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IN  
SOVIET CENTRAL ASIA

BY

GRÉGOIRE FRUMKIN



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E. J. BRILL  
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PRINTED IN THE NETHERLANDS

*To my wife*



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## TECHNICALITIES

1) Maps from atlases cannot, as a rule, illustrate a text which often refers to tiny archaeological sites as well as other ancient places. As on the other hand Soviet publications frequently contain no adequate maps or only rather rough sketches, it is difficult to locate all these sites with precision. The maps reproduced in the present volume are therefore neither uniform nor always up to the standard of the usual cartographic requirements.

Map 1 is reproduced by courtesy of the Clarendon Press, Oxford (The Oxford Atlas). Map 2 is due to the courtesy of D. Schlumberger. The Central Asian Research Centre kindly put at the disposal of the author the maps 6, 10, 14, 15, 17 and 18 which accompanied his articles in the Central Asian Review. All the other maps have been adapted from Soviet sources.

The numerous adjustments and additions we have made to these maps are occasionally tentative, but since their purpose is not scientific cartography but general orientation, we hope they will suffice. For all such adjustments and additions, the author is alone responsible.

2) The figures and plates are intended to illustrate the text, with which they are closely connected. Preference has been given to reproductions little known in the West. The reader will find a richer collection of general purpose reproductions in several publications enumerated in the bibliography. In many cases, especially those of badly damaged objects, adequate pen-drawings give better results than field photographs. These drawings inserted throughout the text are listed on pages XI-XII; the plates made from photographs on pages XIII-XV.

3) No transliteration of Russian is likely to be acceptable to all scholars and not one of the systems is satisfactory in all circumstances. It may at best become forbidding. The system used, rather reluctantly here, is largely the same as that agreed to in 1948 between the British Permanent Committee on Geographical Names and the U.S. Board of Geographic Names, Department of the Interior, Washington D.C. Although the U.S. system has been applied on a world-wide basis by



means of comprehensive gazetteers, this does not necessarily mean that no better system is conceivable, especially with regard to the transliteration of terms other than geographical.

While "Ya" and "Yu" are used to represent letters peculiar to Russian, the letter pronounced "Ye" has, as a rule, been transliterated by "E".

4) The annotated bibliography in this book is a selection of writings that will illustrate the text, and an effort has been made to reduce the list. There are, in fact, many treatments of similar topics by different Soviet authors and the authors themselves tend to recapitulate the same subject. This seems almost inevitable when one remembers how many scholars have been engaged in this new and developing field of research. But the result is that an article or a book which is up to date at the time of writing, is only too likely to be out of date when published. Although the bibliography in this volume is largely confined to publications in the author's own possession, it should be found sufficiently illustrative. While purposely restricted in size, it is, on the other hand, accompanied by comments on the main features of the publications quoted, which may help the reader to gain his bearings. (For details see page 159, note preceding the bibliographies).

Since this book is supposed to deal with archaeological research by Soviet scholars only, the number of entries relating to non-Russian authors was severely restricted.

