NEW SYMBOLS OF A NEW POWER IN A “ROYAL” TOMB FROM 3 000 BC ARSLANTEPE, MALATYA (TURKEY)

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Abstract : *The paper presents the extraordinary discovery at Arslantepe, on the borderline of the large period VI A public area, of an isolated burial from the very beginning of the 3rd millennium (period VI B) with imposing size and construction features, complex ritual, and very rich funerary gifts, which seems to be ascribable to a high-status person. The high rank of the man buried in this tomb was also stressed by the presence of four adolescents probably sacrificed on the stone slabs covering the cist grave with the main personage. Various specialists present the results of their investigations (typological connections, anthropological and paleopathological features, metal composition, geological provenance of the stone slabs, identification of wood remains and C¹⁴ date) converging in an interdisciplinary study which allows to debate the cultural and ethnic identity of the deceased, the external relationships evidenced by the tomb, its cultural/historical significance in the development of the site. The unusual characteristics of this tomb, its dating to the period immediately after the collapse of the Mesopotamian-type palatial system, the presence in it of both handmade red-black Transcaucasian pottery and light-coloured wheel-made pottery in the local VI A tradition, open the debate on the role the Transcaucasian component may have played both in the collapse of the powerful religious/administrative 4th millennium centre at Arslantepe and in the radical changes that took place in the political and socio-economic systems of the Eastern Anatolian communities at the beginning of the third millennium.*

Résumé : *Cet article rend compte de l'extraordinaire découverte d'une tombe isolée faite à Arslantepe, en bordure de la grande aire publique (période VI A). Cette tombe qui peut être datée du tout début du 3^e millénaire (période VI B) présente des dimensions imposantes, des caractères de construction qui lui sont propres, le témoignage d'un rituel complexe, des offrandes funéraires très riches qui semblent devoir être faites à un personnage de haut rang. Le statut de l'homme enterré dans cette tombe est renforcé par la présence de quatre adolescents probablement sacrifiés sur les dalles en pierre qui couvrent la tombe en ciste où a pris place le principal personnage. Divers spécialistes donnent ici les résultats de leurs analyses (relations typologiques du matériel, caractères anthropologiques et paléopathologiques, composition du métal, provenance géologique des dalles de pierre, identification des restes de bois ainsi que datations C¹⁴) ; cette recherche interdisciplinaire a permis de lancer le débat sur l'identité culturelle et ethnique du défunt, les relations extérieures que met en évidence le matériel de la tombe et sa signification tant culturelle qu'historique dans le développement que connaît le site. Le caractère inhabituel de cette tombe, sa datation qui permet de la situer lors de la période qui suit immédiatement la chute du système palatial de type mésopotamien, la présence dans le matériel à la fois de poterie rouge-noire de Transcaucasie et de poterie claire faite au tour dans la tradition de la poterie locale de la période VI A, ouvre le débat sur le rôle qu'a pu jouer la composante transcaucasienne et dans la chute du puissant centre tant religieux qu'administratif que représentait Arslantépé au IV^e millénaire et dans les changements radicaux que l'on observe dans les systèmes politiques et socio-économiques des communautés d'Anatolie orientale au début du 3^e millénaire.*

Key-Words : *Eastern Anatolia, Arslantepe, Royal tomb, Beginning of 3rd millennium, Mesopotamian-Transcaucasian connections, Political change.*

Mots Clefs : *Anatolie orientale, Arslantépé, Tombe royale, Début du 3^e millénaire, Relations mésopotamiennes-transcausasiennes, Changement politique.*

THE FINDING OF A "ROYAL" TOMB FROM 3 000 BC AS A MARKER OF RADICAL CHANGES IN THE POLITICAL STRUCTURES AT ARSLANTEPE (M. FRANGIPANE)¹

INTRODUCTION

Until recently, the collapse of the palatial complex of period VI A at the end of the 4th millennium BC and the total disappearance of the Mesopotamian-type early state system at Arslantepe was thought to have been followed by a return to forms of rural and country life, initially marked by such traumatic events as the arrival on the site of nomadic groups of Transcaucasian origin which, over the course of a short period (period VI B1, roughly 3 000-2 900 BC), repeatedly settled on the area where the abandoned palace and the temples had originally stood². At least two levels of wattle and daub structures and rows of post-holes of different dimensions dotted around the large open spaces, perhaps partly fenced-in for the stabling of livestock, were built on the uneven surfaces following the collapse of the large monumental VI A buildings, after having previously levelled these surfaces and filled the wide ditches and holes sunk into the ruins. Evidence of the presumed seasonal nature of these occupations was the flimsy nature of the dwellings, the very large number of post-holes, which were obviously sunk time and time again in the same areas, and a number of peculiar features of the deposit, such as the presence of numerous small holes filled with fine soil on the occupied areas, probably the remains of plants that may have grown there when the area was abandoned, and subsequently covered by soil thrown down to create a level surface and prepare for the new settlement. Furthermore, both the construction techniques (wattle and daub), which were alien to the local mud-brick tradition, and the exclusive presence of characteristic handmade red-black burnished pottery and the resultant temporary disappearance of the local wheel-made fabrics, suggest that groups of transhumant pastoralists of Transcaucasian origin may have arrived on the site, probably occupying the area left abandoned following the collapse of the monumental buildings of the Late Uruk period (period VI A).

1. The plans and drawings of the tomb structure were made by Corrado Alvaro, the drawings of the objects by Tiziana D'Este, the photographs by Roberto Ceccacci. I would like to thank C. Alvaro and T. D'Este for their invaluable assistance in the preparation of the illustrations, and Alice Siracusano who put finishing touches to some of the drawings.

2. FRANGIPANE and PALMIERI 1983b ; FRANGIPANE, 1998a.

The events recorded archaeologically at Arslantepe with the emergence of Transcaucasian groups coinciding with the final collapse of the 4th millennium centralised system have raised problems and essential questions which must be answered if we are to comprehend the radical structural changes that occurred in the communities of the northern Mesopotamian periphery following the initial establishment of economic and political centralisation. The modes and types of Transcaucasian presence on the site, the role they played in the collapse of the powerful religious/administrative 4th millennium centre, the influence of this new cultural, social and ethnic component on the later radical changes that occurred at Arslantepe throughout the third millennium, the dynamics of relations between the nomadic groups and the local sedentary populations during the various phases of this intense period of interaction – all these were problems to which there was no easy solution, and yet they were very important for an understanding of the "crisis" in the 4th millennium power structures at the very time they seem to have reached their apotheosis.

The Transcaucasian phenomenon seemed to have been a passing event, limited to a short period at the very beginning of the third millennium BC (period VI B1), after which the whole area under investigation was occupied by a village made of small mud brick houses, with one or two rooms, full of charred cereals and pulses and with evidence of various domestic activities (period VI B2), and when pottery production once again returned to the Late Uruk tradition, with plain simple ware and reserved slip jars³. Indeed, the latter now fully shared, even more than period VI A, the repertoire of Uruk origin that was present in Early Bronze I throughout the Upper Euphrates Valley. The previous function of Arslantepe as a great administrative and religious centre however seemed to have been lost for ever. It was assumed that there had been a drastic interruption in the process of developing the centralised institutions and the palatial system, and the kind of return to forms of rural life without any real power structures. This prospect was in keeping with the existing documentation on Early Bronze I throughout the whole of the northern Euphrates area.

But in 1996 an extraordinary discovery began to shed doubt on this view of things, and raised very serious questions. On the western edge of the mound, on the borderline of the large period VI A public zone, in an area without any architectural structures and with a deposit made up of filling layers levelling out the ground over the Chalcolithic building

3. FRANGIPANE and PALMIERI, 1983b ; FRANGIPANE, 2000.

Fig. 1 : Arslantepe, area SW : Location of the "royal" tomb S 150-T 1 with respect to period VII and period VI A Late Chalcolithic public buildings (Building XXIX and Building IV-Temples A-B respectively).

levels (fig. 1), an isolated burial was discovered, with very imposing construction features and extraordinarily rich funerary gifts, which is placed stratigraphically between the end of period VI A and the beginning of period VI B2 (figs 1 and 2) (see Di Nocera below), and which may be interpreted as a kind of "royal tomb"⁴. The presence of this tomb with its rich

funerary gifts, including both handmade red-black Transcaucasian-type pottery and light-coloured wheel-made pottery, sometimes with reserved slip decoration, in the local VI A tradition, shed fresh light on the issue of the nature of power and authority at the beginning of the third millennium after the collapse of the centralised Mesopotamian-type structures in the regions north of the Taurus.

4. FRANGIPANE, 1998b, 2001.

Fig. 2 : Arslantepe, area SW : Location of the "royal" tomb S 150-T 1 with respect to period VI B1 and VI B2 structures.

THE 3 000 BC "ROYAL" TOMB

The tomb was in an isolated position on the western edge of the mound, comprising a large pseudo-rectangular pit with rounded corners (S 150), and with a rectangular cist grave sunk into the bottom (T1), completely lined with large stone slabs (figs 3 and 4). Inside the cist was an adult male (H-225) (see Schultz and Schultz below) with an extremely rich set of furnishings made of metal objects – 64 items in all, of which 25 were made of copper or arsenical copper (9 spearheads, 2 swords, 2 daggers, 4 axes, 2 chisels, 3 gouges, 1 knife, 2 vessels); 7 were made of pure silver (2 pins, 1 hair spiral, 3 large beads probably belonging to the same necklace, and other necklace of 65 small beads); 28 were made of a very

Fig. 3 : Arslantepe. The royal tomb T 1 at the bottom of the pit (S 150).

