New Evidence from the Yemenite "Turret Graves" for the Problem of the Emergence of the South Arabian States

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During the first millennium BC a new script appeared in the mountainous zone in the southern part of the Arabian peninsula. Together with the ruins of the great walled cities and splendid monuments, this script points to the rise of a group of complex societies which, at that time, played an important role in the historical events taking place between the Mediterranean Sea and the Indian Ocean.

These events have always fascinated scholars either because of the legendary and fabulous image of these reigns projected by the ancient literature (Bible, Classical sources, Koran) or because of the peculiar geographical and chronological conditions in which they took place. The new states appear to be more decentralized than the earlier ones, which are still situated in the Fertile Crescent. They spring up suddenly, apparently without the more or less visible preparatory phase characterizing all the other states, that is, without the formative stage which almost automatically leads to the development and then the flourishing of a complex society.

The suddenness is above all what is surprising, also because it has been further accentuated by the studies so far carried out. Above all by favouring local epigraphic sources, these studies tend to point to a highly localized point in time (albeit somewhat hotly debated) for the beginning of this civilization, which will gradually develop into the realms of Saba, Ma'īn, Qatabān, Awsān, Ḥaḍramawt, Ḥimyar.

On paying closer attention, however, it is seen that the rise of the southern Arabian states appears to be sudden above all because it takes place against a cultural and historical background of which very little is known. The impression of surprise is created by this materialization out of a vacuum, but it is not due to the phenomenon itself but to the fact of its being in a *terra incognita*.

For the past few years the main aim pursued by the Italian Archaeological Mission has been to investigate this original problem (de Maigret *et al.* 1988). The research is

based on two essential questions. Was there a cultural tradition on to which the southern Arabian culture could be grafted? And, is it possible to identify a previous cultural change in the face of, and in opposition to, which this civilization is independently born? In other words, are we dealing with "precursors" or must it be considered a matter of "predecessors"?

For this purpose the research was aimed essentially at filling the gap preceding the "sudden appearance" of the states. The study of the troubled Yemenite environment indicated that any prior traces would have to be sought in a physiographical area that was quite different from the pre-desertic strip in which the so-called Ṣaihad culture flourished, and so efforts were concentrated on the highlands south-east of Ṣan'ā (de Maigret 1982).

This is where a Bronze Age culture made its first appearance in Yemen (de Maigret 1984). It consisted of farm villages with roughly rectangular farmhouses concentrated around common activity areas. The walls, of mudbrick or earth or brushwood, rested on rough-hewn basement blocks. The ceilings were supported by central pillars. During the excavation of four of the roughly fifty sites found so far, pottery, stone implements, objects of bronze and semi-precious stones, grindstones, pestles and abundant animal bones have been found on the floors. Examination of the seeds included in the pottery (Costantini 1984) and of the bones reveals that sorghum, wheat and barley were grown and oxen, sheep, goats and pigs were raised (Fedele 1984). Radiocarbon analysis of the charcoal remains from the fireplaces gives dates ranging from 2200 to 1650 BC.

The sites inhabited by these communities of farmers and animal raisers are distributed along the ancient arable deposits, and their size is seen to vary according to how close they are to the compulsory routes linking the highlands to the desert. Here the settlements, as though made up of several smaller sites grouped together, are much larger and represent the early stages in the development of centres which would ultimately exceed the dimensions of a simple one-family farm village. The reason for this social and functional integration should perhaps be sought in the position of several of the sites, *i.e.* suitable for intercepting the communication routes. Allochthonous raw materials found in the excavations seem in fact to confirm the existence of trade (bronze, alabaster, chalcedony, obsidian). The existence of a (fertility) cult is proved by the presence of characteristic phallic idols. The rather simple ceramic ware seems to fit the pattern of the traditional Syro-Palestinian pottery-making of the Early Bronze Age.

In other words, this cultural pattern is quite different from that of the subsequent Sabaean civilization. It appears that none of what came afterwards has a counterpart in the earlier period—none of the material culture, none of the architecture or settlement features, nothing of the cult or the mode of production. There truly seem to be too many differences, even though many centuries separate us from the later culture. It does not seem possible to identify in this Bronze Age any of the Sabaean roots we were seeking.

The discovery of this earlier culture was very important for us because, although it did not fully make good the lack of knowledge of the culture of the preceding period,

by allowing an earlier known limit to be set, it revealed a definite gap between protohistory and history.

