VI B2 mainly consisted of grains (indicating the storage of harvested cereals), whereas almost exclusively processed food were kept in quantity in the palace buildings, particularly in storage areas, ready for intense and rapid redistribution (it would not have been indeed possible a long duration storage of processed food). There is also an interesting difference concerning the quantities of liquids consumed in the two periods: liquids were kept in large containers (elongated bottles of Uruk type) in the palace period, whereas small bottles and small jars were used to hold them in the domestic contexts of period VI B2 (chapter XI). A similarly interesting difference is observable as far as the bowls are concerned: whereas bowls of various shapes and manufacture were used in the houses of the Early Bronze I village of period VI B2, wheel-made mass-produced conical bowls were almost the only service vessels used in period VI A, not only in the palace area but even in the élite houses, though they were there in a much lower number (chapter XI). This means that the needs for huge quantities of bowls to redistribute food to a large number of people had deeply influenced the production of this kind of vessels.

Furthermore, the presence of a few querns used to grind dry herbaceous plants (chapter XI) in store A340 – the room interpreted as a distribution store² –, together with pots of various

size and functions including several cooking pots (chapter VIII), is confirmation of the fact that some of the food must have been prepared or processed in this room, or perhaps in an area close to it, as M.B. D'Anna has suggested noting the fact that there is little evidence of fire on the cooking pots in the store room, proposing their use as simple containers of food previously prepared elsewhere (chapter VIII).

Was there central interference on agriculture?

The few caryopsides found in the stores suggest that wheat was prevalent there, unlike other rooms within the palace where, despite the overall scarcity of remains found, barley seems to have dominated together with a few odd findings of pulses (chapter V). The, albeit limited, presence of wheat grains above all in the stores may have been related to the preparation of flour and wheat-based processed foods.

It is also interesting to note that the barley identified in period VI A, notwithstanding the scarcity of remains on the whole, was mostly six-row barley³ which appears to have been quite rare throughout the whole of the Eastern/Southeastern Anatolian region and Upper Mesopotamia in this period (even at Tell Brak in the fourth and third millennia *hordeum distichum* was dominant)⁴. The most interesting thing is that also at Arslantepe *hordeum polystichum* seems to have disappeared (and at all events, being cautious, it certainly steeply declined) giving way to two-row barley in the period VI B2 village⁵, by which time nearly every sign of the centralisation of resources had disappeared. This, albeit with the caution needed when dealing with the few remains found in the period VI A buildings, might plausibly suggest that there had been a major change in agricultural practices and perhaps also in the type of consumption and the circulation of these agricultural products (two-row barley might also have been very widely used as animal fodder) at the beginning of the third millennium, after the collapse of the centralised system. There are good grounds for suggesting this possible change, I believe, in view of the extraordinary abundance of charred seeds found in the period VI B2 village (as much as 37 kg!), mainly barley, found piled up on the floors of all the houses, suggesting that the whole harvest had been stored when the blaze erupted and destroyed the village.

It is possible that in period VI A the central institutions intervened to encourage the targeted farming of more high-yielding crops, perhaps encouraging or promoting the use of irrigation techniques which, thanks to an extraordinary abundance of springs and water courses in the Malatya plain⁶, could have been done very easily and simply by the village people themselves. Obviously we do not know whether this kind of production focusing on product quality was independently practised by the local people living around the site as a result of the impetus given by some kind of pressure in demand (tributes? offerings? participation in collective celebrations?), or whether the quality product was farmed on lands owned or controlled by the élites (we do not even know whether any such lands actually existed). But the change in the productivity of barley found after the collapse of the system suggests of itself that the central institutions may have exercised some form of more or less direct influence over the farming practices.

³ Follieri, Coccolini 1983, Chapter V, this volume.

⁴ Hald 2008; Gregor 1992, table 4.

⁵ Sadori *et al.* 2006a; Susanna 2007.

⁶ Marcolongo, Palmieri 1983.

² Frangipane, Palmieri 1988-89; Frangipane *et al.* 2007; Palmieri 1989.

This possible close relationship between the central élites and agriculture is also evidenced by the marked symbolism linking the ruler figure to the heading of agricultural practices, probably in ceremonial contexts, in representations expressing the image of power. The images referred to here are the ones mentioned in chapters II and VII of the threshing scene with the *tribulum*, represented on a seal design (fig. VII.1c)⁷ and the image of what seems to be a ploughing scene, painted on the wall of the palace corridor, depicting a coachman driving a not easily recognisable object, probably a cart or a plough, drawn by oxen (fig. II.3c). In both cases, these images represent iconography of power: in the first instance, that of the image depicted on the seal, this can be argued from the presence itself of an important personage seated on the *tribulum*, driven by a coachman and followed by a procession of individuals with tridents who were certainly of inferior rank; in the second case, that of the painting, it is the context itself which gives this scene a highly symbolic value, also supported by the wealth of the ornamental elements and symbols and the linkage between the image of the cart or plough and the representation of a stylised building – perhaps the palace itself – from which it seems to be coming out.

Livestock and animal products. The place of animal breeding in the political economy of the VI A élites

Agriculture could not have been the only major object of economic interest to the élites at Arslantepe in the palace period, but certainly the other primary production activity – livestock rearing – must have also been important to them. Indeed, in view of the larger archaeological documentation available on the livestock (since animal bones are much better preserved than vegetable materials) the change evidenced in the animal breeding patterns in period VI A compared with the previous period VII is certainly much more evident and significant than what one might prudently suggest for the agricultural practices.