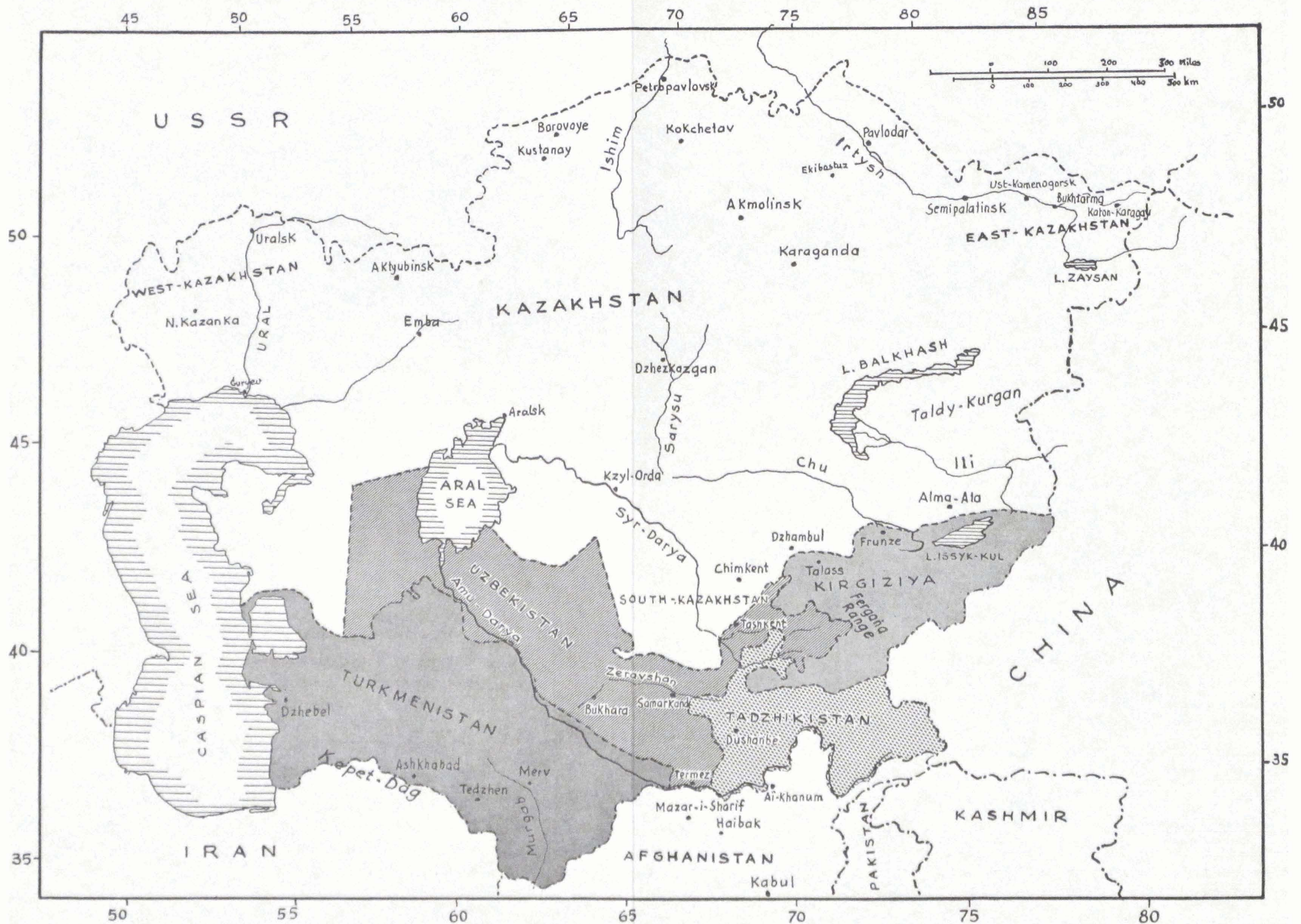
The bibliographical list, preceded by a list of abbreviations, consists of two parts:

Part One: contains general publications or those which are not confined to the subject of any individual chapter; henceforth abbreviated "Bibl. ONE".

Part Two: contains a bibliography to each particular chapter and to each individual Soviet Republic of Central Asia; henceforth abbreviated "Bibl. TWO".

The Synoptic Table of authors quoted is arranged in alphabetical order (pages 199 to 207) and indicates the references made to them in the various chapters and the relevant bibliographies.

Bibliographical references in the text are given between brackets. With the exception of items for which the reader is referred to Bibliography "ONE", the references in a given chapter will be found in the corresponding chapter of the bibliography.



## INTRODUCTION

The aim of the present book—which, thanks to the courtesy of the Central Asian Research Centre (London), derives in the main from the articles previously published by the author in the CENTRAL ASIAN REVIEW—is to appraise the development of archaeology in the USSR, with special reference to its so-called “Central Asian” Soviet Republics (Kazakhstan, Kirgiziya, Tadzhikistan, Uzbekistan, Turkmenistan) (see General Map 1 Soviet Central Asia; owing to the vast extent of Kazakhstan it is on a smaller scale than the subsequent regional maps).

