## Near Eastern Aryans in Central Asia

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#### Abstract

Research into the origins of the Bactria-Margiana Archacological Complex (BMAC) indicates that it achieved its historical position after a migration of tribes from Southwest Asia to the oases of Central Asia. The BMAC provides the best candidate for early Indo-Iranian expansions and its abundant evidence for ritual behavior provides critical evidence for preZoroastrian religion in Central Asia.


The last quarter of this century has seen the discovery of a new civilization in the farming oases of Central Asia. This was a Near Eastern type civilization that appeared on the eve of the 3rd-2nd millennium BC. At present this archaeological culture is well known in Bactria (along the middle part of the Amu Darya River) and especially in Margiana (east Turkmenia) and we have enough evidence to speak of a special "Bactria and Margiana Archaeological Complex" (BMAC). The evidence available leads us to believe that this civilization spread almost simultaneously over eastern Iran (from Hissar via Shahdad up to Tepe Yahya) and Baluchistan (Quetta, Mehrgar-Sibri) and that it finally reached the Indian subcontinent (Chanhu-Daro, Jhukar). In other words this culture spread over a territory that stretches for almost one thousand kilometers from north to south (from the southern coast of the Caspian Sea to the Persian Gulf) and for approximate; Fig. 1). While the evidence for this culture in the region of the Indus is still fragmentary and mainly limited to glyptics and seals, this can be explained by the fact that the sites of the post-Harappan culture have only been poorly studied. The parallels between the "nonHarappan" seals and their Central Asian counterparts (Mackay 1967), especially the Bactria and Margiana ones (During-Caspers 1985), are simply too close. Also these parallels can be supported by the most representative gypsum "amulets" from Kalibangan which apart from this area are found only in the BMAC glyptics.


Fig. 1. Map of the distribution of the BMAC.
During the last decades large-scale archaeological excavations in Margiana have yielded vast and diverse material that I have sought to bring together in Margiana and Protozoroastrism (Sarianidi 1998) and its main conclusions are presented in this work. The basic literature on the subject can also be found in the book and for this reason only references to new works will be mentioned in this article.

The fact that the same tribes lived almost simultaneously in such a vast territory cannot be explained simply by the usual appeal to trade and cultural contacts. It seems all too apparent that we are dealing with a broad tribal incursion. Up until recently it was thought that the ancestors of the BMAC came from south Turkmenistan and first settled down in Bactria and Margiana and some time later migrated to eastern Iran and Baluchistan. But from a cultural point of view the BMAC area surpassed the ancient farming oases of south Turkmenistan, its assumed area of origin. There are now sound grounds to suppose that the BMAC invasion was a complex phenomenon in which not only local but also Incoming tribes took part.

In his brilliant work L'age des echanges inter-Iraniens, P. Amiet (1986) has thoroughly examined this issue and demonstrated that Bactria found its closest relationships if not exclusive parallels in south-western Iran (Elam). This was, as he believed,

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the result of trade and cultural exchanges within Iran. Since that time there have been found many new sites (especially in Margiana), which make it possible to propose a broad tribal incursion of settled farmers in the whole territory of the BMAC.

The complex study of this rich and, what is more important, diverse material of the BMAC (monumental architecture, ceramic and metal production, glyptics and seals. objects of applied art, etc.) allows us to assume that this tribal invasion had its roots far in the west and finds its most representative analogies in Iran, northern Mesopotamia, Anatolia and partially in the MinoanMycenaean culture of Greece. At present the starting point of the assumed invasion is placed in the frontier territory of eastern Anatolia and northem Syria up to the region of Lake Urmia.

## Reasons for Colonization

Before we start to discuss the approximate route of the assumed migration let's try to analyse the reasons for such a broad tribal incursion. Philip Kohl (1996) has made a review of the various points of view, some of them quite old fashioned. Though the problem of tribal invasion is not yet completely resolved, it seems most reasonable to explain it in terms of climatic change and the global aridization that affected the whole Near Fast. Such an assumption can be supported by the fact that in eastern Anatolia and neighboring Iran many sites were in decline and abandoned by their ancient inhabitants. These could be the dramatic consequences of the xerothermic period especially if one remembers that farming was the basic cconomy for these ancient tribes. The gradual but steady process of decreasing water levels in the mountain rivers and streams as well as frequent droughts would have resulted in shortages of arable land and finally brought about their complete abandonment. Thus, these ecological changes forced the ancient farming tribes to abandon the areas that they harl occupied for centuries and try to find new ones suitable for farming. Based on the most recent archaeological data we can follow the main routes of this migration.

To the south of the motherland of these tribes was the rast and lifeless Syro-Palestinian desert. The eastern coast of the Mediterranean was long ago densely inhabited by local tribes. The road to the north, through the Caucasus was blocked by
almost impassable mountains that represented a serious obstacle for the caravans loaded with goods and chattels, children and old men of the migrating tribes. The western areas up to Troy were from time immemorial inhabited by traditional farmers, the pre-Hittite tribes, so that one could hardly think that there had been enough free lands there for colonization.

Thus, the only acceptable direction for the migrating tribes was easterly, including densely populated Mesopotamia. The putative immigrants would have to skirt around Mesopotamia and move along the Zagros mountains in the direction of the Persian Gulf until they reached the fertile oases of ancient Elam. There are good reasons to assume that the majority of the immigrants settled down here and gradually assimilated with the local proto-Elamite population. The new and continuous waves of immigrants to these lands resulted in overpopulation so that some tribes were forced to continue their movement farther to the east. On the road along the Persian Gulf and the Arabian Sea some of them began to master the lands suitable for irrigation farming and partially settled down and assimilated with the local people. Those of them though who continued their migration reached the territory of eastern Iran, settled there and established roots in the free and fertile oases of Bactria and Margiana. At that time there was no settled farming life in Bactria and the rich oases of the Balkhab river were practically deserted. By that time Margiana had already been partially inhabited by some tribes that had penetrated to the Murgab Delta from south Turkmenia. The other immigrants continued their way along southern Iran and reached Baluchistan and presumably the Indian subcontinent as well.