The most remarkable overall change in the livestock is the exponential increase in sheep and goat (between 70% and 90%, depending upon the context) and the concomitant virtual disappearance of pig raising, which never exceeds 2.5-2.7%, and whose percentages were normally much lower than this⁸.

This change is consistent with what was happening throughout the whole of the Northern Late Chalcolithic world in the second half of the fourth millennium: one only has to think of the change that occurred in this regard at Tell Brak, where the traditional mixed rearing of sheep/goat, cattle and pig in Late Chalcolithic 1-2 was followed by an increase in ovines of up to 90% as early as LC3, which was therefore before the direct Uruk influence over the site⁹. This emphasis on sheep and goat rearing, and probably on their byproducts, seems to coincide with the adoption of more centralised and specialised livestock rearing management and control models. In addition to an overall growth in the sheep and goat population, there was also a marked increase in the percentage of sheep almost everywhere, and also at Arslantepe, which might have been linked to a wider and more systematic exploitation of dairy products and wool.

At Arslantepe, by studying the data subdivided into different contexts, a series of interesting horizontal comparisons within the same chronological period have been drawn (chapter VI). For example, in period VII there were a number of significant differences between:

- The area of common dwellings on the north-eastern edge of the site, where the faunal remains show that 24.3% were cattle, 51.5% were sheep and goats, and 22.4% pigs;
- The houses of the élites on top of the mound, where cattle were more numerous (37.6%) and there was a smaller percentage of pigs (14%);
- The tripartite temple, Temple C, revealing signs of the changes that would subsequently characterise, in general terms, the livestock rearing in the later period VI A: a decline in the cattle population (14.4%), a drastic reduction in pigs (5.2%) and a corresponding sharp increase in the sheep and goat population (67%). As in period VI A, moreover, and unlike the other period VII contexts, sheep outnumber goats in Temple C. This is a pattern found whenever there is a significant increase in sheep and goat numbers in general, thus suggesting that the reason for giving pride of place to these animals must have mainly been due to the exploitation of wool and dairy products.

The change recognised in Temple C can certainly be explained in various ways: (a) it might have been the response to a need connected with the intense redistribution practices which were performed there, for which goats and sheep were easier animals to mobilise (to feed large numbers of people in extended commensal practices it is much easier to slaughter sheep than cows, which are capital assets); (b) control over the sheep and goats had already become the privilege of the central institutions and was a clear policy of the period VII political economy, but it was only manifested in their public areas (the Temple) at that time; (c) since Temple C belongs, stratigraphically, to the last phase of period VII, the presence of livestock-raising based mainly on sheep and goat might also be connected with the time factor. A similar, indeed even more evident, pattern of sheep/goat rearing has also been found in the long rooms behind the temple and perhaps connected to it in its last phase of use (A850-860-848-858-842, described in chapter VI as the “storage and craft areas”), where ovines accounted for 75% of the herd and pigs have an even smaller percentage of 4.6%. In other words, it may have been a phase of the centralisation process that was already widely in progress in which the central institutions may have placed constraints on livestock rearing, eventually leading to a radical and more widespread change in the habits of the local people, which emerges very clearly in the evidence from the later period VI A.

It is of course possible that there were multiple reasons for this change in the final phase of period VII and that many of the hypotheses that have been suggested were all correct taken together. We shall only be able to draw a final conclusion on this point after excavating further in the Temple C zone, removing the building and seeing whether there are any other temple structures, and their features, underneath it.

Some differences that have emerged in the study of the fauna of period VII can certainly be related to the diversity of functional contexts, and this is undoubtedly a very important factor for the purposes of our research. Pig-rearing was a typically domestic activity and pork was consumed widely in the common houses, whereas it declined in the residences of the élites (from 22.4% to 14%), and was almost completely excluded from the public consumption circuits. Conversely, the percentage of cattle is higher in the élite houses than in the homes of the common people, rising from 24.3% to 37.6% (chapter VI). This is also a significant fact which might suggest that because bovine meat was more valuable, cattle were consumed more widely in the élites circles; it may also suggest that there may have been commensal practices reserved for high status groups, during which the élites invested symbolically in the offering of richer and more prestigious meals.

This possible linkage between the consumption of bovine meat and the élite environments seems to have been still present in the period of full palace centralisation. In period VI A, apart from the fact that sheep/goats were always and everywhere distinctly predominant, cattle

⁷ See chapter VII: Frangipane 1997. The presence of a *tribulum* flint tool in one of the élite residences on the top of the mound (A726) (chapter XI) confirms that this object was actually in use at the end of the fourth millennium BC.

⁸ Bökönyi 1983: chapter VI and VII, present volume.