The gap between 1650 BC and the beginning of the Sabaean era could not be further decreased unfortunately by starting from the top. It had to be approached from the Sabaean side, *i.e.* from the bottom. The chronological terms of this part are extremely uncertain (the dating was in fact the result of dubious dynastic reconstructions based on the inscriptions). Furthermore, it was no easy task to identify the most suitable point from which to begin this backward search through time.

The discovery in 1985 of an unknown Sabaean city (Yalā Ad-Durayb, ancient ḤFRY) in the region south of Mārib was to provide the opportunity (de Maigret *et al.* 1985). The comparative age of the site, estimated on the basis of the technique used to construct the city walls, was apparently confirmed by the systematic study of the pottery found on the surface. Comparison with the American stratigraphies of Qatabān pointed to the sixth century BC as the date the city was abandoned. However, many typologies, particularly among the potsherds gathered near a natural section opened up by erosion on the south-west part of the site, seemed to indicate an occupation dating back at least as far as the tenth-ninth century BC (de Maigret 1988: 1-20). Excavations carried out in 1987 in one of the private dwellings located in the "upper city" of Yalā did in fact indicate that the city had been continuously occupied for a long time. Below this last, later settlement level lay traces of two other earlier layers, which seem to confirm the hypothesis of a relatively archaic period for the first occupation of this Sabaean site.

After a pause of a good thirty-five years, the Yalā excavations meant the resumption of direct archaeological examination of the Sabaean culture. This initiative had been expected for some time, particularly because only archaeology could now speak the final word on the problem of the ancient chronology of this period. However, the excavation carried out on a simple private quarter of the city has led to further important results, for instance, knowledge of the Sabaean material culture.

The data obtained on domestic architectural techniques, common pottery typology and everyday cult practices, now allow us to perceive more clearly and to confirm with greater confidence the actual radical differences between this and the Bronze Age culture mentioned above. Although small, the chronological gap remains. However, it is not enough by itself to explain the total absence of relationships.

We are up against two cultural phenomena which are totally different as regards economy, society, way of life and mentality. It is a definite fact, although it is a pity that it must always be observed on two different planes, in two different patterns separated by a chronological gap of half a millennium. This prevents us from appreciating the aspect of cultural change and therefore from reconstructing the way the southern Arabian states emerged.

A new type of evidence recently found by us in Yemen can perhaps now provide us with a few missing links. This consists of the category, very common not only in the

Yemen but throughout the Arabian peninsula (from Oman to Saudi-Arabia and Jordan) of the "turret graves", also known as "pill-box" tombs, the name originally given them by H.St.J. Philby (1939: 371ff).

These monuments are found, in various stages of preservation, in all parts of the Yemen explored by us—from the desert to the eastern highlands. They are always found in fairly high areas, which are visible from all sides. The turrets may be isolated, either standing alone or in small groups, for instance, in the region of Ḫawlān aṭ-Ṭiyāl (Anon. 1983: 343, figs 55-7), near our Bronze Age sites, or aggregated in graveyards, sometimes very large, like those on the mountains surrounding the Ğawf valley and the Ramlat Sab'atayn desert.

Although ruins of this kind have always been noted (and often reported) by travellers (Halévy 1872), their actual function remains dubious and their dating uncertain (Doe 1983: 56ff). The peculiar alignments of stones (walls, rows of slabs and piles of blocks, *etc.*) which, varying in number, direction and length (sometimes many hundreds of meters) are often associated with the truncated-cone shaped towers, have only complicated the hypotheses, confirming the sense of enigma which has always characterized this type of ancient monument (Figure 1).

The finding of a group of graveyards in the mountains separating eastern Ḫawlān (Ṣirwāḥ zone) from the Ğawf valley (Minaean region) in 1986 provided us with the opportunity to make a research-oriented approach to the problem (de Maigret 1986). The graves in this area (Al-Maḫdarah) displayed a perfectly intact architecture (Figure 2). The towers, with a double dry wall consisting of flat-laid stone blocks, were still covered with large slabs. Other slabs, laid edgewise, marked off the chamber used for the deposition inside the grave. Access was through a narrow rectangular door opening (about one meter above ground level) on the western side of the turrets (Figure 3). Almost all the graves are associated with one or more rows of stones ("rayṣ"), resembling low walls, which, starting from the circular grave structure, continue in various directions, also for considerable distances (Figure 4).