The second assumed route (but incomparable in its scope with the Elamite one) could have gone through the same Urmian region along the Elburz mountains to the south coast of the Caspian Sea and up to Iranian Chorasan, Bactria and Margiana. It is quite possible that both of these related tribal waves met on the Iranian plateau. It should be especially noted that this was not a one-off migration; on the contrary it looks like a slow infiltration of separate tribal groups that gradually dispersed (using the apt expression of I. Diakonov) and occupied new irrigated lands suitable for farming. Besides the

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main route to Iran and India there could have been some others that were of secondary importance and remain so far unknown. Future studies will undoubtedly define more precisely the assumed route of these tribal infiltrations. But there is still enough evidence to assume that the general movement was from west to east.


Fig. 2. Fire temple of North Gomur.
The works of P. Amiet (1986) and M. Pottier (1984) demonstrate the parallels between Elam and Bactria and the analogies between Margiana and Elamare presented in Margiana arid Protozoroastrianism (Sarianidi 1998) mentioned above. Thus, we now have a rather complete picture of the tribal movements from the Near East to Central Asia that can be proved by some essential parallels between the BMAC and southwest Asia. In this regard special attention should be paid to the palaces and temples of Bactria and Margiana. In spite of their originality and unique character with respect to the monumental architecture of the Near Fast, one can still find some definite features of similarity in separate architectural blocks of temples and palaces of northern Mesopotamia, North Syria and Anatolia.

## The Temples

In the temples of Bactria and especially of Margiana (the

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classical example is room No. 100 in the fire temple of north Gonur) there were excavated some rooms of a definitely special character (Fig. 2). They differ from the rest by their interiors that have figured recessed niches with tooth-like decorations of their side walls. These niches are conventionally called "blind windows".

Such architectural blocks are unknown in the interiors of the Mesopotamian temples but decorate the inside cellas of the monumental buildings of eastern Anatolia (Tillya) and especially of the neighboring Urmian region (Hasanlu, Baba Jan) but also of Media (Nushi Jan). Though they all belong to a later period (first centuries of the 1 st millemnium BC ) there are sound grounds to assume that they had a common local north Mesopotamian origin. This is shown by the finds in Tepe Gawra, where already from the middle of the 4th millennium BC the "blind windows" decorate the temple cellas. In spite of the large chronological gap between these temples such a detail as a "blind window" used as an altar in the Mitannian temple Tell Brak (2nd millennium BC) scems to a certain extent to bridge the two regions.


Fig. 3: Plan of Gomur fire temple with cells.
In practically all the monumental buildings of Bactria and Margiana one can find different combinations of long and extremely narrow chambers ( $70-80 \mathrm{~cm}$ high) located in one row. These chambers, which are obviously not ordinary rooms, are conventionally called "cells" and most likely had some special purpose. A fine example is an inner court of the fire temple at North Gonur that on each of its three sides has a row of 12 cells

[^0]of this kind (Fig. 3). Still more definite is a separately located closed architectural complex with a small inner square court that was found next to the monumental temple inside the citadel of North Gonur. It has a rectangular shape and on all of its four sides there are rows of cells.

In Bactria and Margiana such cells are found only in the monumental buildings and so far not a single example has been found on a secular or smaller site. Such cells are practically unknown in the temple architecture of most of the Near East except for the Hiffite ones. The main temple in Hattusa, the capital of the Hittite state, is surrounded by a row of such long and narrow chambers.


Fig. 4. Comparison of palaces of Mari (left) and Gomur (right).
Unfortunately, here too, the exact purpose of such"stores" is not absolutely clear. Still it is widely assumed that rows of such chambers separating the inner court with the centrally located temple on all four sides should have symbolisedasort of isolation of the cult buildings from the outer world, from all that is secular.

The comparatively small cells of the Margiana temples and palaces in no way can be compared with much larger Hiffite ones and may be looked upon as a kind of a a smaller copy of the Hittite temples.

Finally, strikingly impressive is the similarity between the palaces of North Gonur and Mari. Both palaces have two courtyards, bypass corridors, corner niches of the "swallow tail" type, vast rooms and so on (Fig. 4). Special attention should be paid to the audience hall in the Gonur palace where a low

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threshold with a centrally located column (to separate two wide passages) divides it into two parts. This plan finds its direct analogies in the official rooms of the palaces of Alallakh, Ugarit, Tell Tayan, Zinzirli, and Sakchagezi. It is representative that such dividing thresholds with centrally located columns are characteristic of the architecture of northern Syria (Frankfort 1954) and are not found in the monumental structures either in Mesopotamia itself or in the Near Fast. So far the local roots of their origin are unknown and some believe that they could reflect the influence of the architecture of the Aegean world.