Fig. 4 : *Arslantepe. View of the interior of the cist grave T 1.*

unusual copper-silver alloy (1 dagger, 1 belt, 7 spirals, 4 rings and 15 arm-rings); and 4 were made of gold (3 beads and 1 hair spiral). The metal items were mostly found in a hoard behind the back of the deceased (fig. 5). Exceptions to this were a number of ornaments that were probably originally worn on the body, such as the two silver quadruple spiral pins found close to the shoulder (fig. 6 : y17 and y18 ; fig. 19 : 19-20) and the two necklaces (fig. 6 : y1), both near the head, the first made entirely of small silver beads, while the second was composed not only of copper, silver and gold beads but also cornelian and rock crystal items. More than 100 small limestone cylindrical beads spread all around the head and chest could have been part of the decoration of a dress or a veil. There were also traces of fabric all around the grave, both near the body and above and below the objects, suggesting that there might have been a sheet or a shroud wrapped around or

covering the body and its funerary furnishings. These had been placed on a wooden board, of which numerous traces are still preserved, making it possible to identify the type of wood (see Sadori below). The only other ornaments outside the hoard of metals was a group of 5 bracelets, 6 spirals and 2 copper-silver alloy rings in the NE corner of the cist (y20), and one isolated ring made of the same material in the SE corner (y15) (fig. 6).

Seven of the 9 spearheads in the funerary offerings had also been lined up along the stone walls of the tomb (figs 7 and 8), on the eastern side of it, all around the area of the head of the deceased (fig. 6 : y36, y37, y39, y40, y41, y42, y43 = fig. 18 : 3, 1, 2, 5, 10, 4, 6). The only two decorated ones (y37 and y39) were found among these lances, one (y39) with herring-bone motifs covering the whole of the surface of the octagonal butt, and one (y37) with a typical motif made up of small inlaid silver triangles in the entry point of the blade, which was absolutely identical to the decoration of the three swords found in building III belonging to the period VI A palatial complex.

There were also numerous vases in the tomb. The large ones, all simple ware like necked jars (six, of which three had reserved slip decoration) (fig. 15 : 9-13, 15), had been placed at the feet of the deceased, where there was also found one single example of a red-black burnished ware bowl (W18, fig. 15 : 3). The other examples of handmade red-black ware, which were only small vessels, three bowls and two small jars (fig. 15 : 1-2, 4-6), were concentrated in the eastern part of the cist (fig. 6) : the bowls in the NE corner (W16-17, W19), where there is also an uncommon type of red-slipped jar with a three-rib motif decoration on the shoulder (W15) (fig. 15 : 14) and a calcite bowl (y16) (fig. 15 : 8) ; the two small jars were, one in the NE corner (W20) (fig. 15 : 2), together with a small plain simple jar (figs 7 ; 15 : 7), the other (W21) (fig. 15 : 1) close to the dead thorax, respectively. The different function of large wheel-made jars and small black burnished vessels, already evident from their different sizes, is confirmed by their different position in relation to the dead corpse, with the jars probably used for storing food-stuff, placed at the feet of the man buried in the cist for his hereafter "life", and the small red-black vessels used as eating and drinking service.

The cist had been closed over by two large stone slabs on which two adolescents had been placed, a girl (H-224) and probably a boy (only the upper half of the body remains) (H-223) (figs 9-10) (see Schultz and Schultz below). Each of them was wearing two copper-silver hair spirals and two copper pins,

Fig. 6 : Arslantepe, T 1, Location of red-black vessels and metal objects not included in the main board.

Fig. 5 : Arslantepe, Plan of the interior of the cist grave T 1 with materials in situ.

Fig. 7 : *Arslantepe, T 1. SE corner of the cist.*

Fig. 8 : *Arslantepe, T 1. NE corner of the cist.*

Fig. 9 : *Arslantepe. Pit S 150 with the four individuals buried on the top of the cist grave.*

and on their heads they had a copper-silver alloy diadem decorated by the same technique and in the same style as the belt found in the funerary objects of the main personage (figs 11 ; 19 : 1-10). The diadem was probably resting on a veil, traces of which have remained inside the diadem and all around it (fig. 12). Traces of textile were also found on the pins around which thread had been wound, perhaps to sew up the clothes, as in the case of the high status personage, whose clothes must have also been decorated with masses of small limestone cylindrical beads. The clothing of the two youths buried on the covering slab of the cist suggests that they must have been closely related, perhaps members of the family, to the deceased. This makes it all the more surprising to find that

Fig. 10 : *Arslantepe. Plan of the upper burials, S 150, with the four individuals killed on the "royal" cist tomb.*

both of them showed signs of having been subjected to violence a few days before their death (see Schultz and Schultz below).

The position of the bodies of these two individuals also indicates that they had not been laid out in the normal way, but that they must have died in a state of suffering (fig. 13) (Schultz and Schultz below).

A similar fate must also befallen two other young women (H-221, H-222) found in unnatural positions (one of whom was also without the lower part of the body) on the western side of the covering slabs of the cist, lying at the feet of the two persons with diadems, without any funerary gifts, which may indicate that they were of an inferior rank.

Fig. 11 : Arslantepe. Detail of the diadem and ornaments of H 224 (S 150).

Fig. 12 : Arslantepe. Traces of textile on the inner side of H 224 diadem.

The deaths of the four adolescents, who must have been subjected to violence before they died, seem to have been linked to some sacrificial rite performed on the tomb of the important individual buried in the cist, probably a chief or a “king”, and certainly a man of high rank⁵.

5. These different terms have deliberately been used in a non-specific sense. There is in fact no evidence to suggest either the political and social function of the man buried in the tomb or his ethnic/cultural origin. He was certainly a person of high rank but it would only be possible to define his role if his ethnic and social origin could be established (was he a member of the old palace/temple élite of period VI A or a head of the newly arrived pastoralist groups?).

Fig. 13 : Arslantepe. Schematic reconstruction of the position of corpses and vessels in S 150.

It is interesting to note that the vessels among the funerary gifts accompanying these four individuals were also of the same two types that were found in the cist : wheel-made necked jars also linked to the cultural tradition of Arslantepe period VI A, and Anatolian-type handmade red-black burnished vessels. But whereas the black burnished vessels inside the cist only comprised bowls and small jars (fig. 15 : 1-6), the two categories of red-black ware already present in the repertoire of period VI A, the red-black ware in the upper part of the tomb associated with the sacrificed adolescents consisted of large jars with high and wide cylindrical necks, clearly of a Transcaucasian type (fig. 14 : 1-4). Furthermore, there is also a particular location of the funerary gifts of the upper burials (S 150) where the three wheel-made necked jars, one of which is with reserved slip decoration (fig. 14 : 5-7), were directly associated with the two individuals concerned with ornaments lying on the cist stone slabs, while the four red-black burnished jars had been set out in pairs outside the area of the cist, along the northern edge of the pit (fig. 13).

Fig. 14 : Arslantepe. Vessels in the upper part of the royal tomb S 150.

It is difficult to imagine what dramatic events may have caused or accompanied the deaths of this high-ranking person and the youths who were probably killed on his tomb, just as it is difficult to imagine the identity of the youths, dressed like the chief and sacrificed to his death. However, the joint presence of local cultural elements in the 'Mesopotamian' tradition with elements of the new Transcaucasian culture indicates that the interaction between these two worlds must have become very intense at the beginning of the third millennium, as evidenced clearly from the definitive collapse of the early palatial system and the occupation by Transcaucasian pastoralists on the ruins of the 4th millennium public buildings. The "royal" tomb at Arslantepe perhaps exhibits two aspects : on the one hand it contains elements of both cultures symbolically placed side by side, on the other, there is a different positioning of the pottery in the local VI A tradition associated with high-ranking personages (decorated with jewels

and diadems) and the Transcaucasian pottery placed around the edges of the pit, perhaps associated with the two girls who were without funerary gifts.

THE OBJECTS BURIED IN THE TOMB : CHRONOLOGY AND CULTURAL RELATIONS

The chronology of the tomb according to its stratigraphic position and C¹⁴ date (see below) is fully confirmed by the typological features of the funerary items. The pottery vessels exhibited conservative features linking them to the production of period VI A, as well as new aesthetic and typological features that were to appear and become fully established in period VI B2. Some of the wheel-made jars, for example, have a broad body and sometimes high shoulders that are typical of the jars of period VI A (figs 14 : 5, 7 ; 15 : 13, 15), while others have ovoid more elongated bodies (fig. 15 : 10), more widespread in period VI B2 and in general in EB I Upper Euphrates contexts. In the same way some of the jars have the vertical simple reserved slip, which in one case is also bordered by a line of impressions on the shoulder (fig. 15 : 11) which is typical of the VI A examples and almost absent in period VI B2, while together with these is also a jar with a complex reserved slip (fig. 15 : 9), typical of period VI B2. The fact that new and old typological features coexist is also confirmed by the two red black burnished small jars found inside the cist : one of these (fig. 15 : 1) still shows the slightly conical neck and a markedly outflared lip, both of which are typical traits of the red-black small jars of period VI A, while the other one (fig. 15 : 2) had a broad and cylindrical neck with only a suggestion of a lip, like the Transcaucasian jars of period VI B1.

Another important early feature can be found in the shape of the spearheads, which are practically identical to those which form part of the group of weapons found in Building III of period VI A⁶, in terms of both the size and the general typology, as well as in the details of the individual constituent elements (blade, butt, tang). The variability of the butts which were both circular and oval polygonal shaped, and the fact that in addition to the most common blades with central ridges and sinuous outlines, there were also two specimens with blades having slightly convex edges, thicker in the centre, and with a slightly broader tip (fig. 18 : 4-5), fully reflect the typological variability found in the spears from period VI A⁷. The

6. FRANGIPANE and PALMIERI, 1983a.

7. FRANGIPANE and PALMIERI, 1983a : fig. 58-61.

Fig. 15 : *Vessels inside the cist grave.*

Fig. 16 : *The pottery furnishing in the upper part of the royal tomb S 150.*

decoration using inlaid silver triangles on one of the spears (figs 18 : 1 ; 23), which is identical to the one on three of the swords found in the weapon assemblage in the oldest palatial complex, is further confirmation of the very close relationship existing between the metals in the tomb and the group of weapons from VI A, which is also found in the production technology (see Palmieri, Hauptmann, below).

Even though the type of butted spears with leaf-shaped blades with sinuous outlines and square-sectioned straight tangs is well-documented as early as Early Bronze I in the Upper Euphrates, generally in burials – Hassek Höyük, the necropolis at Birecik, Carchemish and Kara Hassan⁸ –, the spearheads from Arslantepe are overall longer, and above all the butt is longer in relation to the blade. This feature, which is common to the spears in the VI A palace and the spears found in the royal tomb, could be a specific characteristic of Arslantepe. But it is likely that it is also an indicator of greater antiquity. Similar spears are documented in Transcaucasia⁹, but unfortunately we do not have any firm data on their chronology.