Unfortunately, the graves appear to have been violated in ancient times, but the excavations carried out inside six of the less disturbed structures have made it possible to ascertain several of the main features of the burial customs. Multiple burials, in which the earlier bodies were piled up against the walls to make room for the more recent, seem to indicate family graves (Figure 5). The more recently inhumed bodies still bear traces of the organic matter associated with cloth and plants used in embalming. Only traces of the grave goods still remain (beads, bronze and iron fragments). Only in one case (grave T13) were ornamental furnishings found, consisting of a necklace made of semi-precious stones, sea-shells and gold, a cornelian bracelet, a bone ring, and objects related to the preparation and use of bistre (Figure 6). Oddly enough, pottery is absent, except for two fragments. Samples were taken from the graves with the largest quantity of bones

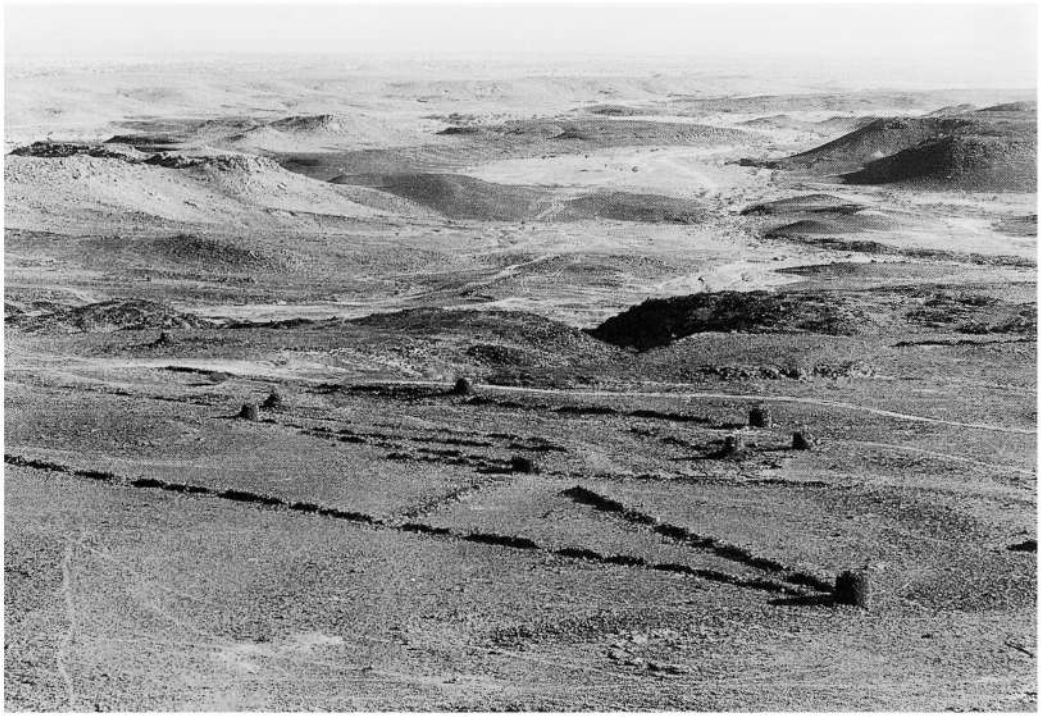

Figure 1 Partial view of the necropolis (MKDi) at Al-Maḥdarah near Ṣirwāḥ

Figure 2 The turret grave T5 at MKDi (Al-Maḥdarah)