Throughout this volume and contrary to Soviet practice, “Soviet Central Asia” is understood as including both Kazakhstan and “Sredniaya Asia”, i.e. “Middle Asia”—formerly called Western Turkestan—a collective term which does not include Kazakhstan.

The author owes a great debt of gratitude to various scholars and scientific bodies, especially in the USSR. In addition to up-to-date information and valuable suggestions, he has been given so many publications, as well as the indispensable photographs, that he cannot possibly mention here all those research colleagues who were so generous with their friendly and unsparing assistance. They can be assured, however, of his gratitude in each case.

The views of the author on Soviet ideology, which have occasionally been criticised by Soviet scholars, have been set forth in his previous publications in sufficient detail to make it superfluous to repeat them here.<sup>1</sup> With the passage of time these problems have actually become less intractable and a better mutual understanding and knowledge of each other's achievements is now gradually developing.

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<sup>1</sup> Other writings on Soviet Archaeology by the author: “Archéologie Soviétique en Asie” (*Etudes Asiatiques*, vol. XI. 1957/58, Bern, 1959); “On some Ancient Wall-Paintings in Soviet Central Asia” (*Bibliotheca Orientalis*, XIX 3/4, 1962); “Archaeology in Soviet Central Asia” (*Central Asian Review*, Nos. 4, 1962; 1, 1963; 1, 1964; 3, 1964; 1, 1965; 3, 1965; 1, 1966); “Archéologie Soviétique” (*La Table Ronde*, Paris, No. 185, 1963: Vie Intellectuelle en URSS); “The Expansion of Buddhism as witnessed by recent Archaeological Finds in Soviet Central Asia” (*Bibliotheca Orientalis*, XXV 3/4, 1968); “On Soviet Archaeological Finds relating to the Kushan period” (Report presented to the Dushanbe Conference, 1968); “International Conference on the History, Archaeology and Culture of Central Asia in the Kushan Period” (*Bibliotheca Orientalis*, XXVI 1/2, 1969).

In spite of ideological differences, it is the obvious duty of Western scholars to deal with the work of their Soviet colleagues unemotionally, putting aside all prejudices and preconceived ideas however inveterate they may be. There has been a widespread belief among them that even if the material results of the excavations carried out by Soviet scholars are good, the interpretation of the results is occasionally defective and tends to be biased; this, in their opinion, is largely because Soviet archaeology is so tightly enmeshed in Marxist ideology, as to influence scientific interpretation.

Things may be less simple than this and the initial occurrence of special circumstances belongs to the past. Be it as it may, this ideology has not in the long run actually prejudiced the achievements of Soviet archaeologists. Moreover, "europo-centric" Western views can hardly be regarded as being without bias, and many of those who doubt the value of Soviet achievements do not understand Russian and thus either do not know them or are, at least, prejudiced against them. In fact the scientific results, the analysis, interpretation and—increasingly—the synthetic approach by Soviet scholars frequently compare favourably with similar work done in the West, and there is reason to believe that some Soviet scholars not only equal their Western colleagues, but are among the best in the world. There is, however, a difference of intellectual approach: many Westerners lay stress on the political, artistic and chronological aspects of history and archaeology, possibly at the expense of their social and economic aspects, on which emphasis is most properly laid by Soviet scholars.

There can be no doubt about the remarkable impulse given to archaeology from the very beginning of Soviet rule in 1919. It would be both unfair and unwise to minimize the outstanding achievements due to the revolutionary outburst of energy and the fanatical "reason of State" atmosphere. It is high time to abandon any traditional and egocentric illusions that may still be inherent in a Western superiority complex in this or other fields. Marx, Engels and Lenin still maintain their full authority and their atheistic scriptures have proved more durable than cults of personality with their monuments of brass.

As might be expected, Soviet archaeology with its dogmatic zeal has spread beyond the national frontiers of the Union and, apart from its

obvious interest in some contiguous countries, is gaining a foothold in several more distant countries as well.