It is clear that the parallels in the monumental architecture of Bactria and Margiana on the one hand and of northern Syria on the other lead us to assume the existence of a common center of ancient architecture, the Bactrian and Margiana temples and palaces representing a trend in this architecture. It can be proposed that these idcas of civil as well as cult architecture were brought by the tribes that migrated from the west. They brought them in the form of a certain "architectural memory" to their new homeland in Bactria and Margiana and more widely to the territory of "Outer Iran". It is natural to assume that in the course of time after they arrived in Central Asia their general planning principles had undergone serious changes. Only the major architectural blocks such as those of the sacred precincts remained unchangeable. This would include the cellas with altars in the form of "blind windows" where the main religious ceremonies directly linked with cult rituals took place. Equally unaltered remained the double audience halls in palaces where official receptions took place exactly according to the same etiquette as was used in the palaces of their faraway motherland.

Here also one should add that almost no temple in Bactria or Margiana had a single sculptural image of any deity. Not even a pedestal or a recessed niche where a statuette could have been placed has been discovered. The same is true for Anatolia and especially for the Hiffiteand Mitannian temples. This fact may prove the existence of cult rituals common to all these temples. It is quite possible that they were not devoted to specific deities but rather to their essence, that is, for example, a temple could be devoted not to the god of fire, but simply to fire in an abstract sense. One should remember that according to Herodotus up until the rule of Artaxerxes II the Persians did

[^1]not employ statues in their worship; the custom of venerating images was foreign to early Zoroastrianism.

We can see then that only the main, sacred sections of the architectural features remained unchangeable, the features that were directly connected with the ritual ceremonies, the most conservative and strongest elements of the people's psychology and culture. It is also clear that the temples and palaces of Bactria and Margiana do not reflect the usual cultural links or trade exchanges; rather they show that the tribes who migrated from the west continued to build traditional temples in their new homeland and remained faithful to their old gods and ritual ceremonies.

## Glyptics and Seals

The Syro-Anatolian parallels with the BMAC are not limited to monumental architecture. A close resemblance is also marked in the glyptics and seals showing the prevailing analogies in the SyroHittite art where apart from similar images one can trace some compositional subjects as well. In this respect very representative is the general idea of stcaling the "semen of life" which is reflected on seals and amulets of the BMAC where snakes steal it from animals. At present these subjects find their direct prototypes in the Syro-Anatolian glyptics and seals (Arslan Tepe, Tepe Gawra and others) long before the early Ubaid period (Frangipane 1993) One should observe the chronological "priority" of the north Mesopotamian examples compared with the Bactrian and Margiana one.

Undoubted parallels, though small in number, can be seen among the Minoan-Mycenaean seals of the Aegean world (scenes of tauromachia, the fight of a hero with a lion or with a manyheaded hydra, the 'Mistress of the beasts' and others) that are continuously enriched by new finds of this kind from Bactria and Margiana. It must be said that practically all the compositions are of a mythological character and reflect the commonest religious and mythological themes of those who made them.

Exceptionally impressive are the cult vessels with sculptured friezes so typical of the BMAC. These friezes represent completed subject compositions that form a tradition outside of Central Asia only in the Aegean and Anatolian
centres. One may suggest then that the Aegean and Anatolian traditions in decorating ceramic vessels with sculptured friezes were brought to Central Asia by the migrating tribes. In their new homeland these traditions underwent some transformation as their religious representations became more intricate.

The fact that the rims of the vessels were decorated with fragile sculptured friezes completely denies their every-day usage and it seems most likely that they were used for cult libations of hallucinogenic beverages. In the temple of Togolok-l there was found one intact vessel with five smaller ones inside of it. On the other hand fragments of vessels with sculptured figures of animals along the rim, exactly the same as those found in Bactriaand Margiana, have been recovered from Allalakh (where a temple was also found) as well as Tell Brak. These finds mark the supposed area of their distribution from here in a general easterly direction to Bactria and Margiana and up to Baluchistan (Kulli) that suggests the spread of the same religious ideas and rituals connected with cult libations only there and nowhere else in the whole religious system of the Near East..


Fig. 5. Sculptured dish from Ligabue Institute.
In this respect very representative are two ceramic dishes from chance finds in Elam (Sadigh Gallery 20, i and j) and from plundered tombs of Shahdad (Sarianidi 1998, fig. 10, no. 10) that are now found in the Ligabue Institute. Here I would like to use the opportunity to express my deep gratitude to the President of the Institute G. Ligabue for his kind permission to publish the vessel with sculptured figures of people who are

[^2]praying in a temple open to the sky (Fig. 5). These two ritual dishes find direct analogies with the famous native Cyprian ones leaving no doubt of their clear parallels. This similarity once again shows the links that start from Cyprus then through Elam and the great Iranian desert extending to eastern Iran (Shahdad). The sculptured friezes on the cult vessels of Margiana are supposed to represent compositions connected with myths of the Soma-Haoma god. In this respect a dish from Cyprus is representative on which human figures are shown with bent hands thus suggesting women washing clothes. At the same time these figures also bring to mind someone in the process of grating plants. In this case these could be plants that are used for the preparation of hallucinogenic cult beverages. The available data indicates that the opium poppy was alreads widespread in Asia Minor and Greece in antiquity (Merlin 1984: 160-189). V. Karagheorgis (1976:127) definitely says that in the Bechesultan palace there was found a vessel filled with opium poppy. The Russian orientalist M. Veselovskyi believes that the opium poppy was cultivated in western Asia and the eastern Mediterranian and was spread from there throughout the Old World in association with Indo-European migrations. Anyway, it may be considered proven that the ancient people of the Aegean world (around the Pontic zonc in Asia Minor) were aware of the narcotic plants and their use in cult ceremonies. It is quite possible that this knowledge found its reflection in the objects of applied art and more precisely in the dishes from Cyprus (Merlin 1984: 150250; Merlin 1g72). Here it should be mentioned that in the temple of Kition there were found small pipes that were supposedly used for smoking opium (Karagheorgis 1982, fig. 80) and that are reminiscent of the ones found in Margiana temples.