⁹ Weber 2003; Oates 2005: 26.

were still being consumed to quite a significant degree (about 24-25%) in both the public environments in the palace complex (temples and redistribution stores)¹⁰ and in the private residences of the élite (unfortunately we have no common houses for comparison purposes in this case). The presence of significant quantities of cattle remains in the period VI A temples is in contrast to the fact that fewer remains have been found in Temple C in the previous period VII. Here there is evidence of a ceremonial type of redistribution involving a very large number of people, which means that the temple was open to broad sections of the population, as is evidenced also from the thousands of mass-produced bowls which were virtually the only kind of ware found in this temple (see chapter IX). This temple must have been therefore the place in which meat was distributed to the people who came in large numbers to take part in the ceremonies (probably also including the common people) for which sheep and goat meat was preferred. Conversely, it is possible that in the period VI A temples, and in particular in Temple B, which always maintained its pure ceremonial features, more "restricted" ceremonies were conducted and meals were prepared mainly for the élites, as is suggested by the presence of only a few bowls, generally large in size, and other elements identified in the study of the pottery (see chapter VIII). And it was precisely in these contexts that valuable animals, such as cattle, were consumed in greater quantities. The fact that substantial cattle remains have been found in élite contexts, both public and private, (also found in the earliest period VII élite residences), may therefore confirm the traditional use of this capital in élites circuits, where it was probably used to manage various transactions, even between households, such as, for instance, for élite marriages, accompanied by moments of commensality, feasting and celebrations (chapter VII).

Meat must have formed an integral part of the food redistribution system for the benefit of the ordinary people, which was more intensively and regularly performed in the stores in the palace. In the redistribution room A340 there were very many animal bones (1500) unlike the situation recorded in the proper store A365 where they were almost entirely absent; and they were concentrated above all in the débris of what is assumed to have been a collapsed upper storey. Here again ovines predominated (70.3%) but there were also abundant remains of cattle (28.9%) while pigs were almost completely absent, showing they were excluded entirely from the redistribution circuits. The ages of the animals varied, even though they were mostly adult, and the bones mainly belonged to medium and poor quality parts, such as heads or limbs, with only a small presence of best quality parts (chapter VI). The bones of medium and poor quality parts were dominant everywhere, even in the temples. It is possible that, since the animals had to be slaughtered elsewhere, their heads and limbs would have been what remained after the separation of the best choice parts, which were perhaps redistributed and taken away to be consumed elsewhere, even not far from the distribution places. Store A340 is also very small and could not have been an appropriate place for cooking¹¹ and neither for eating meals there. If this interpretation is correct the meat found in A340 could not have been stored and preserved there for a long period, but it must have been what was left over from distribution and consumption. At any rate, it must have been very difficult to preserve meat for long periods: it could have been salted, but that was a far too sophisticated and costly process, or smoked, but more probably, in my opinion, it was consumed rapidly. We cannot either exclude that at least part of that meat had been eaten on the spot, and its less than

excellent quality was related to the distribution of poor or middling quality food to the workers who went to take their daily meals in the stores.

Everything found in store A340, as we have pointed out several times already, is indicative of intense and frequent food distribution activities to large numbers of people performed there under administrative control, judging from the use of the *cretulae* and the fact that more than 100 mass-produced bowls were found in this room¹². The smaller size and the higher level of standardisation of the period VI A mass-produced bowls in comparison with those of period VII (chapter IX) and in particular those found in the stores and the A206 *cretulae* dump, might indicate the distribution of smallest quantities (and perhaps worst quality) of food at symbolically less significant events, as remuneration for daily work less linked to extraordinary events.

In this connection it is also interesting to compare the remains of the bovines found in Temple B with those found in the A340 distribution store in terms of the ages of the animals slaughtered there (chapter VI): in A340, as also in Temple A, there were adult, subadult, and juvenile animals, albeit with a prevalence of adults, while in Temple B the animals were almost exclusively mature and to a lesser degree adults. Considering that the adult and mature cattle were larger animals, and therefore provide more meat, these animals might have been slaughtered for particular ceremonial and celebratory events in the temple, perhaps after having been fully exploited for work or for milk, precisely because they provided more meat; and it is possible that the tenderness of the meat may not have had a high gastronomic value for the Arslantepe population, as for other populations known to ethnography. The killing of these animals may also have had a strong symbolic value.

The fact that the bovine remains found in Temple A exhibit a pattern which is more similar to store A 340 than to the other cultic building, Temple B, is consistent with other evidence we have seen which suggests that temple A underwent a multifunctional transformation in the final phase of life, as a place in which, at different times and under different circumstances, a variety of different activities were performed. The architecture itself and the use of the rooms also underwent significant changes in this regard: the external entrance was narrowed by the construction of a small wall (chapter III.2), the stairwell was transformed into a *cretulae* dump (A77), the two side rooms were converted into stores; moreover, the fact that multiple activities, and not only those linked to cult, were performed in Temple A is also evidenced from both the study of wear traces on the lithic tools (chapter XII) and that of the pottery found *in situ* in the building (chapter VIII).

Only the main room A42 seems to have remained more or less unchanged, and shows evidence of the fact that certain cult activities were still being performed in the building: a human skull and the skull of a boar sacrificed before the altar, more remains of wild animals, various fruitstands near the small central podium and the platform of the altar-basin¹³. But we do not know whether the cultic function of A42 was permanent or whether it was only used for this purpose on certain occasions. On the whole, the main function and activities performed in the building seem to have been more varied and probably changed from its original functions, and also included less "high" and élite redistribution practices than seem to have taken place in Temple B, which never changed its original function.

¹⁰ The only exception are the *cretulae* dumps, where cattle showed a lower percentage (11-12%).

¹¹ It must be noted, once more, the absence (or very scanty evidence) in this room of pots showing traces of direct contact with fire (see D'Anna, chapter VIII, present volume).

¹² Frangipane, Palmieri 1988-89; Frangipane *et al.* 2007: 31-38.

¹³ Frangipane, Palmieri 1983: figs. 19-20. Wear traces on the lithic tools from A42 have also revealed less numerous and more specialised activities (mainly meat cutting and hide scraping), which may have been connected with sacrifices (chapter XII).