Relations with the Transcaucasian world are very clearly indicated from other classes of objects. Very close similarities exist in all the ornamental objects, from the twin spiral pins (fig. 19 : 2, 4-5), of which the four-spiral silver pins are a sophisticated variation (fig. 19 : 19-20), the large number of bracelets, rings and spirals (figs 19 : 11-18, 22-23 ; 25), diadems decorated in relief placed on the heads of the two youths on the cist (fig. 19 : 1, 10), and what is presumably a belt

Fig. 17 : *The vessels in the cist grave.*

deposited with the deceased chief (fig. 19 : 21) using the same shape and decoration found on the diadems, but far wider and longer (about 60 cm in length). The shape of these foils, the type of fastener using small laces tied to three eyelets at each end, and the decoration, are extremely similar to a number of Transcaucasian examples, particularly one from Kvatchelebi, in which there is a repetition even of the metope iconography with its linear and wavy motifs¹⁰ (fig. 20). The loop-headed pin (fig. 19 : 3) also shows similarities, even though they are more generic, with this Transcaucasian metallurgy, as does the presence of a dagger with handle and blade cast together (fig. 18 : 14).

The instruments – flat axes, chisels and gouges (figs 21, 22) – are fairly widespread, while the two metal vessels (fig. 21 : 10-11) seem to be unique in their typology, even though it must be considered that metal containers have very rarely been found for this period.

Fig. 20 : *Decorated diadem from Kvatchelebi (from Kushnareva, Chubinishvili 1970, fig. 43 : 31).*

8. BEHM-BLANCKE, 1984 ; SERTOK and ERGEÇ, 1999 ; WOOLLEY and BARNETT, 1952 ; WOOLLEY, 1914.

9. KUSHNAREVA and CHUBINISHVILI, 1970 : fig. 42 : 4.

10. *Ibid.*, 1970 : fig. 43 : 31.

Fig. 18 : *Arslantepe. The weapons in the cist grave T I.*

Fig. 19 : Arslantepe. The copper and copper-silver alloy ornaments buried with the two adolescents on the stone slabs in S 150 (1-10) : copper-silver alloy, silver (19-20) and gold (14) ornaments with the main personage in the cist T 1.

Fig. 21 : *Arslantepe. Metal tools and vessels from the cist grave T 1.*

Fig. 22 : *Arslantepe. Copper axes from the cist grave T 1.*

Fig. 23 : *Arslantepe. The silver-inlay decorated spearhead, a sword and a copper dagger from the cist grave T 1.*

Fig. 24 : *Arslantepe. The copper-silver dagger found in the cist grave T 1.*

Fig. 25 : *Arslantepe. Copper-silver, silver and gold arm-rings, rings and spirals from the cist grave T 1.*

The furnishings in the tomb as a whole seem to indicate an apparent contrast between the dominance of Transcaucasian cultural elements in metallurgical production and the higher prestige which seems to have been given to local traditional pottery with very close Mesopotamian links. The very large number, and their arrangement, of the wheel-made necked jars, which seem to be associated with the high-ranking personage buried in the cist T1 and with the two persons bearing the diadem and other ornaments on top of it may in fact suggest that this production had a highly symbolic value, in contrast to the Kura-Araxes type red-black jars which were placed more marginally around the edges of the pit, without any direct connection with any of the individuals buried there. The presence of red-black burnished ware inside the cist were,

in fact, only bowls and small jars which were already present in the pottery repertoire of period VI A. The links with Transcaucasian metallurgy, on the other hand, were already present at the end of the 4th millennium, as evidenced from the similarity with the group of period VI A metal weapons, which might indicate very close relations with the environment of Northeastern Anatolia in relation for the production and perhaps also the supply of metal or of certain categories of metal objects in particular (see Palmieri, Hauptmann below).

The complex combination of different cultural components in the tomb suggests different possible interpretations of the cultural and ethnic identity of the deceased and the individuals accompanying him, particularly since the burial coincided with a radical change that occurred in society and the

organisation of government at Arslantepe, which is evidenced very clearly in the sequence of the site¹¹. The deceased might have been a foreign (Transcaucasian ?) leader buried on the edges of the huge public area of period VI A which was still remembered at the time. In that case the leader would have retained the link with his own customs in terms of the type of burial and of the metal objects buried with him, while, and at the same time, symbolically taking over the locally produced objects linked to the tradition of the palace and the élites who had preceded him. However, it might have also been a “king” or some senior dignitary of the old ruling class overwhelmed by the crisis which threw the centralised power structures into turmoil, and eventually brought them down. The combination of the different elements in the tomb may well have reflected the changes then taking place in the political system at Arslantepe at the beginning of the third millennium, changes which certainly involved the Transcaucasian, or at least the eastern Anatolian, component to no small degree. In either case, the close association and intermingling of elements of both cultures emphasise the fact that the northeastern pastoralists were by no means only occasional visitors to the Malatya plain but were firmly rooted in the life and the economy there.

THE “ROYAL” TOMB AT ARSLANTEPE : STRATIGRAPHY AND CONSTRUCTION FEATURES (G.M. DI NOCERA)

THE TOPOGRAPHICAL AND STRATIGRAPHIC POSITION

The tomb at Arslantepe, comprising a large pit and a central stone cist, is on the western slope of the tell in an area bordering on the Early Bronze I settlement¹² (fig. 2). This area is seriously eroded, and it slopes steeply from East to West. The tomb upper part had been cut away by later levels, so there is nothing left of the original entrance to the pit, which was damaged by the numerous pits dug there in Early Bronze II and III. The direct stratigraphic linkage with the VI B2 settlement has also been lost because it did not reach as far as the tomb area. However, the “royal” burial is certainly later than period VII because it had cut away part of the base of a Chal-

colithic monumental temple building (Building XXIX)¹³, conserving some of its foundation stones along the northern edge ; and it is also later than period VI A, which is represented in that area only by earth filling layers that had also been cut through by the tomb (fig. 1). Lastly, it seems that the burial pit also cut through the floor of the first level of huts occupation in period VI B1 (fig. 2), even though even in this case we are not completely sure, since this is the westernmost and most damaged edge of the settlement. We can say that the tomb must have been dug prior to period VI B2 and slightly later than the levels of period VI A. It is highly probable, therefore, that as a whole it may be attributed to period VI B1.

THE STRUCTURE OF THE TOMB

A large subrectangular pit (4.35 m by 3.45 m) running N/NE-S/SE is a kind of “antechamber” for the actual “princely” tomb proper. It is in the very centre of this wide pit that reaches a depth, in the extant part of about 110 cm, that the cist was sited forming the central core of the tomb. This cist is another pit, whose sides were strengthened by lining them with slabs of hewn stone, probably intended to act as retaining walls (fig. 26). And wide regular shaped stone slabs were also carefully placed in a vertical position to form a rectangular “room”, 40-60 cm deep, measuring 2.05 m × 1.20 m, whose perimeter was slightly wider at the bottom. The floor of the cist is paved with three large stone slabs (85 × 120 m, 72 × 112 m, 50 × 125 m) and the spaces left empty after putting them into place were filled with irregularly cut pieces of stone (figs 26-27). At the time of excavation, the inside of the “room” was almost free of any deposit. The only two filling layers were one shallow sandy level (2-3 cm) that had encroached into the tomb which rested on another layer of earth (10-15 cm) which had also probably found its way in from above, in which the funerary furniture and the burial were found. Two separate polygonal slabs of stone covering, measuring 1.20 m × 1.65 m and 1.40 m × 1.75 m, enclosed the tomb “room” on the top.

RITUAL CUSTOMS

Most of the funerary offerings inside the cist rested on, and were partly covered by one or more pieces of cloth. Visible traces of a textile material have been found in abundance

11. FRANGIPANE, 2000.

12. FRANGIPANE, 1998b, 2001 : 6-7.

13. FRANGIPANE, 2000 : 443, 446.

under the groups of pottery items, but also on the handle of the dagger. The weave of the textile can also be seen under the rust on the copper beaker (Y3). It is likely that, when the items were placed there, they rested on or were wrapped in the cloth. Traces of the fabric has also been seen under the legs of the deceased, which means that the body must have been wrapped in or laid out on the cloth. But it could also be pieces of his own garments. A further unusual element is the presence of traces of wood near the head of the deceased and also under his legs and the remains of the cloth, as well as under the objects in the eastern and southern part of the tomb. This is not charred wood, but solid wooden boards, highly mineralised by the conditions inside the cist. It is possible that the body had originally been placed on a kind of wooden table, perhaps used to carry the body and to lay it to rest.

Two of the four adolescents inside the pit and directly placed on the slabs covering the cist, face each other in a crouching, but unnatural, position. The skeleton on the western side, facing downwards and with clenched fists (H-223) (see Schultz and Schultz below) has been damaged by the collapse of part of the stone slab which caused much of the skeleton to fall inside the cist, from the waist down to the feet. The position of the skeleton on the eastern side (H-224) is slightly crouched and resting on its left side, but with the legs drawn right behind the back and with the feet crossed, suggesting that it had probably been forced into this position, perhaps by tying the limbs together.

Even though the burial in the cist and the burials in the pit had occurred in sequence, with the adult being placed in the cist first, complete with the funerary gifts, and the tomb being closed with the stone slabs, and the bodies of the adolescents being placed on top of the slabs after the burial of the adult in the cist, the image that one gets of the whole structure is that of a single burial and ceremonial event.