Finally, in the temples and tombs of Margiana there were found characteristic vessels with four spouts in the form of horned bulls' heads that directly correspond to ones from Anatolia. According to the unanimous opinion of specialists such vessels were used in Anatolia for cult libations, this statement is equally applicable to the Margiana vessels. The complex picture of mutual parallels between the BMAC and Anatolian and northern Mesopotamian regions is completed by the similarity of other artifacts of everyday use (pottery, copper and bronze items, decorations, jewellery and so on).

## Ethnic Identity

The large-scale invasion of the Near Eastern tribes into Central Asia cannot but raise the question of their ethnic and linguistic origin. Among many hypotheses for us the most attractive is the theory of V. Gamkrelidze and V. Ivanov (1984: 865) that considers the Near East (Anatolia, south Caucasus and North Mesopotamia) a motherland of the Indo-European tribes whose eastern branch is represented by the Indo-Iranian or in other words Aryan tribes.

This theory is also supported by the additional data collected by Colin Renfrew (1987) and according to them the centre of Anatolia was occupied by Hittites while Indo-Iranians were to their east. As a result of gradual dissemination the IndoIranians finally settled down in the fertile oases of Central Asia, this statement being clearly supported by the archaeological facts and studies mentioned above. Indeed, from the point of view of archaeology so far in the whole of Central Asia only the culture of the BMAC finds so representative and, what is more important, various parallels in the materials of Near East (north Mesopotamia, Anatolia). It is significant that it is here that some linguists place the homeland of the Aryans.

In this connection our special attention should be drawn to the Mittanian temple Tell Brak that was mentioned above and where in its cella there is an altar in the shape of a "blind window" that corresponds to similar altars in the Bactrian and especially Margiana temples. It is almost unanimously agreed that the Mittanian ruling elite consisted of Indo-Iranians, a fact that lends additional support to the theory that the BMAC tribes were part of the Indo-Iranian group of people. It is significant that the region of Lake Urmia, where monumental buildings with "blind windows" are represented, is also where, as I. Diakonov assumed, contacts between the Indo-Iranian and Mittanian tribes took place in the 2nd millennium B C.

The well-known necropolis at Marlik on the southern coast of the Caspian Sea may be looked upon as an intermediate point on the assumed route along the Elbruschain. Though this monument is dated to the end of the 2nd millemnium BC it yielded cylinder seals that reflect Mittanian traditions (Parpola 1998) and some specialists believe that it belonged to the IndoIranian military aristocracy (Kurochkin 1994).

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The newest archaeological finds and studies then correspond to the linguistic theory mentioned above (Gamkrelidze and Ivanov, Renfrew) and support the idea of a wide invasion of Aryan tribes from the Near East to Central Asia and to the Indian subcontinent which is reflected in the archaeological material of the BMAC.

It should be mentioned that in Margiana until recently there has not been found any object of a clearly imported character, a fact that could have supported the idea of the supposed wide invasion of tribes. But in 1997 in a twochambered tomb of the early cemetery of Gonur there was found a cylinder seal with an image of a Goddess of Vegetation of the same type as the earlier ones found on the seals in Shahdad and Tepe Yahya as well as among the accidental finds in the monuments of eastern Iran. P. Amiet (1997: 121-126) has shown that this Goddess of Vegetation has a Mesopotamian origin and the distribution of this image in eastern Iran went through Elam. Moreover, E. Porada (1975: 367, fig. 283) pointed out that a cylinder with such images was found in the Tod treasure in Egypt and she definitely ascribed it as an import from Iran. The Goddesses of Vegetation were always depicted in the canonical posture: seated on the ground with legs crossed under floppy skirts. Now we have reason to believe that they were wide spread only in the east-Iranian world. At present this is proven by the finds of Margiana and possibly future excavations in Bactria will provide us with the same kind of finds. We can speak of cultural and commercial links between two opposite points of the Near East that clearly testify to their mutual contacts.

## Zoroastrian Origins

If this is all true then we face another and no less complicated problem of the origin of the first world religionZoroastrianism. According to the generally accepted linguistic opinion this religion originated in the Iranian environment. Furthermore, at present it may be considered proven that the homeland of Zoroastrianism is located in the eastern Iranian world and that this religion originated in a society with a highly developed urban civilization based on irrigated oasis farming combined with animal breeding and the elements of nomadic steppe economy (Gnoli 1989).

It is well accepted that Zoroastrianism originated out of "Iranian paganism" and so far Bactria and Margiana appear to be the most plausible areas to look for the roots of the origin of this religion (Grenet 1989). To solve this problem we should first determine the chronological framework in which Zoroastrianism could have originated.


Fig. 6. Plan of Togolok 21.
During the excavations of the Togolok-21 temple (Fig. 6), the "cathedral temple" of the whole Margiana system, there were found single fragments of a small iron knife. This find proves that the temple belongs to the end of the 2nd millennium BC, the period of "Iranian paganism". In this case one can assume that Zoroastrianism originated in Margiana in the last centuries of the 2 nd millennium BC , and most probably in the first centuries of the 1 st millennium $B C$.

Actually, the Prophet Zoroaster did not invent a new religion, he just transformed the old Iranian one and its roots should be sought for in"Iranian paganism". The tribes mentioned above brought this paganism to Central Asia and more specifically to the territory of the BMAC. If this is true then we can assume that the reforms of Zoroaster took place after the new tribes came to the territory of eastern Iran, Bactria, and Margiana, including probably Baluchistan as well. Thus, having approximately determined the place and the time of the origin of Zoroastrianism, we can begin to investigate the roots of this new religion based on the latest archaeological materials from Bactria and Margiana.