The expansion of archaeological work in the USSR is due not only to Marxist philosophy, but also to the structure of Soviet society itself. The Government and the Party have full power over the Soviet continent. There is no private ownership of the soil, no private ownership of archaeological finds and there are no private museums or collections to which any archaeological objects could be illicitly sold. All educational institutes, all scientific bodies, the press, the wireless, as well as all publishing houses are likewise in the hands of the State, which alone supplies the necessary funds. There is probably no other country in the world where archaeologists, who are apparently well paid, have such powerful financial and technical resources at their disposal. Archaeological work throughout the Union is said to be concentrated under the supervision of the Institute of Archaeology (formerly the Institute of History of Material Culture) and excavations without a special licence are officially prohibited (Bibl. ONE AN SSSR 1962b).

A special feature of Soviet archaeology is the combined, all-round expedition (Kompleksnaya Ekspeditziya) made up of teams of specialists in archaeology, history, linguistics, epigraphy, numismatics, ethnography, anthropology, geology, palaeozoology, palaeobotany, etc. Western countries might well envy the Soviet Union in this respect. Moreover, the numerous public works undertaken on a vast scale, such as canals, railways, irrigation schemes, electric power-plants, agricultural schemes for cultivating barren lands, etc., afford excellent opportunities for archaeological teams, especially when there is the necessary co-ordination between economic and archaeological requirements at an early stage. In a number of cases such archaeological expeditions have been launched as rescue operations, before land is flooded or crushed by armies of bulldozers.

Archaeological work is, moreover, greatly facilitated by the rise in the general standard of education among the people, including the rural population. Many discoveries have actually been made in areas belonging to kolkhozes. In an attempt to acquaint the general public with archaeology and to arouse interest in it, there are published, in addition to scientific and technical reports, numerous reviews, newspaper articles, and valuable

books on archaeology, which range from a highly specialized to a popular level. Some of the reviews, for instance the *Sovietskaya Arkheologiya*, are among the best of their kind. Although the production of books has until recently not always been of the highest standard—especially in some Central Asian Republics—there has lately been an improvement in this field. Even the plates have tended to improve, but while some of them are of a high artistic and technical level, many are still unsatisfactory.

Books are occasionally the joint work of several authors and though this teamwork has the advantage of ensuring an all-round competent treatment of the subjects such as may be beyond a single scholar, there are occasionally drawbacks to an impersonal production of an ideological mill.<sup>1</sup> Scholars—not necessarily Western only—may still find it difficult to obtain the necessary Soviet material on archaeology—especially that published in the Soviet Asian Republics—or else they cannot use it for reasons of language. In recent years, however, there has been some improvement in this respect also.

From ancient times the regions of Soviet Central Asia dealt with in the present volume have been a melting pot of nations and cultures, a cross-road of influences from all sides. Trade, religion and other cultural currents followed the tracks crossing these regions which also served as stages of transit for numerous peoples, who were often nomads—Scythians, Kushans, Huns, Turkic tribes, Mongols and many others. Central Asia was, moreover, the focus of influences from other countries, such as Greece, Iran, India and China.

Valuable archaeological research work was done during the Tsarist period in the former Russian Turkestan and it should not be ignored, but as we noted above, a new and powerful impetus has followed under the Soviet regime, especially since 1930. In spite of particularly difficult conditions in an immense archaeological region stretching from the sands of the Caspian to the glaciers of the Tyan-Shan, the special effort made in these Central Asian Republics has produced splendid results. Several ancient civilizations have been discovered in this archaeological paradise of sands or loess: monuments of unburnt clay containing objects of clay,

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<sup>1</sup> WOOLEY'S (UNESCO) momentous "The Beginnings of Civilization" is also largely the result of teamwork (Bibl. ONE Wooley 1965).







buried in clay or sand. This, together with the existence of multiple layers and thick top strata, has occasionally made the work of the archaeologists rather arduous. In a number of cases spectacular wall-paintings have unexpectedly been brought to light, as well as sculptures and documents which are gradually being deciphered.

As we stated above the system of organizing "combined" (kompleksnaya) expeditions with powerful equipment at their disposal has proved useful in remote and arid areas. The use of aerial photography on a large scale has been a decisive factor in the discovery of hundreds of sites, old riverbeds, and irrigation systems indicating bygone civilizations. (See especially the Ch. V and VII on Khorezm and Turkmenistan).