EASTERN ANATOLIA AND THE CAUCASUS : SIMILARITIES AND DIFFERENCES IN THEIR FUNERAL RITUALS

This tomb is an isolated case on the mound at Arslantepe, and no similar archaeological remains have been discovered anywhere else in the whole of the Upper Euphrates region. There are some important tombs in the territory of Malatya and Elazığ even in earlier phases, such as the two Late Chalcolithic tombs at Korucutepe in Altinova, but these are completely different contexts in terms both of their architectural

features and the quality and quantity of the furnishings. In order to identify rich cist tombs that are comparable with burials of high-ranking dignitaries with particular funeral ritual aspects we have to look at the Early Bronze burials in the regions of the northern Caucasus and in Kuban¹⁴ as well as in western Transcaucasia. These areas are known above all for the spread of the Majkop culture which has been almost exclusively defined in terms of the funeral remains, whose main feature is the predominance of tumulus necropolis (Kurgan) with some high-ranking tombs characterised by rich metal gifts. One of the most outstanding example is a kurgan near the village of Novosvobodnaya, in an isolated area known locally as "Klady", which was about 60 m in diameter and 4.5 m high and held two Majkop burials. One of them consisted of a cist built using stone slabs containing the remains of a man and an infant and could be defined as a "Royal tomb" judging from the wealth of the funerary gifts¹⁵. The funerary offerings comprised 40 bronze items, including axes, daggers, chisels and awls, a bronze dagger, figurines inlaid with silver, and gold ornaments, besides turquoise and cornelian beads which were probably part of a necklace.

At Klady 20 Majkop kurgans have been excavated, revealing about 60 tombs. In this necropolis, even though the individual tombs possess different features, there are a number of similarities with the Arslantepe tomb, particularly the construction techniques employed. In addition to the rich tomb described above, there were at least five different types of tomb structures including cists made of stone slabs completely sunk into the ground¹⁶. In Kurgan 31, tomb 5, stone slabs were also used to pave the bottom and the whole structure had been reinforced using retaining stones on which the vertical slabs rested¹⁷, using a technique which is very similar to what has been found in Arslantepe. One singular case is tomb 1, Kurgan 28, with a single female burial. Here, the vertical stone slabs bore blackened red paintings of an arch, a quiver and what is probably a shield¹⁸. This type of representation, despite the fact that it is only two-dimensional, is reminiscent of the way in which the weapons were arranged around the burial in the cist at Arslantepe, making a kind of "stage set for the deceased".

14. CHECHENOV, 1973.

15. REZEPKIN, 2000 : 63-67, Tafel 52, 4-7, Kurgan 31, Grab 5 ; CHERNYKH, 1992 : 69, plate 1.

16. REZEPKIN, 2000 : 5.

17. REZEPKIN, 2000 : Tafel 52, 4-7 ; HÄUSLER, 1994 : 193-194.

18. REZEPKIN, 2000 : 59-61, Tafel 44, 1-2 ; HÄUSLER, 1994 : 192, 198-200.

Fig. 26 : *Arslantepe. The interior of the empty cist grave T 1.*

Even though calibrated carbon dating shows that the necropolises at Klady were used throughout the whole of the 4th millennium, most of these datings show that many of the tombs were excavated between 3 600 and 3 000 BC¹⁹.

In addition to Majkop there are other similar features found in burials under the Kura-Araxes culture, particularly with regard to the metal funerary gifts, but also the tomb structure itself. The Kura-Araxes culture used more or less rectangular cist tombs, semicircular structures and pit burials²⁰. In most cases tumuli, kurgans, have also been found in the Kura-Araxes culture in eastern Georgia, covering stone tombs or, in extraordinary cases, wooden tombs. The kurgans were common throughout the whole of the third and the early part of the second millennia in a vast area including Georgia and northeastern Anatolia²¹.

Closer similarities with the tomb at Arslantepe, in terms of the type of burials although not in the size of the tomb and the richness of the funerary gifts, are found in the tombs recently discovered along the Anatolian Euphrates valley, and dating back to a period covering Early Bronze I and above all its most recent phase. 312 tombs, most of them cists, have been discovered in a huge cemetery near the Birecik dam in the province of Gaziantep²². These structures had been built by excavating rectangular pits and lining them with large limestone slabs. Two, three or in a few cases, one single stone slab were placed horizontally on the top to close the structure, covering it from side to side. The bottom of the cist was left unpaved, but there were a few cases in which stone slabs had

0 50 100 cm

Fig. 27 : *Arslantepe. Plan of the cist grave T 1.*

0 50 100 cm Sezione B - B'

0 50 100 cm Sezione A - A'

Fig. 28 : *Arslantepe, S 150 - T 1 : north-south and east-west sections (their position is indicated in fig. 10).*

19. REZEPKIN, 2000 : 21-22.

20. LORDKIPANIDSE, 1991 : 46.

21. MIRON und ORTHMANN, 1995 : 57-94.

22. SERTOK and ERGEÇ, 1999.

been placed on the floor. Generally speaking one of the slabs placed vertically on the shorter side of the cist was higher than the others, almost as if it intended as a kind of headstone. The tombs at Birecik did not have antechambers, and were not dug out inside pits. Even though the bones in the burials are poorly preserved, it has been possible in most cases to see that they were cists with multiple burials. The similarities are not restricted purely to the structure, but also the type of furnishings in which metal objects predominate, especially numerous weapons and spearheads. One striking aspect, which is wholly similar to Arslantepe, is the way in which the metal spearheads are arranged, generally along the northern and southern sides of the tomb, but always along the internal sides of the cist. The other metal objects, particularly the pins, have also been found as ornaments placed on the deceased or grouped together as a kind of 'hoard'. In addition to these close similarities in terms of the arrangement of the metal objects, traces of wood around the body have also been found in one cist in the Birecik necropolis (M282)²³. It is possible that the remains of wooden elements may, as in the case of the tomb at Arslantepe, have originally belonged to a structure connected with the burial, such as funeral bier to carry the body and lay it to rest.

In the same region, and only a few kilometres away, 6 cist tombs, made with large stone slabs and closed by two or three slabs placed horizontally and sealed with clay, have been found in another Early Bronze I cemetery on the mound at Hacinebi²⁴. Here, however, the funerary gifts were mainly vessels, necklace beads and a number of copper ornamental pins.

There are also the cist tombs published by Woolley found in the acropolis at Carchemish in the south eastern part of the mound²⁵ which, despite the very recent dating originally given to it by the authors of excavation, fall chronologically in the early centuries of the third millennium BC. However, the flooring of these cists, which were made of stone slabs and covered by large rough-hewn slabs, were bare earth. These were generally individual burials in which the body was in a crouched position, and once again the funerary gifts included a large number of metal objects, such as pins, axes, knives and butted spearheads, together with pottery vessels.

A stone cist found at Hassek Höyük and also dating back to this period²⁶ is structurally different from the others we

have been considering because the cist is made of river pebbles, and not stone slabs. However, there are still a number of similarities with the Arslantepe cist. It contains a single adult skeleton in a crouched position lying on its right-hand side, and the funeral gifts included eight copper items: 2 butted spearheads, a dagger, a chisel, a flat axe, a pin and a mace-head. There were also two pottery vessels placed near the waist.

What one notes in general from the point of view of the distribution of the cist tombs belonging to the first quarter of the third millennium, and in particular those which are most similar to the Arslantepe cist, is that they are found in the Caucasian and Transcaucasian zone and along the Upper and Middle Euphrates. This route seems to begin chronologically with the burial context of the northeastern regions, under the Majkop cultures, finally reaching the Transcaucasian regions (Early Kura-Araxes Culture) and the Euphrates Valley during the first quarter of the third millennium BC. The tomb at Arslantepe, which probably dates back to the very beginning of the third millennium, belongs to the time when this particular cultural feature was being first disseminated. It is difficult to say whether it can be compared to a kurgan. The wide pit standing over the central cist which was probably also used as a ceremonial area in addition to being the burial chamber for the four adolescents, is unusual in the Majkop, Kura-Araxes and middle Euphrates valley tombs. Furthermore, there are no elements which might suggest that there was a tumulus covering the whole structure. The strong erosion and the excavations carried out during Early Bronze III in the very point in which the tomb was built, must have carried away all the traces of what might have been some indication that there was a burial structure there, and so it cannot be excluded.

PRELIMINARY REPORT ON THE RESULTS OF THE ANTHROPOLOGICAL AND PALEOPATHOLOGICAL INVESTIGATION (M. SCHULTZ* and T.H. SCHMIDT-SCHULTZ**)

MATERIALS AND METHODS

On the invitation of Dr. Marcella Frangipane, the skeletons of five individuals excavated from the "royal" burial chamber at Arslantepe²⁷ which date to approximately

23. *Ibid.*, 90.

24. STEIN *et al.*, 1997 : 115-118.

25. WOOLLEY and BARNETT, 1952 : 218-222.

26. BEHM-BLANCKE, 1984 : 49-50, fig. 7, Grab 12.

27. FRANGIPANE, 1998b.

5 000 BP, were examined in the field seasons 1997 and 1999 by anthropological and paleopathological methods and techniques²⁸. The skeletons of individuals H-221 and H-222 were found on the western part of the pit, the individuals H-223 and H-224 on the central part of the cover plates of the burial chamber and individual H-225 was found in the chamber. In particular, the following determinations were made : Sex²⁹, age³⁰, anthropological measurements³¹, attrition of the teeth³², and pathological and postmortem changes³³. In association with the paleopathological investigation, all bones and bone fragments were examined macroscopically and with a hand lens (4x, 10x and 15x). Furthermore, samples were taken for endoscopic, radiological, light and scanning-electron microscopic³⁴ and molecular biological investigations. Not all examinations have been carried out as yet. Techniques used for reconstruction and conservation were described by Kunter³⁵.

RESULTS

In this chapter, the findings obtained from the anthropological and paleopathological investigations are described in order to establish an approximate biography and cause of death of the five individuals³⁶.

H-221

The skeleton of this young individual is well represented, however preserved in a fragmentary state. The skull was found *in situ*, however, as it was completely crushed by post-mortem soil pressure, it measures only 4 cm at the frontal level. The bone surfaces can, in general, be relatively well

observed. The bone consistence is very brittle. The age at death of this individual was determined from cranial and post-cranial traits to have been between 16 and 17 years. All preserved features usable for sex determination are female or probably female. Thus, the individual was doubtless a young woman.

The examination of the skull reveals evidence of meningeal disease. In the right posterior cranial fossa, there is a veruciform newly built bone formation which has the size of a sesame seed. This structure probably represents the product of an inflammatory process. Very close to this, there is a small area with a coarse and porotic surface measuring 10 × 10 mm which must be interpreted as a scar due to an inflammation of the meninges and the endocranial surface of the occipital bone. These changes developed several months before the death of this young woman. There are no pathological changes at the external and internal laminae of the skull vault or in the orbits, the middle ear regions (mastoid processes), the venous sinuses of the brain or the left nasolacrimal duct (right duct not preserved).