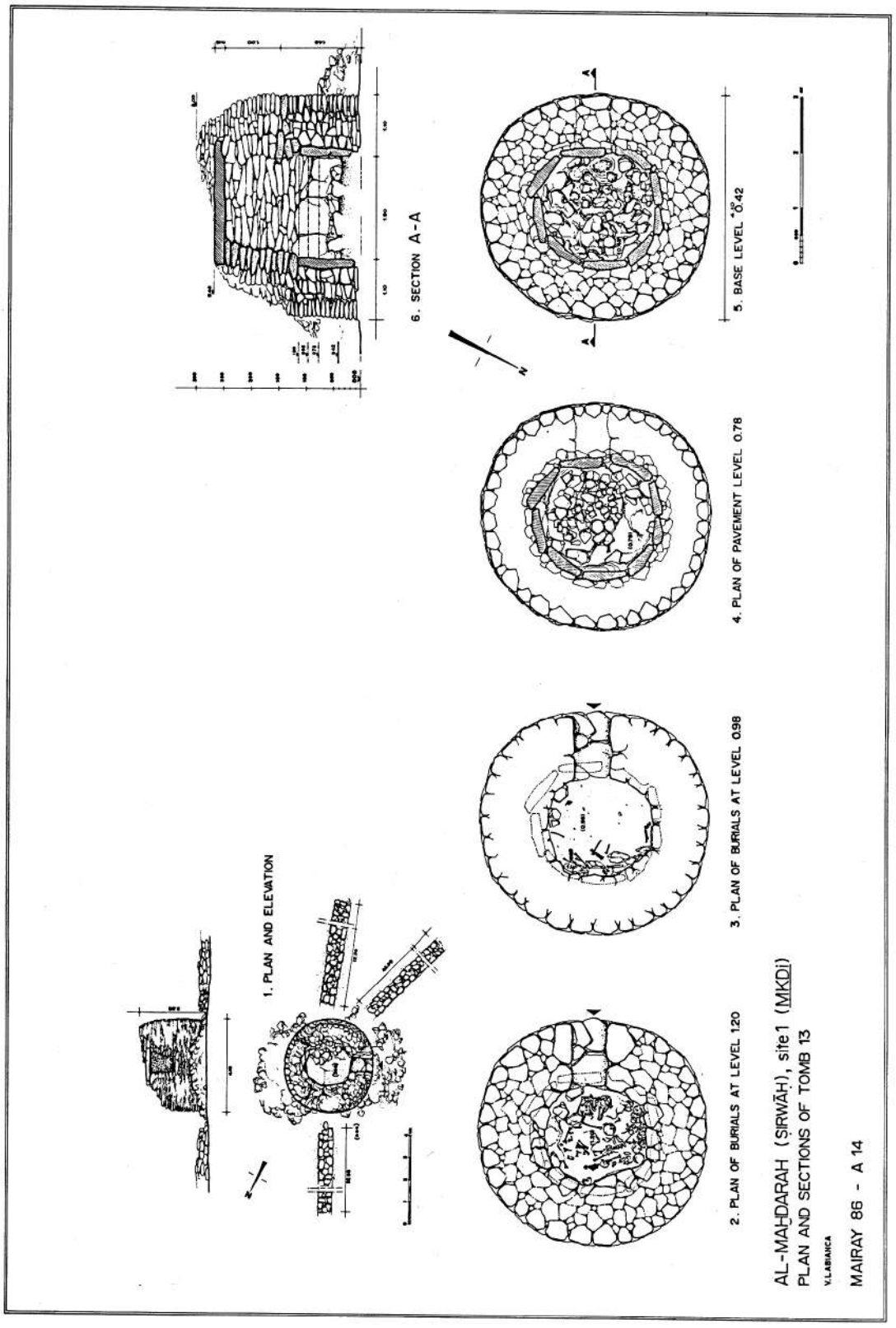

Figure 3 Plan and sections of grave T13 at MKDi (Al-Maḥdarah)