The main circuits for the circulation of food and the development of food management systems

Taken as a whole, the two period VI A temples, which were smaller, closed-off, and built into the complex of buildings which made up the palace, were therefore less outstanding and impressive in architectural terms than the isolated monumental temple of period VII. While having without doubt a "public" and cultic function, albeit perhaps limited to an élite use, they possess numerous features in their ground plan and in the material remains of the activities performed there, which make them very similar to the so-called élites' residences which were built just slightly to the north and north-west top of the mound. In these buildings too, which have been interpreted as residential, there were, among other things, more remains of wild animals than in the non-cultic areas of the palace. We might suggest that these similarities were due to the fact that the élites themselves performed their activities in both environments (public and private), while the greatest differences were in the areas of redistribution to the "common" people within the palace (the stores, courtyard, dumps).

Separation and differentiation in the matter of food management, in other words, was no longer in terms of public versus private élite buildings, as seems to have been the case in period VII between Temple C and the "columns building". The distinction was now drawn within one and the same public context, between, on the one hand, the restricted élite sphere, which expressed its separateness through special activities and transactions performed in the public sphere in the small temples in the palace and, perhaps, in the residential buildings on top of the mound, and, on the other hand, the economic-administrative sphere, which was managed, presumably by the same élites, in a separate ambit independent of the cult and élite sphere, that is to say in a more "secular" and routine manner. This sector of the political economy appears to have been managed separately, also in symbolic terms, largely through the mediation of the new social classes (the bureaucrats) who were delegated with administrative and managerial tasks. These two élite spheres – prestige and finance – seem to have been already largely separated at Arslantepe in the palace phase. Perhaps this separation was also expressed in the animals consumed: the consumption of bovines above all signalled the prestige circuits, independently of the physical place in which they took place, whereas the animals mainly consumed in the common distribution circuits were sheep and goat.

The ways in which the élites took part and conditioned the 'staple economy': evidence and consequences

The evidence

Sheep and goat husbandry may perhaps have been very largely entrusted to outside social groupings, more specialised in this type of production, living in the area and interacting with the palace, and perhaps also with the rural populations in the Malatya plain. I am referring here to the seminomadic communities that are thought to have existed there, and whose archaeological most evident physical expression was the introduction of Anatolian handmade Red-Black pottery into the typical ceramic repertoire produced in period VI A (chapter VII). This ware emerged earlier still, at the end of period VII, exactly at the time that sheep and goat raising was intensified, but became an integral part of the repertoire, with its functionally specialised shapes (above all service vessels), in period VI A, and continued with even more highly selected shapes (particularly bowls and a few large jars) in period VI B2 (chapter X). It was in this latter period that the livestock raising pattern confirmed the focus on sheep and

goats, indicating that the change that had occurred in the period of centralisation had had a far-reaching effect on the local people, changing their behaviour and modes of production. And this was the case whether the nomadic groups had been structurally incorporated into the system of economic relations in the Malatya plain, or whether the new demands of the élites had encouraged the local development of new forms of animal husbandry. Only such a radical transformation of production methods and economic practices on the part of the people living in the area is able to explain why it was that, following the collapse of the centralised system, animal breeding and husbandry practices remained unchanged.

However, even though this evidence indicates that the people must have been involved, the impetus behind the drastic change in the direction of livestock rearing based on goats and above all sheep, abandoning or sharply curtailing the more domestic rearing of pigs, which traditionally had been an important activity in these areas ever since Neolithic times, must have been brought about by the new demands of the centralised economy, and whether or not this activity was managed from the centre, it must have been an important part of the political economy of the Arslantepe élites. This is shown by the fact that sheep and goats were one of the main resources used in the central redistribution economy in period VI A, and that it had emerged at the end of period VII. It is precisely the data gathered from Temple C and the rooms connected to it dating back to the end of period VII, which is to say, before a marked relationship with the pastoral groups in the surrounding Anatolian regions had become particularly important, that all points to an "internal" origin of the change, linked specifically to the gradual economic centralisation process and the increasing ability of the élites to manage food resources and primary production, conditioning their development in order to meet their own needs.

It is naturally very difficult, on the basis of the data available to us, to know whether the intervention in the staple economy on the part of the ruling classes went as far as direct management of certain activities and means of production (land and livestock) or whether they became the main clients for certain products, indirectly influencing their production. However, there was a major novelty in period VI A which is highly significant in this regard: the undoubted exponential growth of the central management of the labour force, evidenced from the regular redistribution of food in a non-cultic environment. This would suggest that unlike what probably occurred in the previous period, the élites were now responsible for managing certain activities, or parts of them, themselves. For food was not accumulated (and unless exchanged against other commodities or services it would have been difficult to hoard) for the sole purpose of feeding the élites and supporting their prestige-aimed activities, but was continuously redistributed to an increasingly large number of people in an environment that was increasingly detached from the symbolic-ceremonial sphere. It is therefore likely that whoever ruled over the public sphere had already begun to manage the means of production, more or less directly, which could only be made productive by employing an increasingly large number of people, and that this "business" was managed in a public environment as part of the transactions between the leaders and the population. At the same time, "private" production may have continued to feed some redistribution circuits, above all the prestige ones, in the form of either offerings in ceremonies or internal exchange of goods and "services" or investment to encourage important social relations, such as marriages, particularly between the members of the élite.