Additionally, there are vestiges of a traumatic incident at the external surface of the left zygomatic bone. These changes are characterized by a slight thickening of this region and a coarse and porotic surface which represents new bone formations, *i.e.* bone apposition, just built up very shortly before her death. Unfortunately, this structure was affected, although only partially, by slight postmortem erosion. Nevertheless, we can see that the cause of this newly built bone formation was very probably a hemorrhagic reaction due to trauma, such as a strong blow to her left middle face region. As up to now, in this case, the microscopic analysis has not been carried out, the point of time of the origin of this lesion can only be guessed and was probably only a very few weeks before the death of this young woman. The right zygomatic bone shows no pathological structures.

The examination of the teeth reveals interesting results which give insight into the state of health of this young woman during her childhood. In most of the upper and lower incisors, in the lower canines and in the second upper molars, slight transverse linear enamel hypoplasias can be observed (some teeth cannot be examined because of the poor state of preservation or because of labial or buccal dental calculus). These hypoplasias are the result of irregular or arrested growth due to deficiency and/or infectious diseases during the time period when the crowns of the teeth were developing. This young woman shows episodes of arrested growth diagnosed by these hypoplasias in her 2nd, 3rd, 4th and 6th year of

28. The authors wish to thank Dr. Marcella Frangipane, University of Roma (Italy), very much for her invitation to work on these skeletons and for her gracious help in the project, for technical assistance, we thank Michael Brandt and Ingrid Hettwer-Steege, for the line drawings Egbert von Bischoffshausen, and for reading the English text Cyrilla Maelicke, all of the Zentrum Anatomie, University of Göttingen (Germany).

29. FEREMBACH *et al.*, 1979 ; SJOVOLD, 1988.

30. FEREMBACH *et al.*, 1979 ; STLOUKAL und HANÁKOVÁ, 1978 ; SZILVÁSSY, 1988.

31. BRÄUER, 1988 ; MARTIN, 1928.

32. BROTHWELL, 1981 ; PERIZONIUS and POT, 1981.

33. BROTHWELL, 1981 ; SCHULTZ 1988a, 1997.

34. SCHULTZ, 1988a, 1988b ; SCHULTZ und DROMMER, 1983.

35. KUNTER, 1988.

36. SCHULTZ, 1996 ; SCHULTZ und KUNTER, 1999 ; SCHULTZ und SCHMIDT-SCHULTZ, 1991 ; SCHULTZ 2001 (in press).

Fig. 29 : *Reconstruction of the position of the skeleton of the young woman H-221.*

life. Thus, this result correlates with what was found in other prehistoric population. The second (end of weaning period) and the sixth years of age are, as a rule, the most frequently affected time periods in childhood. Furthermore, there is evidence of slight periodontosis in the regions of the mandibular incisors as well as dental calculus in many preserved teeth. The attrition (dental abrasion) is relatively advanced. Caries and dental abscesses were not observed.

This young woman suffered from a traumatic accident which happened probably one or two years before her death. At the proximal phalanx of her right big toe, there are vestiges of a healed chip fracture on the medial face of the distal joint surface. In the rest of the postcranial skeleton, there is no further evidence of pathological lesions. The joints of the extremities are free from degenerative or inflammatory changes. The joints of the vertebral column cannot be analyzed because of the very poor preservation of the severely fragmented vertebrae.

Of forensic interest is the position of the skeleton found during excavation (fig. 29). The corpse of this young woman was placed on the southern part of the cover plates of the

burial chamber slightly on her left side with her stomach towards the plate. Thus, her shoulder-blades lay upwards. Her skull rested on its left side. Her left upper arm was found under her chest, directed down towards her right side, so that her left lower arm and hand were partly covered by the right side of her abdomen. Her left hand was found extremely flexed and in extreme ulnar deviation with the palmar surfaces of its bones up. Her right upper arm was slightly flexed (approximately 30°), her right elbow joint extremely (approximately 45°). Right radius and ulna were found in a pronated position. The fingers of her right hand which lay close to her face, were slightly flexed, the thumb extended. Her right leg was flexed at the hip joint (approximately 90°) and also flexed strongly at the knee joint (approximately 55°). The bones of the right lower leg crossed the distal end of the left femur which was situated below her right leg. The bones of her right foot were lost postmortem. Her left leg was slightly flexed at the hip joint (approximately 60°), well flexed at the knee joint (approximately 90°) and lay below her right leg directly on the cover plates of the burial chamber. Her left foot was plantar flexed.

H-222

This skeleton is incompletely represented and extremely fragmented. In general, the surfaces of the bones and the bone fragments can be well observed. The bone consistence is extremely brittle and crumbly. The skull lay on its left side and had been extremely badly crushed by postmortem soil pressure (it measures only 2 cm at its frontal level). The age of this individual at the time of death was probably between 12 and 14 (15) years old. The sex was very probably female.

There is no evidence of disease in the external and internal laminae of the skull vault, in the posterior cranial cavity, the external surfaces of the zygomatic bones, the orbits, the left frontal sinus (right sinus not preserved), the middle ear regions (mastoid processes), nor most of the venous sinuses of the brain. However, the main venous sinus of the brain, the sagittal sinus, shows over a length of 17 mm, in the region of the occipital bone, at the bottom, an irregular porotic and coarse surface characteristic of the vestige of a hemorrhagic process. This process might have been florid a few weeks before the girl died. The cause of this lesion is difficult to reconstruct, because there are several things which could cause a hemorrhage in the back part of the skull (*e.g.*, blunt trauma).

Fig. 30 : Reconstruction of the position of the skeleton of the girl H-222.

The teeth of this girl are relatively well preserved. There is no evidence of caries or dental abscesses. Dental calculus is quite widespread in the upper and lower incisors to a relatively severe degree. The attrition (dental abrasion) of most teeth is relatively advanced. Periodontitis was widespread and is seen in almost all preserved tooth sockets including incisors, premolars and molars. There are also transverse linear enamel hypoplasias in the crowns of all four canines which show evidence of growth arrest responsible for deficiency and/or infectious diseases during the 4th year of age.

As the postcranial skeleton is very poorly preserved, no joints of the extremities or the vertebral column could be examined. However, in the ribs, which are only incompletely preserved, there is evidence of fractures in at least three of them. The fragments of two, probably right, ribs were broken *intra vitam* in the lateral part of their shafts, apparently a few weeks before the girl died. There is callus at the external and the internal surfaces of the ribs. The fracture line is not completely fused. Furthermore, there is a piece of fracture callus which does not fit these two fragments, but belonged very probably to a third broken rib which is not preserved. Thus, the girl had some sort of accident just a few weeks before her death. The lesion in the occipital bone representing a hemorrhage and the rib fractures might have been due to the same incident.

The position of the skeleton on the southern part of the cover plates of the burial chamber can only be reconstructed for the upper part of the body because the bones of the lower part are missing (fig. 30). The corpse of this girl was placed on its left side, arms in a flexed position at the shoulder and the elbow joints. The two lower arms lay parallel and the hands were placed in front of the face.

Fig. 31 : Reconstruction of the position of the skeleton of the young man H-223. Burial with diadem.

H-223 (inhumation with diadem)

The skeleton of this individual is incompletely represented and extremely fragmented. The lower part of the body is missing. In general, the surfaces of the bones and the bone fragments can be well observed. The bone consistence is extremely brittle and very crumbly. The skull was found resting on its face and was also crushed by postmortem soil pressure (it measures only 7 cm at its sagittal level) so that the bones of the visceral cranium were pushed into the occipital part of the neurocranium. The age of this individual at the time of death was probably between 16/17 and 18 years old. The sex was very probably male.

In the left mandibular body, in the rostral part of the mylohyoid line (size 14 × 8 mm), there is an oval fossa with smooth rims and a smooth bottom which was apparently caused by a process due to pressure atrophy (e.g., small tumorous formation). There are no vestiges of disease in the external and the internal laminae of the skull vault, in the left posterior cranial cavity (right cavity not preserved), the external surfaces of the zygomatic bones, the orbits, the frontal sinuses, the right maxillary sinus (left sinus is missing), the middle ear regions (mastoid processes), the venous sinuses of the brain, the right lacrimal duct (left duct is not preserved), or the hard gum.

The teeth of this young man are all preserved. There is no evidence of dental caries, dental abscesses and, very strikingly, no vestiges of periodontal disease. However, dental calculus was very widespread and found in all the types of teeth. Dental attrition (abrasion) is relatively advanced. Furthermore, it is remarkable that no transverse linear enamel hypoplasias could be diagnosed. Thus, this young man probably

did not suffer from deficiency and infectious diseases during his childhood.

There is only little evidence of pathological processes in the preserved bones of the postcranial skeleton. One fragment of a right rib shows a smooth longish superficial bone apposition on its internal surface which can be interpreted as a scar of a pleural process. The joints of the upper extremities (lower extremities are missing) show no signs of joint diseases.

Although the skeleton of this young man is incomplete because the caudal part is missing, the position of the corpse at the time when it was buried, can be partly reconstructed (fig. 31). The trunk lay on the northern part of the cover plates of the burial chamber with the stomach towards the plate. Thus, both shoulder-blades of this young man lay upwards, in a parallel position. His skull rested directly face down. His right upper arm was found under his chest, pointing up towards to his left side, so that his right lower arm and hand lay above his left shoulder girdle. All fingers of his right hand were slightly flexed. His right lower arm was in a supinated position. His left upper arm lay parallel to the left side of his chest. His elbow joint was flexed (approximately 90°). Left radius and ulna were found in a supinated position. All fingers of his left hand, which lay over the right gluteal region, were extended.

H-224 (inhumation with diadem)

This skeleton is well represented, however, also very fragmented. In general, the bone surfaces can be well observed. Because of the diadem, there is a greenish staining (Cu-ions) of the external skull surface in the region where the diadem touched the skull. The consistence of the bones is brittle and very crumbly. The skull was found resting on the left side and was also extremely crushed by postmortem soil pressure. This individual was between 12 and 14 years of age at the time of her death. All preserved morphological features used for sex examination are probably female.