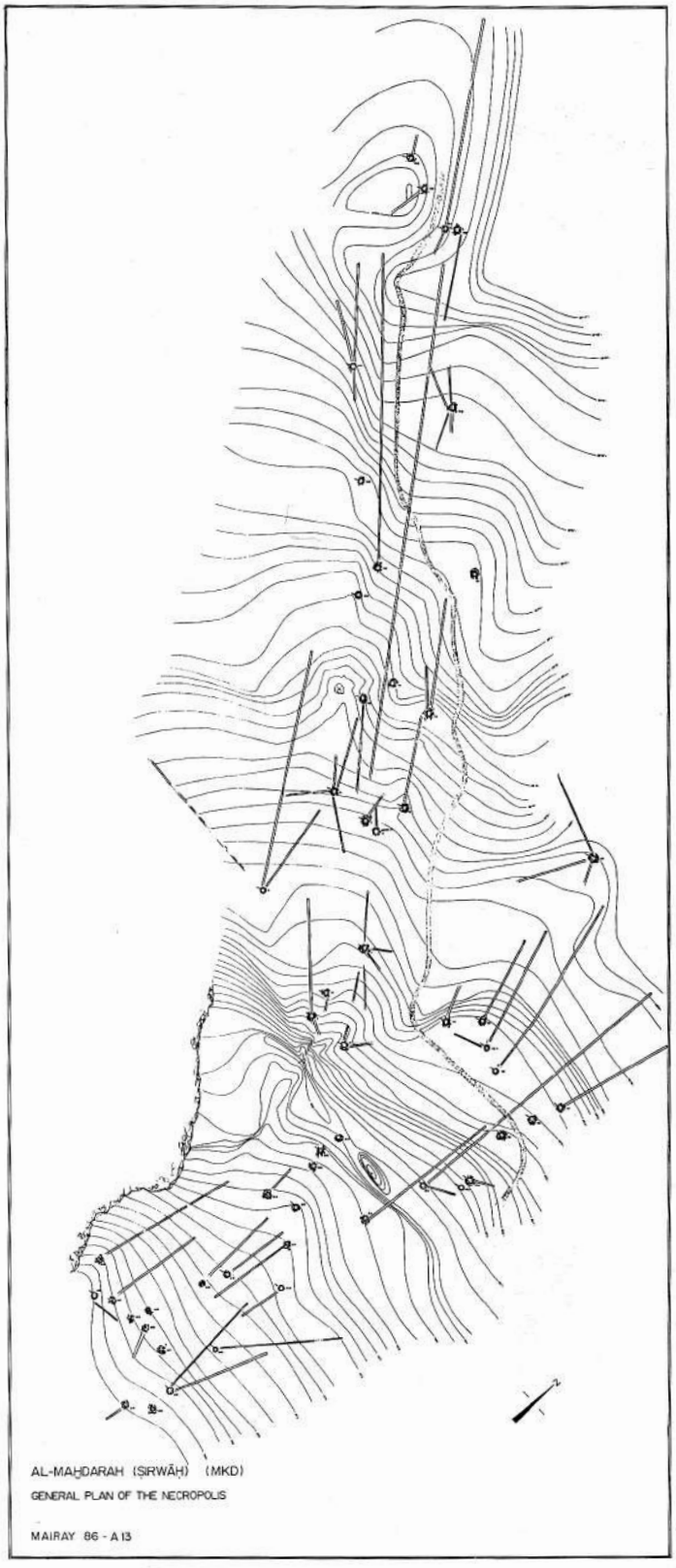

Figure 4 General plan of the necropolis MKDi (Al-Maḥdarah)

(graves T5, T13, T15). When subjected to radiocarbon analysis, these samples gave the following dates: 60 BC, 630 BC and 830 BC.[1]

Although limited by the violation of the graves, the evidence gathered allows a number of important observations to be made, particularly when a comparison is made with the more general data mentioned in the earlier part of this report. First, the dates obtained must be said to place the Al-Maḫdarah graveyards right in the first millennium BC. In other words, these graves are contemporary with the great southern Arabian states. This is surprising for two reasons: the first reason is related to the considerably greater antiquity (third millennium BC) of the structurally identical funeral monuments excavated, for instance, in Oman (Santini 1985; 1987). The second consists of the totally different design of the classic southern Arabian graveyards, *e.g.* the rich crypt tombs of Timna' (Cleveland 1965: 173ff, plans 1f); the hypogeum chamber graves of Ḥurayḍah (Caton-Thompson 1944: 63ff, pls 79f), and Waragah (de Maigret 1985: 355ff, figs 19f), near Ḏamār; the tombs dug out of the rock at Šibām Suḫaym (Anon. 1983: 344, fig. 59), near Ṣan'ā, and the zone of Al-'Ulā and Madā'in Ṣāliḥ (Anon. 1975: 56, 59-62) in northwest Arabia; and the inhumation graves of Yalā[2] and Madīnat al-Ahğur (de Maigret *et al.* 1984: 431, transposed figs 15, 19) in the Al-Ḥadā region.

Is it conceivable that the turret graves come (also in Yemen) from an earlier different tradition? Of course, it is impossible to generalize on the attribution of so many graveyards of this type found in Yemen from the chronological evidence obtained from analyses carried out on only three graves. If for no other reason, this would be sufficient justification for trying to extend the hypotheses and the probabilities.

The first observation is that it is obvious that the Al-Maḫdarah graves are late. The state of preservation of this kind of monument deteriorates progressively: the outer wall of the construction is the first to fall (Figure 7), followed by the internal one, and lastly only the slabs of the burial chamber laid edgewise remain (Figure 8). In this particular case, the deterioration has visibly only just begun. However, near the intact towers some unimposing ruins can be seen, the remains of graves, obviously from an earlier period, which have been reduced to mere slabs laid edgewise (Figure 9). Although deteriorated to a greater extent, these ruins have been found in almost all the graveyards visited, both together with intact tombs, obviously of a later period, and on their own, in graveyards no longer used in later periods (Figure 10).