As is known, the basis of Zoroastrianism is the worship of
cults of fire and water, and the practice of libations (Boyce 1989), these being also characteristic of Iranian paganism. The excavated temples of Margiana provide us with archaeological evidence of the existence of cults of fire, water and beverages of the somahaoma type. Especially representative in this respect are the temples of Togolok-1 and especially Togolok-21 as well as the Gonur temenos. It is clear now that they were primarily dedicated to the soma-haoma cult and secondarily to the cult of fire.


Fig. 7. White room from Gonur with "baths".
This statement is proved by the finds of fruits and poppy pollen, as well as by the large amount of seeds and stems of ephedra and hemp excavated in these temples (see the Appendix by MeyerMelikian in Sarianidi 1998). In this respect especially important are special small "baths" (over 20 of them) in the Gonur temenos that were found on low brick elevations covered inside with multiple plaster layers. Between these layers was preserved a large amount of cannabis remains and it is believed that these "baths" were used in the preliminary stage of processing this plant (Fig. 7). This assumption is also supported by the excavation of special "white rooms" where the final stage of the preparation of cult beverages took place and where organic remains of ephedra, cannabis and poppy were also found (Fig. 8). It should be noted that scrapings of one such vessel were independently analyzed in the University of Helsinki (Nyberg 1995) with "negative results" (Parpola 1998: 127). This seems only too logical if one takes into consideration the fact that Meyer-Melikian analyzed the samples right after they were excavated and the scrapings analyzed at the University of Helsinki were taken from the vessels after years of being exposed to the sun and rain of the desert. This naturally eroded the organic remains and certainly influenced the results of the
analysis (for more information see N . Meyer-Melikian and N . Avitov1998). The interpretation of the plastered room 137 as a "communal room" (Hiebert 1994) can hardly be considered logical if one realizes its extremely small size as well as the fact that it was built in the very last stage of the existence of the temenos.


Fig. 8. White room from Togolok 21.
During the excavations of the Margiana temples there were found all the items necessary for the preparation of this hallucinogenic drink, including a great number of various stone graters, mortars, and pestles that were used for grinding plant stems. So-called "paired press stones", although found in very small number, are particularly representative. One has a hemispherical projection in the centre and the other has a corresponding hollow. Being inserted one into another they served not so much for grinding as for pressing, a stage necessary during the final processing when the hallucinogenic drink was strained from the floral mixture.

Equally significant are the cult vessels mentioned above that are decorated with sculptured friezes along their rims and that were used for keeping drinks. Also striking are some bone

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tubes whose surfaces were smoothed with use and engraved with images of a human face with extremely large eyes and pupils. It is believed that the eyes on the tubes were created so large because it is known that when one drinks hallucinogenic beverages all surrounding objects acquire fantastically large proportions.

In full accord with the Zoroastrian traditions the altars and altar squares in the Margiana temples are always situated in places open to the sky in secluded places, often as if "hidden" from the eyes of the uninitiated behind high and blind fences. Thus, in the Togolok-21 temple there are two altar squares situated in opposite corners of the temple and surrounded by blind walls. The "inner courtyard" of the eastern altar square has two low round altars, the smaller of them filled with burnt coals. The surface of its walls suggests that on the altars was kept smouldering firewood that was kindled somewhere outside.

The second altar next to the one mentioned above is much larger, has a strongly concave, hemispherical surface and resembles a huge bowl with a small hearth on its bottom. Right at the altar entrance on the hemispherical surface of the bowl is a large"spot" of dried-out crust. The analysis of this crust made in the laboratory of the University of Moscow showed remains of fat inclusions (melted butter, fat, lard). There is every reason to believe that the fat was thrown on the surface of the bowl and it flowed down to the base where the fire was smouldering. The fat reaching the fire made it flame up with renewed strength and the smell of the burning sacrifice mixed with smoke streamed up to reach the deities high in the sky (Boyce 1989: 154).

It is significant to mention that Strabo, who personally attended these sacrifices, noticed that according to the religious representations of Persians the gods wanted only the soul of the sacrifice and only in rare cases they added to the fire ... "a small piece of omentus" (Strabo, XV,3,13), but not meat, a very significant amendment. In other words, according to ancient Iranian beliefs the gods were more satisfied with the pungent smell from the burning fat than with the sacrificial meat. This statement is also proved by the beliefs of modern Zoroastrians. Strabo (Strabo, XV, 3,14) also notes the attempts of the priests to avoid letting oil, honey and milk mixture coming into contact with the open fire but rather only with the earth during
the sacrificial rites. This fact is proved by the archaeological material from the excavations of the Togolok-2l temple.

Moreover, there are grounds to believe that on the altar square under discussion the sacrifices were made not in the honour of abstract gods but specifically to fire (to the god of fire). This suggestion is proved by the discovery of a small altar which is located nearby and was filled with coals that once burned brightly.

Though this altar in the Togolok-21 temple was used only for the sacrifices in the form of fatty liquids this fact does not exclude single cases of blood sacrifices. Thus, in the centreof both temples in Togolok-1 and Togolok-21 there were found ceramic floorings with drainage ditches made in the ground. In both cases these drainage systems were not constructed in the first stage of the temples' construction but rather after a certain period of time. This system suggests that animal sacrifices took place on these ceramic floors and the blood ran down into the ditches to avoid the profanation of the "pure nature" of the earth. It should be noted that initially such "sacrifice squares" were located somewhere else, outside the limits of the temples most likely. Here one should add that, according to the Pahlevi texts, the Zoroastrians banned blood sacrifices and considered it a sin. Still, in some rare cases it was accepted since the Zoroastrian texts mention horses as sacrificial animals.