As the skull was extremely fragmented and crushed to pieces, only a few features could be studied. The external lamina of the skull vault shows no evidence of pathological changes. However, on the internal lamina of the occipital bone, close to the upper rim of the sulcus of the right sigmoid sinus, there is a circumscribed area (22 × 25 mm) which is characterized by short fine blood vessel impressions which ramify like branches of trees or build up a net-like structure. The spaces between these blood vessel impressions are covered by smooth tongue-like plates. These changes are characteristic of

an organized hemorrhagic process of the meninges probably in causal connection with the right transverse sinus. The morphology of these structures and, in particular, the degree of the organization, *i.e.*, remodeling, demonstrate that this lesion was still relatively fresh when this girl died. Thus, it can be assumed that the origin of this hemorrhagic incident dates to a few weeks before her death. The cause could be the same as observed in the sulcus of the sagittal sinus of the girl H-222, where we have possible evidence of a blunt trauma. The sulcus of the right transverse sinus (left sulcus is missing) as well as the sulcus of the left sigmoid sinus (right sulcus not preserved), the external surfaces of the zygomatic bones, the orbits, the left maxillary sinus (left sinus missing), and the right lacrimal duct (left duct not preserved) do not show pathological alterations.

The teeth but not the sockets are completely preserved. Only in the mandible, particularly on its left side, could the tooth sockets be analyzed. Again, there was no evidence of dental caries. However, periodontal disease was found in the region of the lower incisors. Dental calculus was widespread in all tooth types and dental attrition was relatively advanced. Transverse linear enamel hypoplasias were frequently seen in almost all tooth types, however, the degree was not very pronounced. The findings give evidence of growth arrest due to deficiency and/or infectious diseases in the 3rd, 4th and 5th year of life.

In the left humerus, the lateral lip of the bicipital groove is changed to an irregular longish fossa (length 21 mm, width 4 mm). This lesion is not of genetic origin, but was caused *intra vitam* by extreme physical strain (necrotic bone substance). The point of time of the origin of this lesion cannot be exactly stated. However, as its morphology demonstrates, there must have been more than one year between the origin of the lesion and the death of this girl. There are no changes due to joint disease in any joint of the upper or lower extremities.

The position of the skeleton of this girl found during excavation (fig. 32) still wearing her diadem, is of interest. Her corpse was placed with its left side along the northern part of the cover plates of the burial chamber. Her skull also rested on its left side. Her arms were found approximately parallel in a similar position. The upper arms were slightly flexed at the shoulder joints. At the elbow joints, the right arm was more flexed (approximately 35°) than the left arm (approximately 75°). The wrist region of the right arm crossed the lower left arm in its proximal third. Both hands were found straight in the axis of the lower arms. All fingers of her right hand were

Fig. 32 : Reconstruction of the position of the skeleton of the girl H-224. Burial with diadem.

slightly flexed, and all fingers of the left hand were extended. Her right leg was slightly extended at the hip joint and strongly flexed at the knee joint (approximately 60°), the distal part of the bones of the right lower leg crossed the left foot. Her right foot is extremely plantar flexed. Her left leg, which lay below her right leg, was slightly flexed at the hip joint (approximately 20°), strongly flexed at the knee joint (approximately 45°). Her left foot was in a medium position between flexion and extension.

H-225 (skeleton in burial chamber)

This skeleton belonged to the owner of the burial chamber which was covered by large stone plates on which the skeletons lay as described above. The skeleton is not very well represented and extremely fragmented because the stone plate broke (e.g., by earthquake) during the thousands of years, crashed into the chamber and smashed the skeleton of this royal individual. The bone surfaces are poorly preserved and cannot be properly examined. The bones are brittle and very crumbly and it was, therefore, difficult to determine the age of death. This person died between 30 and 50 years of age, however, most probably between 35 and 45 years of age.

Fig. 33 : Reconstruction of the position of the skeleton from the burial chamber H-225 (not same scale as Figures 29-32).

From the skull, only few small fragments are preserved. As the postcranial skeleton is, in contrast, very robust (e.g., thick compact substance of the shaft of long bones, large heads of radius and fibulae, large diameter of the epicondyles of the femur) and the muscle attachments are very well developed, there is no doubt that the deceased was a male.

Because of the poor preservation state, nothing can be said about diseases in the skull region. Only seven single teeth were found which were not affected by caries, but covered by dental calculus and these show relatively advanced dental attrition (abrasion of the teeth). In two upper incisors and in one lower canine, transverse linear enamel hypoplasias were analyzed which provide evidence of growth arrest responsible for deficiency and/or infectious diseases in the 3rd, 4th and 5th year of life.

There is evidence of relatively advanced degenerative joint disease in the right hip joint (left joint not preserved), whereas the right knee joint (left joint missing) was not affected. The elbow joints did not appear to have been very severely diseased. From the vertebral column, only the four caudal lumbar vertebrae and the first sacral vertebra could be studied. Here, only slight degenerative changes were seen in the lumbar vertebra, whereas the sacrum showed more severe alterations.

As the skeleton of the grave owner is poorly preserved and extremely fragmented it is difficult to completely reconstruct the position of the deceased in his burial chamber (fig. 33). However, it can be stated that the corpse lay on his right side. Furthermore, both legs were placed in an extremely flexed position in front of the stomach of the grave owner. Thus, the corpse seems to have been buried in a kind of "typical flexed burial". The position of the upper extremities cannot be reconstructed reliably. However, fragments of the bones of both arms were found in front of the chest of the deceased.

In all four skeletons found on the cover plates (H-221, H-222, H-223, and H-224), the earth fixed closely at the bone surfaces and found between the bones contained small fragments and pieces of limestone, ceramic potsherds, charcoal, and burnt clay. These structures are not found, in general, in regular burials, such as in the skeleton of the owner of the burial chamber (H-225), but are characteristic of special settlement structures (e.g., pits in areas in which houses were destroyed and rebuilt over several generations). Thus, the earth covering these young individuals probably accumulated later into the pit and they were not buried in a regular burial on the top of the chamber.

CONCLUSIONS AND SUMMARY

It is striking that the skeletons of the four subadults were found in unusual positions. At first sight, the corpse of the young woman (H-221) seemed to have been buried in a left-sided flexed position (fig. 29). However, because the body lay on its stomach, the position of the left arm and hand is really unusual and not understandable for a regular flexed burial : a suspicion remains that this young woman fell forwards from an upright position onto the cover plates of the chamber.

In the case of the girl (H-222) found close to the young woman (H-221), a flexed or semi-flexed burial position cannot be excluded. However, also an unusual position due to violence is conceivable, because the bones of the lower part are missing (fig. 30).

Very striking is the burial position of the young man (H-223). Here, evidence of violence before his corpse came to rest seems probable (fig. 31). As his occipital bone was totally upwards, his skull was leaning forward with its face touching one of the stones of the cover plates. With its right arm under its chest and its left arm on its back in a flexed position at the elbow joint, the skeleton looked like a classic case of a person standing upright who had been tightly held by

his left arm on his back and was struck down, so that he fell on his stomach. Of course, this suggestion is only the reconstruction of one possibility : however, a flexed or semi-flexed burial can, with a high probability, be excluded.

The corpse of the last of the four individuals, the girl with the diadem (H-224), also showed a strange burial position. Indeed, the skeleton was found on its left side, however, the positions of the arms and the legs were not very typical of a flexed or semi-flexed burial (fig. 32). Furthermore, the vertebral column was not flexed but relatively extended. The girl could have sunk down onto the cover plates of the burial chamber. However, a non-typical flexed burial cannot be excluded.

The remains of the skeleton of the owner of the burial chamber (H-225) seem to represent a typical right-sided flexed burial (fig. 33), because the legs were found in front of the abdomen in a pronounced flexed position and, very probably, also the arms were flexed. The earth which was found with the skeletal remains of the four subadults was not the same as that found in the burial chamber. Possibly, this is an additional fact to support the idea that the bodies at the top of the burial chamber were not regularly buried.

Additionally, in three of the four individuals, there is evidence of violence (trauma). It is striking that only the three females and not the male (H-223) were affected by trauma. In two cases (H-222 and H-224), there are vestiges of a hemorrhage on the endocranial lamina of the skull vault which could have been due to a blunt trauma, such as a blow to the head. However, a hemorrhagic process caused by disease, e.g., a hemorrhagic-inflammatory process of the meninges, still cannot be excluded. Further microscopic research will probably establish a reliable diagnosis. A hemorrhage due to scurvy is not probable because there are no vestiges of this vitamin-C-deficiency. The vestige of a hemorrhagic incident at the left zygomatic bone was very probably caused by a strong blow to the left middle face region of this young woman (H-221). Also the broken ribs in the skeleton of one of the two girls (H-222) are a strong argument for violence which apparently was inflicted on the three females. All lesions were caused only a few weeks before the death of the individuals.

In summary, it is probable that some of the four individuals met with violence before their death. Furthermore, it cannot be excluded that all four subadults were killed at the top of the burial chamber. Whether this was a kind of sacrifice or an assassination cannot be diagnosed. It cannot be excluded that these four subadults were related to the owner of the burial chamber, therefore, further investigation will be carried out.

THE METALS (A.M. PALMIERI, A. HAUPTMANN)

The main characteristics of the early metallurgy in eastern Anatolia, (as identified above all by the objects from Arslantepe), is the use of a copper-arsenic alloy that, along with pure copper objects, spans the period from the Late Chalcolithic to the end of the Early Bronze Age³⁷. Arsenic is sometimes combined with nickel and antimony, at Arslantepe and other Anatolian sites, such as Hassek Höyük to the south, in the Urfa/Adiyaman region³⁸ and sites in the Keban area (Elazığ) to the north³⁹. Lead objects are also found, though to a lesser extent; they consist mainly of beads of necklaces or small perforated weights. Silver is rarer. The last two elements are important insofar as they are indicative of a more elaborate, technologically evolved metallurgy, with silver being used in a highly refined inlay technique on some swords from period VI A.