Hitherto excavation has not been fruitful as far as these earlier monuments are concerned. The ruinous state of the structures has not guaranteed the preservation of bones and grave-goods inside the burial chambers. Several fragments of human bones extracted from a highland grave (Suhmān) have moreover not led to any definite

[1]The radiocarbon dating analyses are by Beta Analytic Inc., Coral Gables, Florida, U.S.A. (date reported: 26 November, 1987).

[2]During the 1987 excavation campaign at Yalā/Ad-Durayb, a pre-Islamic cemetery with inhumation graves was discovered in the nearby area west of the Sabaean city.

Figure 5 Multiple burials in grave T13 at MKDi (Al-Maḥdarah)

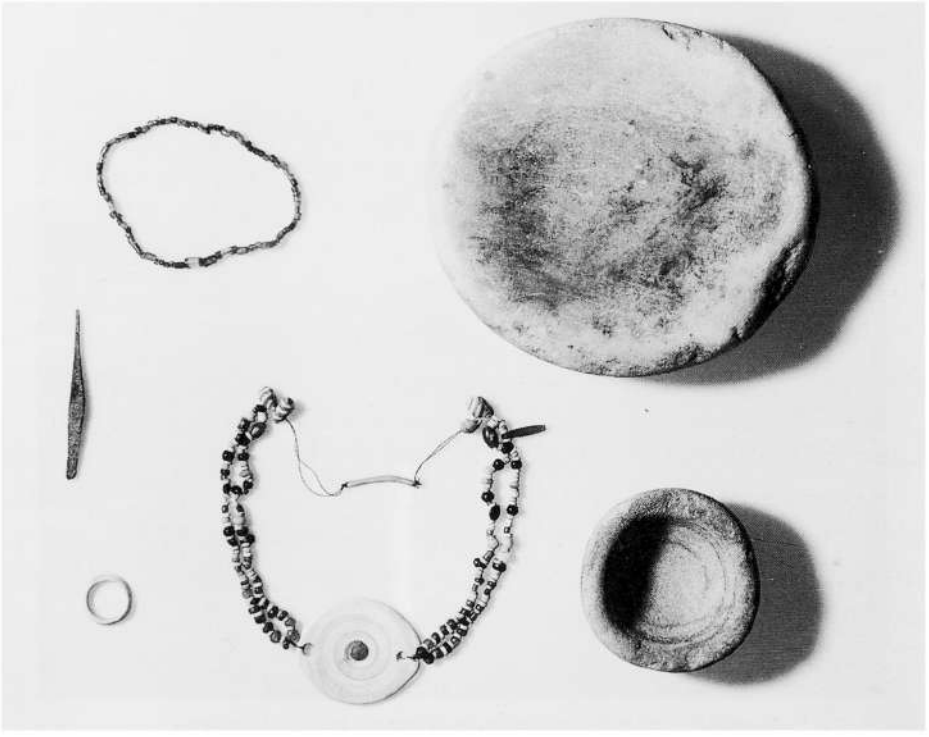

Figure 6 Ornamental furnishing from T13 at MKDi (Al-Maḥdarah)

Figure 7 A view of grave T27 at MKDi (Al-Maḥdarah). Here only the inner wall supported by the slab circle set edgewise is preserved.

Figure 8 An older grave at MKDii (Al-Maḥdarah). Here only the slabs of the burial chamber laid edgewise remain.

Figure 9 A turret tomb worn down to the slabs of the burial chamber (al-'Alam al-Abyaḍ, northern Ramlat Sab'atayn)

Figure 10 An intact turret grave together with—in the foreground—the remains of an older one (al-'Alam al-Abyaḍ, northern Ramlat Sab'atayn)

Figure 11 Foundation structures of a protohistorical monument of uncertain function near the village of Banī 'Aṭif (Ḫawlān aṭ-Ṭiyāl)

Figure 12 The fine paved road found along the pass linking the Ṣirwāḥ area to the Minaean regions of Al-Ǧawf

chronological dating (Anon. 1983: 343, fig. 57). However, the female ornamental objects contained in grave 13 of Al-Maḥdarah (dated around 630 BC) also include an object which can definitely be linked to the Bronze Age tradition. This is the central pendant of a necklace consisting of a large gastropod operculum, of which an identical specimen has been found in the excavations of the protohistorical sites of Wādī Yanā'im, WYi (de Maigret 1984: 103, fig. 21a, b), and which represents the common decorative element in the eastern Arabian tombs of the early third millennium BC, *e.g.* the perforated opercula of conus from Cairn 6 of Ğabal Ḥafīt in Abu Dhabi (Cleuziou 1978: 16, fig. 17.1, photographs on p. 28).