Zoroastrian tradition strictly defined the rules of blood sacrifices. It recommended that one cut a piece of meat of the slain animal and put it directly on the fire (Strabo. XV, 3. 14) because the flame should come into direct contact with the sacrificial meat. In this context we can call attention to the existence of doublechambered rectangular hearths. They differ markedly from the usual domestic ones and have an imner, low partition that divides the space into two parts: a small furnace where wood was burned, and a chamber for the meat. In this case the sacrifice could follow the regulations when the meat was directly touched by the flame. Of interest is the clearly sacred room [100] in the fire temple of North Gonur where a double-chambered hearth is situated between two "blind windows", a detail that demonstrates its special purpose.

The modern Zoroastrians still worship water and dig home wells and bring sacrifices in the form of flowers and fruit (Boyce 1989). One can logically suggest that deep wells found in the

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Togolok-2l temple and especially in the Gonur temenos are not at all accidental and it should be added that the same kind of well was also discovered in the Djarkutan temple in north Bactria.

In the opposite corner of the same temple at Togolok-21 there was found another open altar square of the same type as the one described above. Right in the virgin soil of this square a chain of five rectangular chambers was excavated. The inside of these chambers was faced with brick and strongly burned. It should be noted that such low altars placed at the eye level of a seated man represent a specific feature of the Zoroastrian religion (Boyce 1989: 167) and fully correspond to the ones found in the Margiana temples.

According to the Zoroastrian custom their cult ceremonies and rituals are characterized by extreme simplicity. In the open areas next to fixed altars are located perfectly formed squares outlined by stones or sometimes limited simply by trenches (pavi). According to the Zoroastrian rites the gods and their angels were seated on these pavi and the "eternal" fire burnt in the altars in their honour. In other words, contrary to the sacrifice altars described above these were dedicated to the gods and one can assume that the fire really was burning in them permanently in honour of the deitics.

We can see this particularly clearly in the finds from the temple at Togolok-21 and the Gonur temenos. There next to each fire altar was found a couple of low and open "rooms". In one case the remains of clay plaster on the walls made it possible to prove that initially these "rooms" were not higher than half a meter and could have been intended for the gods who were believed to be seated there invisible to the worshipers. Except for the two temples such open "rooms" are not found in any other building. This persuades us that the "rooms" were really ancient pavi.

Thus, in conclusion it should be noted that the ancient tribes of Margiana carried out sacrifices to: 1) fire, using for this purpose fat, different fatty liquids and even hallucinogenic drinks, 2) the gods, burning in their honour an "eternal fire" in the altars, and 3) water.

Linguists have more than once stressed that temples such as the Margiana ones are not mentioned specifically in the Avesta or Rigveda and they have employed this argument against
our interpretation. But archaeologists (Litvinsky 1989) as well as orientalists (Dandamaev and Lukonin 1980) insist that the discovery of the fire temple at Tepe Nushi Jan in Media forces us to reconsider the linguists' argument. Here it should be especially mentioned that the Margiana temples refer to the Protozoroastrian period, i. e., to "Iranian paganism". It seems quite acceptable that during the reformation of the old Iranian religious rituals the new prophet rejected the custom of building rich temples but preserved the main idea of placing altars under the open sky. And it is not without reason that the cult rituals in the Margiana temples were always performed in the open air, this being in full accord with Zoroastrian traditions.

According to Zoroastrian practice the ashes from altars were divided into several types which determined their method of storage. The temples of Margiana and Bactria provide us with good examples of this custom. Inside these temples there are special brick containers that are called "deposits of ashes" and that are filled with white and clean ashes. Alongside there are found "heaps of ashes" that consist of black ashes and are always located behind the outer walls of the temples (Togolok21, supposedly Togolok-1, Gonur temenos), though very close to them. A huge ash midden behind the outer walls of the Gonur temenos has preserved a great number of animal bones and pottery fragments. This fact can be treated as a sign of the existence of more complicated forms of the ancient rituals that presumably involved some common meals. Such common meals are accompanied by sacrifices and are still practiced by the Zoroastrians of India and are an important part of their sacred rituals.

Linguists, and V. Abaev above all, have mentioned more than once the connection between Zoroastrianism and the steppe cattlebreeding tribes. This statement seems to contradict the situation in Bactria and Margiana where the society was primarily a settled farming one. The available archacological facts help to resolve this problem.

Next to the farming sites in Bactria and neighboring Margiana there have been found single settlements of the steppe cattlebreeding tribes of the Andronovo culture, a fact that proves their rather peaceful co-existence. The discovery of single Andronovo type vessels only in the rooms that were used

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for the preparation of the soma-haoma type drinks in Margiana can demonstrate a certain relationship of these vessels to the process of preparing cult beverages. These purcly archaeological data can be combined with the old linguistic theory that saki haoumovarga and saki amurgian from the Achaemenid inscriptions belong to one and the same Scythian tribe that lived in the contact zone of farmers and cattle breeders, most probably in the periphery of Margiana (Struve 1949, 15).

It is clear that even these sparse but rather representative archaeological facts can to some degree explain the role of the Scythian element in the history of the origin of Zoroastrism, as proposed by linguists. True, the Avesta more than once mentions fights between the farming Zoroastrian tribes and the steppe nomads. This seems to contradict the statement mentioned above. But one should take into consideration the fact that the archaeological material mentioned above refers to the preZoroastrian period and that two thousand years later when the Avesta was written the situation could have drastically changed. By the time of the Achaemenids the ancient Margiana tribes had moved far to the south and were thus separated from the Scythian cattle-breeding world. One can easily suggest that later these two worlds came into conflict in cattle raids and combat, and these very events were reflected in the Avesta.