The metallurgy at Arslantepe during VI A, at the end of the fourth millennium, was well developed. Metal was used for different categories of objects, both implements and prestige objects, as is clearly shown by the substantial group of spears and swords, as well as by ornaments and tools. One hundred-fifty-nine samples of slag and ores and 226 metal objects from the Arslantepe prehistoric sequence have been analysed using ICP-OES (unpublished data Rome), while 57 objects had previously been analysed by SEM⁴⁰. The analytical results on slag and ores indicate that polymetallic ores with high amounts of arsenic, antimony, lead and nickel were predominantly found in period VI A. This was also the case in the preceding Late Chalcolithic period (VII), though with lower concentrations of arsenic and nickel. These elements are virtually absent in the subsequent Early Bronze Age I period (VI B2), where only pure Cu/Fe ores and slag have been found. The use of complex polymetallic ores is also reflected in the VI A objects, which were characterised by higher arsenic and nickel contents, the presence of lead and the appearance of silver.

This picture points to a complex metallurgy in these early periods which obviously produced different metals. Among the objects, one particular example from this period is a pendant composed of 75 % copper, 9.7 % lead and 9.6 % arsenic found in a store-room (A340) of the largest public building of

period VI A. A copper-nickel-arsenic alloy (Cu 90.73 %, Ni 2.20 %, As 1.17 %) was used to make a metal bowl that was employed, instead of the traditional stone, as a door-socket in another public building of the same period. It testifies again to the wide use of metals, and in particular of this alloy, at the end of the fourth millennium BC. The Cu-As-Ni alloy is generally the most common in many metal objects of VI A.

The most important metal find in this period is the weapons group from the palace complex (Building III, A113). It consists of 12 spearheads, 9 swords and one plaque, all made in copper-arsenic alloy⁴¹. The SEM analytical values divide swords from spearheads and both from the rest of the objects of level VI A. The arsenic content in the weapons shows modal values at 2.5-3 % in spearheads and at 4.5-5 % in swords, indicating two possible smelting phases consisting of separate castings⁴². In addition, in the group of weapons, nickel is absent or in traces (0-0.38 %), while many VI A objects with high arsenic values are also high in nickel (fig. 34). This aspect emphasises the compositional difference between these weapons and the other VI A metal objects and gives greater credit to the assumption that a particular smelting was used for the weapons.

The exceptional finding of the "royal" tomb from 3 000 BC, with its very large number of metal objects, including weapons, ornaments, work tools and containers, sheds new light on the metallurgy of this site⁴³. The 75 objects were made of various types of metal and two particular types of alloy: Cu-As and Cu-Ag (fig. 35). Copper, silver and gold are used on their own only in a very limited number of objects: one dagger made of copper, two hair spirals, two pins and many beads made of silver and three beads and one spiral made of gold.

The presence of the Cu-Ag alloy is striking and almost certainly intentional⁴⁴ with the silver content in 28 objects ranging from 16 to 70 %, most objects containing around 50 % silver (fig. 35). The group consists of prestigious objects which point to the high status of the person buried. All the bracelets and almost all hair spirals, together with the diadems, the belt and one dagger (fig. 24) are made of this alloy which gives the objects an unusual colour and shine very similar to silver.

37. CANEVA and PALMIERI, 1983.

38. SCHMITT-STRECKER *et al.*, 1992.

39. ÇUKUR and KUNÇ, 1989; KUNÇ and ÇUKUR, 1987; ÖZBAL, 1986; ESIN, 1986.

40. CANEVA and PALMIERI, 1983.

41. FRANGIPANE and PALMIERI, 1983a; CANEVA *et al.*, 1985; CANEVA and PALMIERI, 1983.

42. CANEVA *et al.*, 1985.

43. PALMIERI *et al.*, 1998a, b; HAUPTMANN and PALMIERI, 2000.

44. A discussion about this topic is still open. see HAUPTMANN and PALMIERI, 2000.

Fig. 34 : Chemical composition of the metals from Arslantepe period VI A.

Fig. 35 : Chemical composition of the metals from the Arslantepe "royal" tomb.

Many of the objects made with this alloy are not comparable to any other object found at Arslantepe or in the surrounding area, and can be considered extremely rare in the Near East as a whole. In Anatolia, the use of silver dates from as far back as the 5th millennium⁴⁵. Its combination with copper,

however, is so far unknown and is not even represented in the VI A period at Arslantepe, where silver has been used to make both ornaments (a ring, a pin and an ear-ring) and the inlay decoration on some of the swords found in the public buildings⁴⁶. The only other early example of a copper-silver alloy

45. YENER, 1983.

46. CANEVA and PALMIERI, 1983.

is an arrowhead, with a silver content of 26 %, from the *Riemchengebäude* at Uruk, ascribed to the end of Late Uruk period⁴⁷. Also worthy of note is the presence of this alloy in two hair spirals with a silver content of 48 % found at the site of Arich, in the Transcaucasian region and dated to the Middle Bronze Age⁴⁸. The use of this alloy in these regions may be, in fact, derived from an earlier tradition, especially if we consider the similarity in the typology of metal objects between these Transcaucasian areas and Arslantepe VI A-B⁴⁹.

Ore suitable for the smelting of Cu-Ag alloys is not documented in Anatolia. This suggests that the objects from the Arslantepe tomb must have been made by deliberate alloying of different metals, *i.e.* copper with a low level of impurities and silver obtained from a two-stage process (smelting, cuppellation) from Ag-containing lead. Both copper and lead have been found at Arslantepe already in Chalcolithic levels. Anatolia has the greatest quantity of silver-bearing ores, and the production of silver by cuppellation was known in the late 4th millennium in this part of the world, as is demonstrated by the finding of litharge at nearby Fatmalı Kalecik⁵⁰ and at Habuba Kabira⁵¹. The As content in the copper-silver objects is markedly lower than that present in the copper-arsenic alloy. This difference in composition might be related either to a substantial drop in the arsenic content during the remelting process carried out to obtain this alloy, or, to the ratio variation when 50 % Ag is added to a 50 % Cu-As alloy. The Cu-Ag objects contain higher lead values, which indicates that silver was extracted from Ag-containing lead.

The other objects found in the tomb are made of a copper-arsenic alloy which is derived from a consolidated technological tradition at Arslantepe. The composition of this alloy seems to result from the use of arsenic-rich mixed minerals. In the swords, spearheads and axes, the arsenic content, which is often combined with nickel, exceeds 4 % (fig. 35). The spearheads found in the tomb are almost identical in both shape and composition to those found in the public building (period VI A), with an arsenic content of roughly 3 %.

Worthy of note is the composition of a truncated conical bowl, found among the funerary gifts, in which the arsenic content reaches 10 %, while iron and silver account for 5 % and Sb for 2 %.

The continuity in the metallurgical tradition between period VI A and the immediately following "royal" tomb, which belongs to period VI B1, is evident. It clearly emerges, besides the shared typological traits of spearheads and highly refined use of particularly rare, sophisticated silver inlay technique, when we compare the composition of the objects. Except for the peculiar already mentioned silver-copper alloy, the only substantial difference between the VI A and the tomb metal objects is the absence of nickel in the group of VI A weapons, whereas it is contained in all the rest of the objects in both contexts.

Whereas the origin of polymetallic and Cu-As-ores in Eastern Anatolia has not yet been clarified, the Transcaucasian copper mines so far analysed contain As but not nickel⁵² and nickel is absent from all the Bronze Age metal objects so far analysed and published from Transcaucasia⁵³. The tradition of arsenic-bronze metallurgy shared by both the Upper Euphrates valley and Transcaucasian regions, which also shared typological features, as indicated by the close parallels between the VI A and VI B tomb metal objects and the north-western part of Central Transcaucasia⁵⁴ may suggest a wide circulation of ores and metals, whose routes may have involved various sources in both areas. The peculiar nickel-less composition of the group of weapons from Arslantepe VI A, certainly an important prestige symbol exhibited on the walls of a public building, may suggest they had a north-eastern provenance, most probably Transcaucasian. A similar composition is shown from the weapons of the royal tomb, whereas the rest of the objects might have been produced within the metallurgical tradition well-established in the region, probably locally smelted, though in the framework of the Transcaucasian-linked metallurgy of the Upper Euphrates valley.

THE LAPIDEOUS MATERIALS OF THE ARSLANTEPE TOMB

(P. MORBIDELLI, A.M. PALMIERI)

The tomb consists of 11 rock slabs of great dimensions and of several rock fragments.

The four internal walls, the base and the covering slabs of the tomb are reported in figure 36. The two long walls orien-

47. PERNICKA, 1993.

48. GEVORKIAN, 1980.

49. KAVTARADZE, 1999.

50. HESS *et al.*, 1998.

51. PERNICKA, 1995.

52. These analyses have been carried out by A.M. Palmieri in the Monte Libretti (Roma) CNR laboratory and have not yet been published.

53. GEVORKIAN, 1980 ; KAVTARADZE, 1999.

54. KAVTARADZE, 1999 : fig. 6 : 36-45, fig. 7 : 3.

ted NW-SE are constituted, respectively, by dark grey porphyritic basalt and brownish sandstone, and by a unique light grey porphyritic andesite slab; the two short sides oriented NE-SW are respectively made of greyish andesite and porphyritic basalt.

The base of the tomb consists of the assemblage of wide fragments of volcanic slabs such as 3 slabs of porphyritic andesite and one slab of andesite. Among these four slabs there are also minor dimension fragments made of the same materials.

The two covering slabs are represented by both a whitish limestone and a porphyritic andesite. These rocks rest on several more or less tabular rocks probably with the aim to obtain a planar surface; the nature of these fragments is shown in figure 36.

The nature of these materials, as expected, is compatible with that of the formations outcropping all around the site (fig. 37). In fact, about 2 km NE of Arslantepe there is the Middle Miocene volcanic complex of Gelinciktepe mainly made of products of andesitic, dacitic and basaltic nature⁵⁵. These rocks show a peculiar characteristic: the alteration forms, together with the nature itself of these rocks, produced the fissurations along the discontinuity surfaces. This leads to the formation of several slabs already used by the villagers to build the surrounding walls of the fields and/or houses.