The same grave construction technique, *i.e.* laying the slabs edgewise as foundations for the walls, has been seen to have been used in the Bronze Age Yemenite villages. In this sense, the analogies with the graves are seen to be even closer on comparison with the foundation structures of a monument of uncertain function, although clearly protohistorical, found recently near the village of Banī 'Aṭif in Khawlān (Figure 11).

In conclusion, I think that all the available evidence points to the existence of a long-standing tradition for this particular type of tower-grave funeral rite. However, only the excavations, which are being continued, will provide definitive proof of this hypothesis.

The results of a series of explorations carried out over the last two years allow other observations to be made. The reconnaissances were designed to ascertain the distribution of the graves with reference to the larger Sabaean and Minaean centres. The fieldwork was supplemented by a detailed study of the aerial photographs of inner Yemen carried out by Mr J. Evans of the "Survey Authority" in Ṣan'ā and by a systematic collection of the literature referring to this type of necropolis carried out by Dr A. Luppino (1987-8) of the Istituto Universitario Orientale of Naples. This gives us an initial idea of the position of these monuments with respect to the ancient Yemenite settlements in both the protohistoric and the historical period.

As can be seen, the graveyards all tend to be sited in a decentralized position with respect to the fortified cities of the state period (Figure 13). Sometimes they are located in areas up to a hundred or so kilometers from the nearest Sabaean or Minaean centre. They are always built on hills or isolated flat areas, and several different local materials are used in their construction (limestone, granite, basalt). In some areas there is a very large number of graves: in the northern area of Ramlat Sab'atayn, for instance, up to about four thousand have been counted.

On the map the graveyards seem to be distributed according to a non-random pattern. They are strung out in long lines that seem to extend beyond the gaps between the Classic Age settlement groups. We thus see rows of graves occupying the desert between Ḥadramawt and Ma'īn, Šabwah and the oasis of Al-'Abr (towards the Al-Naǧd desert), between Naǧrān and the far-off Eastern Province of Saudi Arabia. This intermediate distribution is found also on a smaller geographical scale. Turrets running along the