The same optimisation of barley farming suggested here might indicate that some lands may have been managed centrally, or that there must have been some forms of central intervention to encourage greater yields from the fields and higher productivity (irrigation? water management at various levels? relations with the pastoralist groups and the management of land rights?).

The consequences of centralisation in staple economy

It was precisely the parallel intensification of pastoralism in the zone that must have created problems for the farmers, because of the inevitable competition between them and the pastoralists over the limited area bordered by mountains, and also because of the change in the environmental conditions and the gradual impoverishment of the soil. For there is indirect evidence that suggests a possible beginning of environmental degradation in period VI A, which was confirmed and perhaps aggravated beginning in period VI B, following the collapse of the palace system.

Evidence of this in period VI A comes above all, as far as we know at the present time, from the livestock (chapter VI): for there was a general reduction in wildlife, in comparison with period VII (but this might also have been due to cultural and behavioural factors), accompanied by a decline in the variety of species. One particularly interesting fact is the reduction in the remains of brown bear and, to a lesser degree, red deer, both of which live in forests and woodlands and were widely present throughout the region of Malatya and Elazig. The second indication is the increasingly frequent presence of the hare, indicating the opening up of the landscape. In both cases, the information available suggests that there must have been deforestation, perhaps linked to the need to extend the farmlands, and also due to "intensive grazing by small ruminants" (chapter VI), i.e. an increase in sheep/goat rearing.

Evidence of increased deforestation accompanied perhaps by the beginnings of a more arid climate, is corroborated by the gradual disappearance of pinewood and alder wood in the most recently constructed buildings in the palace complex, followed by their total disappearance in the next period (chapter IV. 2): this timber is very suitable indeed for monumental architecture because of the length of the tree trunks and it had been widely used in Temple B and in the innermost section of the corridor (A796), which both constitute the earliest sector of the palace complex (see chapters II and III.2); it was also used in what was probably a private elite building, A907-A915, which, having been built immediately on top of Temple C, might also have belonged to an initial VI A phase. Pine and alder trunks were almost non-existent, on the other hand, in the other sectors of the palace (stores, the most external parts of the corridor, the gate) that were built later, though all parts were in use simultaneously. Both pine and alder, lastly, were totally absent in the following period VI B2 and throughout the whole of the third millennium (periods VI C and VI D) (chapter IV.2), which suggests that these tree species had become extinct in the area. The explanation of this disappearance may be also partly structural, linked in other words to the width of the rooms they had to cover (very long tree trunks for large rooms) and to the prestige of the buildings (pine wood was probably not available locally or in the Elazig area, as evidenced also from the pollen profiles, and had therefore to be brought in over a certain distance). But, while this may explain their main use in monumental structures, it is strange that this wood was abandoned when building the other parts of the palace which were also quite impressive, unless there was good reason for it, perhaps the greater difficulty of procuring it.

Alder wood thrives on humidity and is usually found around lakes and on river banks (chapter IV.2). The non-use of these trees might therefore be yet further evidence of gradual deforestation in the area, with the shrinkage of tree cover due partly to the intense exploitation of the land for both cropping and pastoralism, and partly also because of the beginning of a period of greater aridity which may have aggravated the degradation of the environment. For the moment these are only mere working hypotheses, and we are now going to conduct a

wide-ranging and multidisciplinary survey of the area in order to answer these questions more adequately.¹⁴

All the direct and indirect evidence nevertheless shows that there was a sharp intensification in primary production, both agriculture and animal husbandry, in the second half of the fourth millennium, showing that this was the main basis of the financing of the Arslantepe 'early state' system. Changed environmental conditions as the result of intensified production could be seen as a sign of this, and at the same time it may have been one of the constraints on the continual expansion of this production which was probably demanded by the expanding centralised system, becoming perhaps the cause, or one of the causes, of its crisis and eventual collapse.

But was the staple economy the sole economic basis and source of financing of the élites in Arslantepe at the end of the fourth millennium? Or were there also different kinds of resources in the centralised economic circuits in that form of archaic state?

CRAFT ACTIVITIES. WAS THERE "WEALTH FINANCE" AT ARSLANTEPE VI A?

Metallurgy

Metallurgy is the production sector that is most usually related to the development of forms of "wealth finance". And it is precisely the huge development of metallurgy in the fourth millennium throughout most of the Near East which, considering the rarity of ore sources, made some scholars emphasise the importance of trade, and of metal trade in particular, in these phases. It is from these premises that theories have emerged applying the concept of *world system* to the ancient world¹⁵ and the tendency to interpret the dense network of interregional relations of the Uruk world as the outcome of the need to trade in raw materials¹⁶. Even where the most extreme theories on 'centre-periphery' relations have been placed in doubt in many respects, when viewed as systemic relations of close interdependency between regional units at different levels of development and based on import-export patterns – such as Algaze's theories about the Uruk world –, the idea of trade as an economic activity of primary importance in the earliest Early State forms, and its paramount role in establishing interregional relations have driven most of the studies into the regional-level dynamics of interaction between the early societies in the Near East¹⁷. This view, in my opinion, seems to oversimplify a complex problem and improperly standardise formative, archaic, and more mature state systems, which were based on different ways of functioning of the economy and different social relations of production and power. Ekholm and Friedman, several years ago, had already shown up the complexity of the problem by distinguishing the specific features, not only formal but also substantive, of what they call 'early systems' based on the circulation of "prestige goods – obsidian, metals, etc. – necessary for the social transactions of all local kinship or corporate units"¹⁸. But I do not want to return here to theoretical and methodological questions that I have already examined in chapter I.