## Mortuary Practice

The past few years have been marked by archacological discoveries that reveal the similarity in the burial customs of the ancient people of Margiana and the Zoroastrians. Thus in 1998 during the excavations of Gonur there was found a small room with a floor that was completely covered with a thick layer of ashes. On top of this layer there were placed more than 10 skeletons (of adults and children) in chaotic order, none of them in correct anatomical position. Many layers of rain spots on the bones give evidence that the room was roofless and the bodies of the dead were accessible for birds and animals. Onc could assume that it was a collective tomb with successive burials but in this case the last burial should have been in correct anatomical position with undisturbed bones.

Here one has to remember the fractional burials found in the early cemetery of Gonur where in the undisturbed tombs
there were sometimes found incomplete skeletons. This together with the facts mentioned above leads one to conclude that there were some clear parallels reflecting the specific ceremonies existing in Bactria and Margiana.

It is well known that the disposal of the dead among the Zoroastrians involved exposing the corpses on the dahma to prevent the corpse from profaning the clean elements of nature (earth, fire and water) and it is believed that the home of this ritual is Central Asia (Boyce 1989).

Long ago, linguists noticed that the Avesta presents contradictory information about the burial customs of different Zoroastrian sects and it is almost impossible to draw precisely the common line of their development. From an archaeological point of view this may testify to multi-variation of the burial customs, in other words to the co-existence of several types of burials as this was documented in Margiana (Gonur cemetery) and Bactria. In this respect the cemetery of Bustan in north Bactria is representative: here the same people practiced a wide variety of types of burial such as typical inhumation, cremation, fractional burials, cenotaphs, burials of parts of the dead cut into portions, symbolic buryings of "dolls" and so on (Avanesova 1997).

Now if one compares the collective burial in North Gonur mentioned above (the supposed dahma) with the fractional burials of the early necropolis from Gonur then it is possible to suggest their direct correlation when after the excanation the bones were placed in such tombs. It is known that at least during the last period of Zoroastrianism the dead were first placed on the dahma where, over the course of a year, specially: trained dogs as well as birds of prey cleaned the flesh from the bones. After that the relatives collected the bones and placed them in the usual tombs. The relatives could not always collect the full skeleton because the dead were on the dahma for such a long time that the skeletons disintegrated, and the bones became jumbled. This could have finally resulted in fractional burials.

In Bactria the practice of excarnation was noted by the ancient Greek authors and particularly by Onesikritos (in the words of Strabo). The comments of the ancient authors leave no doubt as to the existence of such rituals in antiquity at least, and Tarn (1938: 115-116) thinks that the Bactrians raised
special dogs for this purpose and assumes that the excarnation ritual was used here in the "pre-Iranian" period It should be mentioned that besides Bactria and Margiana fractional burials are also found in Baluchistan and in Khurab in particular (in the BMAC zone) where they were excavated by the expedition of Aurel Stein (1931: 77-82; 1937: 120).

Though there is an assumption that the excarnation ritual originated in nomadic society (Boyce 1989) it is believed that it was inherent to "Iranian paganism" long before the migrating tribes appeared in Central Asia. This burial ritual of the ancient Iranians seems to pursuc one goal-to preserve the "pure element of nature", the earth, from profanation by a corpse. This supposition seems to be true when one considers the fad of covering the floor of the presumed dahma with a layer of ashes that was also supposed to prevent the direct contact of a corpse with the carth. The same explanation seems to be true when one tries to explain the fact of the preliminary burning of the catacombs with fire (from the bottom and up to the vault including it) on the Gonur necropolis (Salvatori 1994: 18) It should be noted that the preliminary buming of the inside of the tomb by the fire that was found in the early necropolis of the first colonists of the Murgab Delta was a new custom in the burial rites of the Central Asian tribes of the eadier period. This custom seems most likely to have been brought to Central Asia by immigrants who came here from their distant homeland. This assumption is also supported by the discovery of some tombs at the Gonur necropolis that represent a kind of a house model or in other words "hypogacum" that was earlior unknown in the Central Asian world. The rectangular tombs were dug in the virgin soil, their walls were faced with bricks and thus imitated a stone facing. All the tombs but one were plundered in antiquity. The untouched burial No. 194 on one of its butt walls had an entrance with steps and on the opposite wall there was a "bench". It had preserved three skeletons of adult women and one of a child. Three skeletons tumed to be shifted to the "bench" and were chaotically mixed with the funeral offerings (including a golden vessel) and about 1000 gypsum beads (Fig. 9).

Closer to the entrance on top of an ash layer was the final deposition, a woman's skeleton in a crouched position; her skull was replaced and covered with a bent arm. At her feet was

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Fig. 9.Tomb 194 from Gonur. Legend: 1. pottery; 2. hand-made pottery; 3. crushed vessels; 4. skull fragments; 5. lower jaw; 6. mosaics; 7. golden boul; 8. beads; 9. ash layer.

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a kind of a "mosaic". The location of the skeletons attests a sequential process of burials when in order to make room for the newly deceased the previous corpse had to be moved from the central place to the butt wall.


Fig. 10. Tomb 256 from Gomur.


Fig. 11. Section through tomb 256.
Even more representative is burial No. 256 that was also dug in the virgin soil and faced with bricks (Figs. 10, 11 and 12). In its eastern butt wall there was an entrance with steps and

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Fig. 12. General view of tomb 256.