To the south of Gelinciktepe *caldera*, near the Arslantepe site, whitish, massive limestones outcrop (Middle Eocene). The site is located in the Sultansuyu formation made of cyclo-terms⁵⁶. It is constituted by white limestones, brown-greenish claystone, red-brownish mudstones, brownish sandstones and polygenic conglomerates that are characterised by fluvial and mud flat environments. The vertical and lateral stratigraphic changes demonstrate that the Malatya Graben Basin is already controlled by the growth fault system.

Often the sandstones and the limestones belonging to this formation can be founded as slabs in the Kuruçay river near Arslantepe.

THE WOODEN REMAINS (L. SADORI)

All the wooden remains that have been in the past recovered at the site of Arslantepe consist of charcoal and are gene-

rally very well preserved. The wooden fragments of the tomb constitute, in this sense, the only exception as they are not charred, but dried, thus indicating that the tomb must have been well sealed for most of the time it remained buried. The clear evidence of fragments of cloth, both inside the central tomb and in the upper burial, also confirm this. The bad state of preservation of the wood, which appears wrinkled and shrivelled, was unfortunately a handicap for the xylological investigations and in most cases it was not possible to obtain the three diagnostic wood sections used in routine analyses. A light microscope was used to determine the histological features of the xylematic and parenchymatic elements extracted from the wooden fragments in order to identify the arboreal taxa. The analyses, still in progress, have been carried out at magnifications of X250 and X400.

Four tree taxa have so far been identified: *Alnus* sp. (alder), 24 g; *Fraxinus* sp. (ash), 4 g; deciduous *Quercus* (oak), 4 g; and *Ulmus* sp. (elm), 1 g. The wooden remains have been subsampled, and the weight refers only to the analysed material.

Alnus is the most abundant wood and a look at the *in situ* position of the samples has confirmed what had already been supposed at the time of the excavation of the tomb: in *Alnus* was made the big wooden table placed under the corpse. As the table was very badly preserved it was difficult to take large samples, but a collection of various small fragments have been collected from different areas and all turned out to be of the same wood. An AMS radiocarbon date carried out on the wood of the table gave a date of $4\,355 \pm 65$ years BP, a result consistent with the archaeological chronology.

Other wooden fragments had been identified during the excavations as being the handles of many different objects found in the burial (weapons and tools). It is interesting that all handles, of the weapons and of the tools (chisel) as well have turned out to be made of the same material: *Fraxinus*. It is well known that *Fraxinus* is a quite flexible wood, thus its use for handles of the different weapons and utensils is comprehensible. In particular, it was possible to recognise the wood of weapons Y5, Y10, Y11, Y24 and Y25, of chisel Y6, and of awl Y7.

Very interesting was also the identification of the deciduous oak wood, found in a quite large quantity; the wooden fragments were all concentrated in a very small area, just under a group of ornamental beads and close to a small calcite bowl and a pot. It is highly probable that these remains indicate the existence of a small wooden bowl or cup in which the beads were contained.

55. ÖNAL, 1997a.

56. ÖNAL, 1997b.

Fig. 36 : Geological nature of the slabs constituting the four walls, the base and the covering of the Arslantepe tomb are shown. An oriented key map of the tomb is also reported.

Fig. 37 : Geological map and Arslantepe site location in the Malatya Plain.

All the wood recognised was probably collected in the area around Arslantepe (nowadays at the base of the hill there is a waterfall) and next to the Euphrates (15 km away). *Alnus* and *Fraxinus* trees could either grow next to the stream or along the shore at the time of the burial. Unpublished wood identifications from VIA period are in good agreement with the results of the tomb, *Alnus* being the most abundant wood used for building structure and deciduous *Quercus* and *Fraxinus* used for small objects. The variety of wood recognised shows that the choice of the wood was not casual but linked to different intended uses and functions, the table being made from a tree, while flexible branches were used to make handles.

Carporemain⁵⁷ have been found, some of which probably being offerings left during the burial rite, since they have been found inside two pots in the pit above the main cist grave; these have not yet been analysed and will be the object of a further publication.

RESULT OF ¹⁴C AMS DATING OF WOOD

Due to the extreme mineralisation of the organic materials in the cist grave, an AMS dating has been necessary. One sample of the wood contained in the cist has been dated at the Uppsala Laboratory. The results are as follow :

Lab number	Sample	¹⁴ C age BP ^a
Ua-18081	ARS T1 2*	4 355 ± 65

a. A correction corresponding $\delta^{13}\text{C} = -26,8\text{‰}$ vs. PDB has been done.

This date, when calibrated (calibration 4.3 Copyright 2000 Stuiver and Reimer), gives a range of 3 081-2 897 BC (1 sigma) or 3 308-2 879 BC (2 sigma).

CONCLUDING REMARKS (M. FRANGIPANE)

The burial at Arslantepe was a unique and extraordinary event which was an anomaly in the cultural development of the site. No tomb has ever been found on the tell, except a number of burials under the floors of the Late Chalcolithic houses (periods VIII and VII), often of infants, or a few indi-

⁵⁷. This is a generic botanical term to indicate fruits or seeds without any specific determination.

viduals buried without any particular care in a few Early Bronze II and III pits. The complexity of the construction and the ritual features, the extraordinary richness of the furnishings, the position of the tomb, isolated and standing on the edges of the large monumental public area from the previous period, certainly make it an élite tomb, perhaps for a royal personage or at all events a member of the ruling class. This burial was certainly an exceptional fact, but at the same time it fits in perfectly with the series of events and processes which led to epoch-making changes in the history of the site and its region. The interpretation of this exceptional event, with its links to the traditions of the local élites from the second half of the 4th millennium and the novel features that partly heralded in subsequent developments, is a complex exercise. However, the phenomena that are being reconstructed at Arslantepe in ever-greater detail regarding the move from power structures linked to a temple/palace system of a Mesopotamian type to new political entities of a different cultural matrix at the beginning of the third millennium make this unusual discovery a fundamental piece of the whole mosaic, on which it sheds fresh light.

The expansion of the excavation in an increasingly wider area N-NW of the Late Uruk monumental public complex has provided us with a greater understanding in details of the stratigraphic sequence over wide areas. Temporary, perhaps seasonal settlements, indicated by layers containing a few wooden structures, for the first time appeared to be present in this part of the settlement as early as the beginning of period VI A. Similar settlers regularly returned after the end of period VI A (period VI B1), and again at the end of period VI B2. It is interesting to note that the first evidence of what may perhaps have been intermittent waves of groups of nomadic pastoralists in the Malatya area was only shortly after the first rare occurrence of red-black ware in the final levels of period VII, around the mid-4th millennium BC. Furthermore, red-black burnished pottery is clearly present in period VI A as one of the classes of local production, together with the more plentiful wheel-made plain simple like ware. It is possible that a powerful linkage with the cultural components of Transcaucasian origin also existed in the VI A metallurgical production which, as we have seen, shares the same technology, formal models and perhaps even raw materials with those areas.

The picture that we find here is that of a very long period of interaction, and perhaps even economic integration, between the sedentary people living in the Malatya plain and groups of nomadic pastoralists perhaps of Transcaucasian origin. This integration was probably helped by the emerging

central institutions that were certainly able to control and economically exploit the various components present in their territory (one only has to think of the great increase in sheep raising in period VI A, which continued right through to the beginning of the third millennium⁵⁸). It must therefore have been, at least partly, a peaceful phenomenon, perhaps breaking out into conflict at times, as always occurs in relations between nomadic and sedentary peoples living on and exploiting the same territory. Only this model can explain the intermittent presence of these episodes of occupation that was alien to the usual settlement patterns, and which occurred in a continuous sequence of residential settlements, but which also interfere culturally with the local communities bringing in new elements and creating an osmosis that is the only explanation of the radical nature of the changes that took place in the region in the second quarter of the third millennium. The elements of Transcaucasian culture, in other words, seem to have gradually permeated the tissue of the local Mesopotamian-type culture to the point of radically transforming it when there must have been a deep-seated political crisis in the centralised institutions.

This crisis, from what we know today, does not seem to have created a power vacuum but rather a radical and irreversible change in the forms and the structure of power. In period VI B2, immediately after the burial of the high-ranking personage, an enormous surrounding wall about 6 m thick was built on the top of the mound, which must have been intended to protect a citadel or an acropolis, while outside the wall, and running down the slope of the mound, was the village with common dwellings of which we have now excavated a surface area of more than 2 000 sq metres⁵⁹. The wall, which was discovered in 1999, and of which only a small section has yet been excavated, clearly indicates the emergence of a new type of political power, no longer based on the administrative control of the staple economy and the labour force, like the previous temple/palace system of period VI A, but based on a different type of relationship between the élites and their people. This is a major political change, which brought the area of Malatya fully into the Anatolian cultural environment, but did not immediately change all the aspects of the culture. Pottery production, for example, continued to develop the Late Uruk traditional classes with new and old types of plain simple and reserved slip wares, while in metallurgy there was a change in the technology and perhaps also in the supply of

raw materials (see Palmieri, Hauptmann in this paper). It was only later in Early Bronze II (period VI C) that the change became total, indicating the complete assimilation and local elaboration of cultural features of eastern Anatolian and Transcaucasian origin⁶⁰.

It was at about this time, around 2 800-2 700 BC, that there was a gradual expansion southwards in the Upper and Middle Euphrates Valley, south of the Taurus, of new cultural elements linked to the new symbols of the new power originating in the north. Cist tombs, a great boost in the development of metallurgy, complex funerary rituals and the richness of funerary gifts also spread within the Early Bronze contexts in the more southern areas, where there was no evidence of any direct presence of Transcaucasian components, and became a distinctive element of those cultures until Early Bronze III⁶¹.

The tomb at Arslantepe seems to mark the beginning of this far-reaching change involving the forms of power and the manner in which it was exercised in the Upper Euphrates Valley during the first half of the third millennium, even though it happened in different situations undergoing different developments (north of the Taurus, south of the Taurus). Whoever this buried leader was, and whether he belonged to the new or to the old élites, does not alter the fact that he, his society and his culture – whether alien or local – marked the emergence of a new reality, which had so closely integrated itself into the old system that it was able to transform it from its foundations.

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58. FRANGIPANE and SIRACUSANO, 1998.

59. FRANGIPANE, 2001.

60. CONTI and PERSIANI, 1993.

61. PELTENBURG, 1999 ; SCHWARTZ *et al.*, 2000.

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