¹⁴ A team from Kiel University has started to cooperate with La Sapienza University archaeological expedition team in this research, beginning in 2010.

¹⁵ Frank, Gills 1993.

¹⁶ Algaze 1993; 2001; 2008.

¹⁷ Stein 1999; 2005.

¹⁸ Ekholm, Friedman 1993: 67.

What I would rather like to do now is to take up some of the important evidence that has emerged in this regard from the analysis of the Arslantepe data.

As we all know, this site has provided extraordinary evidence of highly developed and sophisticated metallurgy in the palace period, using polymetallic minerals and producing arsenical copper, lead, silver and to a lesser degree, gold¹⁹. But it is precisely the highly technological level reached at Arslantepe in this period which demonstrates that it was a craftsmanship with a long tradition behind it, which appears to be confirmed by the, albeit scarce, evidence of metallurgy in period VII. The characteristics of the ores and the slag found here and there in these levels, and of the composition of the metal objects themselves, showed a close linkage existing between the products of both periods (chapter XIII). This indicates that the development of this craft work must date back to at least period VII when direct relations with the Mesopotamian world were by no means particularly intense.

Another important aspect connected with this observation is the fact that the vast majority of the objects produced in period VI A were prestige items: the arsenical copper weapons themselves – 9 swords, 12 spearheads and a quadruple spiral plaque – some of which were also decorated with silver inlay²⁰, could also fall within this category, as could be an arsenical copper bowl with four nails used as a door socket, found in the internal corner of the entry threshold of a monumental building. In addition to these exceptional findings, there were also a few ornaments, beads and pins, made of various metals: arsenical copper, lead, silver and gold. But the percentage of the tools (small ones such as awls and chisels) is tiny in comparison with the luxury objects (only 13%).

The picture becomes even more interesting when compared with the metallurgy production of the following period VI B2. In this latter period, there is also evidence of metalworking (smelting) on the site, evidenced from the kilos of slag and large numbers of crucible fragments and ores found there. In the VI B2 village, the ratio between working tools and ornaments/prestige objects was reversed, with about 50% tools, whereas the ornaments, which were mainly pins, were only made of copper or copper with a low arsenic content. This shows that metallurgy continued to be practised quite intensively, with smelting carried out in the village, but its main purpose was to manufacture objects for daily use. Even pins, whose types were widespread throughout the whole of the Upper and Middle Euphrates Valley in this period, must have formed part of everyday clothing.

The extraordinary concentration of metal objects buried as funerary gifts in the Royal Tomb at Arslantepe further highlights the importance that metallurgy still had in the Malatya plain at the beginning of the third millennium, and its enduring technological sophistication even after the collapse of the economic centralisation system. Furthermore, the numerous beautifully made weapons found in the tomb demonstrate the continuity of a certain élite sector of this craft work from the previous period VI A (chapter XIII), and they also appear to be a category of objects which symbolically, and perhaps actually, demonstrated the role and the prestige of the leaders²¹.

The extraordinary metallurgical production in the palace period did not therefore seem to have originated in relation to some external demand for metal or metal products, but on the contrary in response to internal needs, and the high status persons may have used and displayed these objects to emphasise their personal prestige, perhaps also hoarding them to be used in

their own social transactions. None of the period VI A metal objects, except, perhaps, for the spearheads, whose typology will be widespread later in Eastern Anatolia, have any comparison with anything found on other contemporary sites, and this is usually the case for most of the prestige metal items belonging to the fourth and fifth millennia BC (take the case of the Ghassulian objects, for example).

A major change began to emerge perhaps with the use of metal for the production of weapons, which were both prestige objects and items to be used, in the sense they were actually employed in combat, but probably exclusively used by socially pre-eminent persons. And, as we have already seen, the use of these metal objects continued throughout time, even beyond the highly centralised late fourth millennium political and economic context and beyond the time of close relations with the Mesopotamian world. Indeed, the manufacture of sophisticated metal weapons at Arslantepe marked a significant change in the role played by the leaders and probably in the way in which they exercised authority, probably in connection with the starting crisis and possible increasing conflicts. Such a period of growing difficulties is also evidenced from the recognisable changes, already referred to, in the life of the palace at the end of its history (chapters II e III.2): a decline in the importance of symbolic-ceremonial aspects and the increased defences to protect access to the monumental complex.

To conclude, we have no indication to show that it was external demand that encouraged metallurgy production, conversely, the archaeological data analysed so far tend to show the opposite. Metal does not even seem to have become a means of hoarding wealth, considering that there is no trace of this, at least at the present state of our knowledge, in the VI A palace complex, and also considering that vast numbers of objects, not only symbolic but also in common use, such as axes, chisels and gouges, which taken as a whole make up a very large quantity of metal, were obliterated by burying them in the tomb, albeit an élite tomb, in the following period VI B, at a time in which this industry was still in its beginnings and supplies difficult to acquire. This product certainly had a high symbolic value and this perhaps prevailed over its use value.

The final important aspect to be noted regarding the question of the role of metal as the dominant reason for the intensive relations between Arslantepe, Eastern Anatolia, and the Late Uruk Mesopotamian world, is its origins and circulation as a raw material.