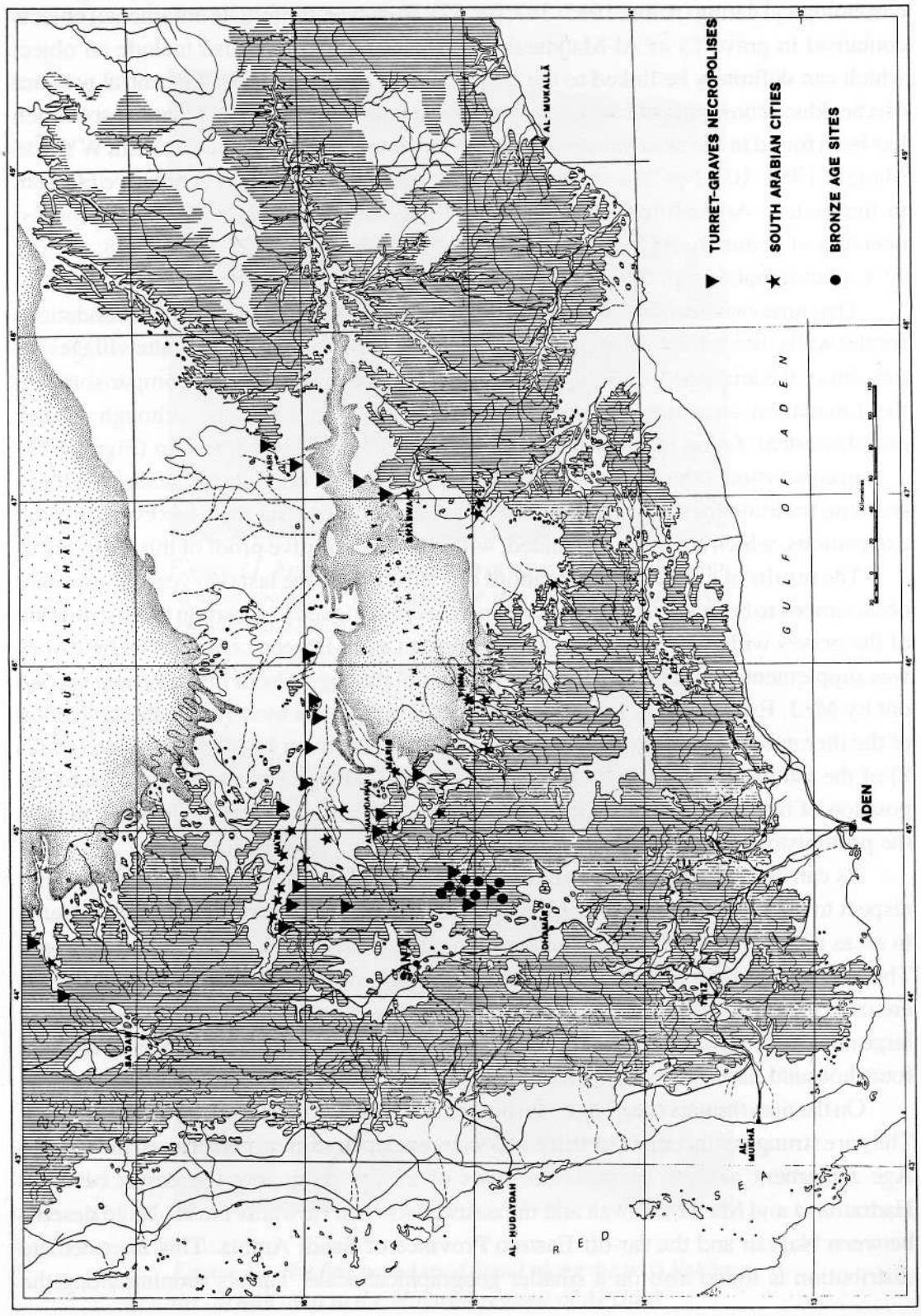

Figure 13 Distribution map of the turret tomb necropoleis in inland Yemen

mountain crests accompany travellers journeying from Mārib to Ṣirwāḥ, from Mārib to Yalā, from Ṣirwāḥ to Ǧawf, and from Ǧawf to the highlands.

The idea that the position of these funeral monuments followed the ancient roads linking the early state centres was confirmed by several investigations carried out on the ground during our reconnaissances. It was indeed the graves that actually suggested the existence of the ancient roads, which otherwise would not have come to mind. One example of this is the fine paved road flanked by graves of this type linking the Ṣirwāḥ area to the Minaean regions of Ǧawf (Figure 12).

In passing it may be said that, in such a perspective, the well-known "rays" also take on a certain significance. As they ran in the same direction as the ancient roads, they must have been clearly visible to travellers and could well have had the function (in view of their highly variable parameters) of characterizing and identifying the individual graves (which would otherwise all have been identical).

The importance of what has been said is self-evident. Suffice it to recall the implications that a complete survey of the distribution of these graves could have in a topographical and historical reconstruction of pre-Islamic Arabia. However, this fresh evidence also touches upon certain aspects of the problem of the emergence of the southern Arabian states, which will only briefly be mentioned here.

The peculiar distributional model of the turret graves seems without doubt to imply a connection between these structures and trade in early times. Furthermore, it has been seen that they reflect a different culture from that documented in the epigraphs, the cities and the monuments of the South Arabian classic period. This culture finds its nearest equivalent among the people settled in the Yemenite mountains in the third-second millennium. As shown by the Omani and Saudi turret graves, this culture became widespread throughout the Arabian peninsula starting from 3000 BC and, given the extreme peculiarity of the funeral rites, could be considered native to this subcontinent.

The small but important excavations of Al-Maḫdarah prove that this culture was already in existence around the time of Christ and coexisted with the other great culture, the "South Arabian", maintaining its characteristics intact. The depositions have been seen to bear traces of mummification, and it has been observed that pottery was not included among the grave-goods. The first evidence is in agreement with the idea of transporting the deceased to graveyards far from the inhabited area. However, together with the second, it seems to suggest also that those carrying out the burials were travellers.

Could this perhaps mean that, during the Sabaean period, there existed a sector of society with a peculiar ethnic identity which, by ancient tradition, performed the function of transporting goods from one centre to another? Could this turret-grave people have represented a very ancient autochthonous Arabian population? And could the Sabaeans be considered later arrivals who managed to exploit, by organizing and optimizing it, a trade network which already extended all over the peninsula and had been slowly built up by a preceding cultural tradition?

These are stimulating arguments and their implications are of great interest. This is also because, since they extend beyond the borders of the Yemen, they could represent the first actual evidence of trade between the Erythrean Sea and the world of the Mediterranean.

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