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nearby an unusually large brick that was most probably used 10 block the passage. On the opposite butt wall three bricks were placed in a row probably imitating a "bench" and above it was a recessed niche with six intact miniature vessels that in a way represented a sort of a "cupboard". In the center of the floor was a brick elevation, a kind of a "table", that was used for dishes with food and nearby in the wall was a fireplace with an arched vault. The tomb lacked a skeleton and was probably plundered in antiquity.

This burial most likely represented a model of a house or in other words "hypogaeum" (an underground house) that was extremely popular along the middle part of the Euphrates and especially in the Syrian and Anatolian regions. This type of burial was known there from the 3rd millennium BC and used until the Urartu period.

Marija Gimbutas especially noted that the burials of IndoEuropeans looked like houses and the Greek expression "House of Hades" was an euphemism for the afterworld. In the Rigveda the equivalent expression is the "House of Yama" or" House of clay" as metaphor for the grave. Thus, the expression "House of Hades/Yama" is nothing more than a description of burial pits that had the design of a house and that from very ancient times were popular in the Syrian and Anatolian world and were especially used by Indo-Europeans and Indo-Iranians in particular. Thus, the hypogaeum type tombs at the Gonur necropolis can serve as an additional proof to the fact that the new tribes that came to Margiana were not Indo-Europeans in general but rather IndoIran~ans.

## Conclusions

The archaeological facts and evidence mentioned above, combined with a linguistic perspective gives one the right to draw some rather definite conclusions. On the eve of the 3rd2nd millennium. BC the Indo-Iranian tribes slowly migrated from the Syro-Anatolian center and via Iran and Afghanistan reached Central Asia up to the Indian subcontinent. Thus, the appearance of the Indo-Iranians in Central Asia should be dated to the eve of the 3rd-2nd millennium BC and not later.

In their homeland in the Near East they were accustomed to build temples where in the cellas the "blind windows" represented altars and where they engaged in cults of
hallucinogenic beverages of the soma-haoma type, and worshipped water and fire. All these traditions were brought to their new homes in Central Asia. In the secular buildings of their palaces they built vast official rooms of the audience-hall type that consisted of two parts with two connecting passages, as is the case in Alallakh.

In their burial rites alongside the usual burials they used the fractional ones when the flesh was preliminary cleaned from the bones. The local aristocracy was buried in doublechambered tombs with side niches for the burial offerings. Furthermore, other burial rites including catacombs were also used and these traditions were also continued in their new homes in Bactria, Margiana and Baluchistan.

Summing up the latest archaeological material of the BMAC and comparing it with the linguistic data it becomes clear that it is time to make some cardinal revisions of old ideas on the Aryan problem and to replace them with new ones.

Before the discovery of the BMAC there existed one theory according to which the motherland of the Indo-Iranians was in the steppes of Eastern Europe. According to this theory the SrubnajaAndronovo nomadic tribes who lived there were most likely Aryans and at a certain time they moved to Central Asia, reached the Indus Valley and destroyed the urban Harappan civilization there. Until now this theory was considered to be the most popular one and is supported by many specialists. But none of its adherents can still answer the main and cardinal question: why is there no archacological evidence of these tribes mentioned above on the whole Indian subcontinent.

At the same time the discovery of the BMAC has radically changed our knowledge of the historical processes that took place in the 2 nd millennium BC in this part of the Western Asia. It forces us to advance a new theory to explain the origin of the Indo-Iranians in Western and Central Asia. The two incompatible theories of the northern (steppe, nomadic) and southern (oases, farming) origin of the Indo-Iranians now find some compromise in the light of the latest archacological discoveries. First of all this concerns the origin of the Sintashta culture whose Indo-Iranian character is recognised by practically all scholars. At the same time complex study of this culture has revealed that the old representations of its local Volga-Ural origin from the Abashevo and Poltavka cultures

[^3]does not in itself suffice. We have seen how the architectural traditions, burial rites, pottery shapes, and many other details testify a Near Eastern origin for this culture. In support of this idea one should add that the nomadic steppe tribes of the Srubnaja-Andronovo type as well as the BMAC tribes have their homeland in the Near East, the Syro-Anatolian region to be more precise (Grigoriev 1996) Thus, by different, independent ways scholars have come to the same general conclusion about the Near Eastern origin of the Indianian tribes, whose migration and settlement took various directions. The northem branch of the Indo-Iranian tribes had separated early on from its Indo-Iranian mother country and settled widely in the wood and steppe zone of Eurasia. The new environment as well as contacts with the aboriginals could not but influence their general culture. We find this reformed culture in the Andronovo tribes in the middle of the 2 nd millennium BC in Central Asia where they contacted the Indo-Iranian population of the farming oasis of the BMAC. In this case the Andronowo culture can be looked upon as an ancient Iranian one but not an Indo-Aryan since until now no sign of the Andronovo tribes is found on the Indian subcontinent. Only the tribes of the BMAC can claim the role of the IndoAryans, this being materially proved by the corresponding sites of Baluchistan (Quetta, Merhgarh-Sibri and others) that are located on the border of the Harappan civilization in the direct vicinity of the Indus Valley cities.

And maybe for this precise reason the Andronovo tribes found no confrontation in the territory of the BMAC (not to speak of a military invasion). On the contrary they peacefully co-existed with the ancient farmers of Margiana, south Turkmenistan and Bactria as they were all tribes of related origin.

The results of the latest archaeological research demands a radical review of the old linguistic ideas and theories and first of all of the Indo-Iranian problem.

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