The numerous chemical and physical analyses conducted, using various different methodologies, on both the Arslantepe period VI A metals and those found in the Royal Tomb have shown that the minerals used came probably from both the regions south of the Caucasus and the south-eastern areas of the Black Sea²². These ores which are recognisable by a number of typical impurities (such as nickel, antimony and others) in the finished objects, seem to have been in wide circulation throughout the whole of the northern band of Eastern Anatolia, the Upper Euphrates and areas south of the Caucasus but do not seem to have gone beyond the top of the Taurus range, beyond Hassek Höyük. We therefore have no documentation to show that at least this type of Anatolian copper had substantially reached Mesopotamia; this removes any further support for the interpretation according to which Arslantepe's growth at the end of the fourth millennium was due to its function as a trade mediator, and the metal trade in particular.

It is possible that silver and other metals reached Mesopotamia from Anatolia; but copper, and in particular the impure copper extracted from polymetallic ores was the most commonly

¹⁹ Palmieri A.M. *et al.* 1993; 1999.

²⁰ Frangipane, Palmieri 1983a; chapter XIII, present volume.

²¹ Frangipane *et al.* 2001; Hauptmann A. *et al.* 2002.

²² Hauptmann, Palmieri 2000; Hauptmann A. *et al.* 2002; Palmieri A.M. *et al.* 1998a; 1999. Different were conversely the everyday metal objects produced in period VI B2, which seem to have used another type of copper ores – perhaps originating closer to home? (Frangipane, Palmieri 1994-95).

used metal in the 4th millennium, and it appears to have mainly circulated in Anatolian circuits. Trade certainly existed, and certainly the central organisation may have improved the conditions of trade by the tighter management of interregional relations, fostering its development. And copper may have travelled as well. But this does not mean that the control of the trade networks were at the heart of the economic development and the political power of the early élites. Such an interpretation would rather appear to be the result of a preconception based on categories and concepts stressing the basic role of the “mercantile” economy in modernist terms, applied to a world which had its own *modi operandi* which we are now just beginning to better understand.

Weaving

The evidence of weaving activities is obviously less substantial. Various types of weaving tools (mainly loom weights and spindle-whorls, but also a few needles and even fewer spools, shuttles and combs) have been found belonging to periods VII, VI A and VI B2 (chapter XIV)²³. But what interests us here is the fact that they were only found in domestic environments, both common and élite, in each of these three periods. The only exception was the discovery of three spindle-whorls in the side access room to Temple A, A 46, where various routine working activities were carried out in the final phase of use of the building. If we look at the location of the weaving tools, there does not seem to have been any linkage with the main activities performed in the palace.

Two other interesting considerations have emerged from the study carried out on these tools. The first one is that, even though the weaving system or the type of loom must have changed between period VII and VI A (the loom weights in period VII were made of unbaked clay and were hemispherical, while in period VI A they were made of baked clay and were cone-shaped), the fabrics produced must have basically been coarse fabrics in both periods (a little more varied in period VI A: one single example of a different type of loom weight, perhaps more suitable for looms producing finer fabrics, was found with the others in room A933, a kind of kitchen in one of the private élite buildings north of the palace). According to these data, the fabrics produced in both the formative phase of period VII and when centralisation was at its height in period VI A, were mainly fabrics for common use.

Almost exclusively spindle-whorls were found in the period VI B2 village houses, but a carefully and expert study conducted on them²⁴ found that it was in this period that a wider range of fabrics, including fine-woven cloth, was produced.

This consideration brings us to the second interesting point, relating to the probable change in the fibres used at the beginning of the third millennium, which may have already begun in period VI A. For whereas the spindle-whorls in period VII were usually large and made of bone (29 out of 42 = 69%), and were therefore light, the period VI B2 spindle-whorls were smaller and made of various materials, the majority made of baked clay and stone (four of bone, four of clay and four of stone), making the spindles heavier. These different features have been linked by Eva Andersson, Marie-Louise Nosch and a team of experts from Copenhagen University to the use of different fibres: vegetable fibres in the case of the large and light (bone) spindle-whorls which dominated in period VII; animal fibres (wool) in the case of the smaller and heavier spindle-whorls which dominated in

²³ Frangipane *et al.* 2009.

²⁴ Frangipane *et al.* 2009.

period VI B2. It is interesting to see that the spindles from period VI A, while being small in number, seemed much similar to the period VII pattern (five of bone, one of clay and one of stone), albeit with a slightly reduced proportion of bone spindles (see chapter XIV, fig. XIV.2).

It is therefore likely that one of the effects of focusing more on ovines, and on sheep in particular, at the beginning of the third millennium may have been an increased production of wool. The greater availability of this raw material may have encouraged a more widespread use of this fibre, which may have become more sought-after also on account of its quality, making it possible to produce a variety of fabrics in terms of their quality and colour, as well as being warmer in the cold weather in an area like Malatya where the winters are harsh.

In the light of this information it is more difficult to argue that the demand for wool within the centralised system conditioned the development of the specialised raising of sheep at the end of the fourth millennium. Valuable fabrics seem to have not been made and neither is there evidence of any large-scale production, nor documentation of this activity being performed in any way in the centralised economy of the palace. It is of course possible, if not probable, that the extraordinary increase in sheep raising in period VI A was not only to meet the many demands mentioned already, but also to meet a demand for wool which was perhaps becoming established as the pastoralist economy developed. It is certainly possible that wool entered the fabric production circuits at a certain moment in time, also during the palace period, but it does not seem to have conditioned this activity to the extent of leaving behind any clear and unmistakable evidence of a marked change in the textile craft sector in the remains of the material culture. In other words, we are possibly looking at an incipient phase rather than one of full development of wool weaving in an “industrial” form.

Here again, and even more so than in the case of metallurgy, the archaeological evidence does not show that there was any particular interest or attention towards this sector of craft production or its artefacts on the part of the élites, and in particular the ruling élites. Since we do not have, of course, any finished products in evidence, but only the tools for making them and indirect clues and incomplete pointers to their quality, we cannot say anything at all about whether or not fabrics may have been used in the prestige circuits, and if anything, the little data we have seems to point in the opposite direction.

CONCLUDING REMARKS

In light of the foregoing, we can now summarise a number of fundamental points. With the major development of the palace and the system connected to it at the end of the fourth millennium BC, the control over the circulation of foodstuffs in prestige circuits, and perhaps also the control over occasional labour *corvées* as part of the same circuits, exercised through ideological mediation in ceremonial contexts (Temple C), was replaced by more direct and “secular” control of labour and production, based on the establishment of standards and rules: goods and services were “remunerated” in the form of regular distributions of food, and were strictly regulated administratively.

The prestige circuits, which mainly referred to the circulation of food in the form of ceremonial redistributions and “banquets” or various forms of commensality, headed by socially prominent individuals, seem to have been the only explicit way in which the élites managed the economy and social relations in period VII. These transactions with a high social value took place in specific areas that were clearly distinct from the places where the élites resided, just as the tasks and activities performed there were clearly distinct.

In period VI A, whereas some of these circuits seem to have been retained, but with more reserved and élite environments and spheres of action as well as with a weaker and less clear distinction between the public and private environments (Temple B and the élite residences), they were joined by new spheres and forms of interaction between the élites and the population shifted onto a more specifically and explicitly economic plane involving even larger numbers of people. In my opinion this created a public economy sector and gave birth to a political economy of the élites who not only centralised and redistributed foodstuffs but actually invested it in labour and may even have begun to take over the direct management of some means of production (probably land and livestock) and the related production activities. The vastness and the complexity of the relations and transactions that existed in these new public circuits, now separated from the ideological-ceremonial sphere (which nevertheless remained active and played an important part in legitimising power) made it necessary to form new social classes specialising in the administrative control of the circulation of goods (the bureaucrats). In other words the social categories expanded and new hierarchical levels were created, making society more complex.

Even though this change was important and brought with it a change in social relations of production and in the way political authority was exercised, the foundations of the political economy of these élites continued to be essentially the control and management of staple products, namely food, which in my opinion continued to be both really and ideologically the basis of "wealth" in these societies in the whole Mesopotamian world. The same concept of "abundance" expressed in the Mesopotamian artistic representations of the Late Uruk period, both in the iconography of seals and in the low-relief decoration of alabaster bowls and vases (see the well-known 'Warka Vase'), refers to domesticated animals and plants, to their production, reproduction, conservation and consumption in public environments²⁵. And it was through this control over food, which means control over the work and the life of individual people, that political authority continued to be exercised, continuously strengthening the prestige and power over those in charge of food management.

The analysis of the elements at our disposal confirms the impression mentioned at the beginning of this chapter that Arslantepe VI A was a kind of intermediate system between the earliest forms of the establishment of power in which the accumulation and redistribution of food took place in special circuits designed to entrench and consolidate the prestige of the emerging élites who managed this circulation process, on the one hand, and, on the other, a more mature system in which the position of prestige and power which these élites had acquired enabled them to exercise more direct control over the production of the food, and hence over labour. The system that we recognise at Arslantepe in the period of palace centralisation is, in my opinion, a system which still very closely links the public sphere and the private élite sphere, like the more archaic forms (élite redistribution circuits in the temples and perhaps also in the houses of high status persons), but at the same time developed a distinct economic sector which managed staple economic activities through labour force use (daily non-ceremonial redistribution circuits), moving in the direction of the gradual "proletarianisation" of an increasingly larger section of the population.

Handicraft and trade, which also may have developed to greater extent in this period thanks to the central organisation and the demand for luxury goods entering the prestige circuits reserved for the élites, do not seem to have been the object of direct economic interest in this management and in the political economy run by the Arslantepe élites.

This system, which was very similar to all the other contemporary political entities in the Mesopotamian world²⁶, was unable to expand at Arslantepe as it would have needed to do for its own survival. This may have been due to the numerous external constraints of which we have already spoken – highly productive agricultural land but limited in size, pastoralist communities intensively frequenting the area and conflicts over the management of the territory –, but, according to the data we have analysed, it may also have been brought about by the overharvesting and the overexploitation of primary resources, croplands and range lands, resulting in deforestation and environmental degradation. These data also help not only to identify possible elements for explaining the crisis, but also to show more clearly the huge commitment deployed by the central institutions to exploit primary resources, seeking to gradually increase production by exercising ever more effective control over the labour force.

But were also the social conditions at Arslantepe and in the Malatya plain (the weak basic hierarchical structure of society, the lack of urbanisation), in addition to the environmental, economic, and political reasons, that may have contributed to lead to the crisis and the collapse of this system, which, in other environments, was subsequently to evolve towards more mature forms of the state and a broader control over the economy, which then would also incorporate craft products and trade.

²⁵ Winter 2007.

²⁶ Liverani 1998.