In opposing the "Western" theories of Pan-Iranism or of Pan-Turkism, in occasionally glorifying local native civilizations at the expense of the rôle of migrations and of outside influences generally, some Soviet authors may have resorted to exaggerations and over-simplifications, but it is nevertheless very likely that there is much truth in the Soviet claims regarding the numerous cultural contributions of Soviet Central Asia. The expression "Iranism" and, particularly, "Sassanian", may sometimes be for Westerners a convenient "passe-partout" expedient for hiding a certain lack of knowledge of Soviet Central Asia's past. Westerners should therefore feel greatly indebted to Soviet archaeologists who, in spite of unusual difficulties, are making a substantial contribution in this field.

Some may feel tempted to compare the evolution in the East unfavourably with the development of the West, but the panorama of world history rather suggests that periods when a high degree of civilization in the West coincided with conditions of backwardness in the East, have been less frequent and shorter than the periods in which the situation was the reverse.

Stereotyped ideologies, intellectual blue-prints, or preconceived ideas applied in a proscriptive spirit are detrimental to scientific research. Disregarding therefore the question of the nationality attributed to the great Central Asian scholar Ibn Sina (Avicenna), or the name of the language he used almost a thousand years ago, let us bear in mind his saying which has a world-wide application:

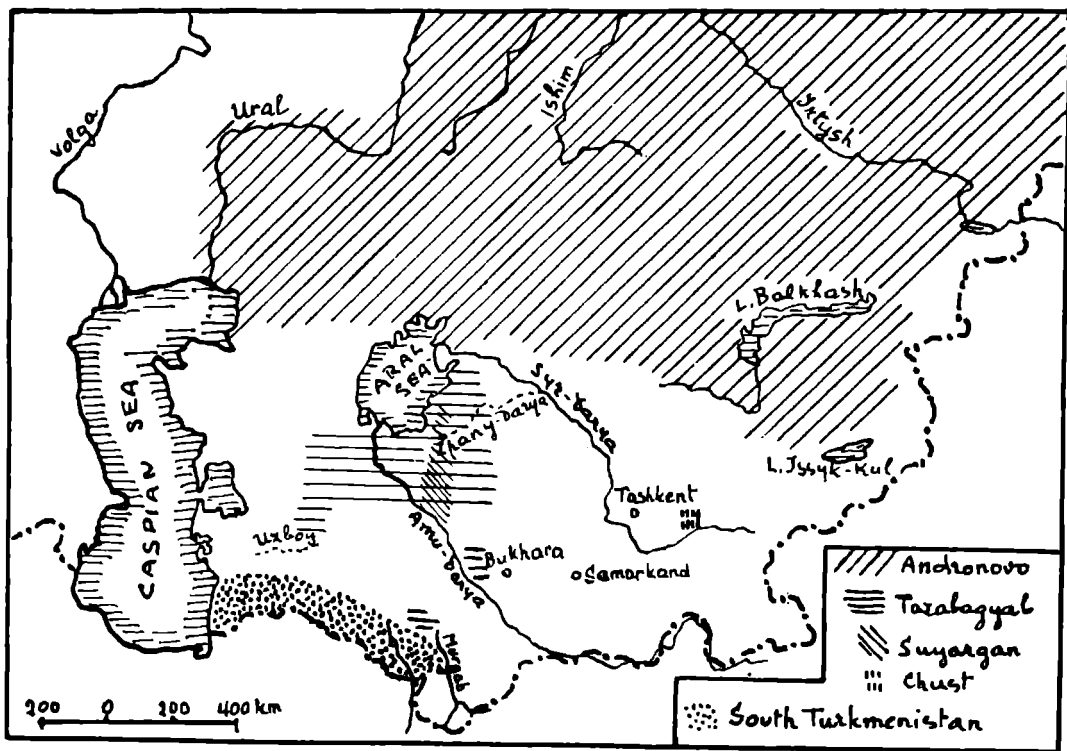
"Whoever has not asinine ears, is for asses an evident heretic".

The limiting of a book to the archaeology of the Central Asian Soviet Republics from the Stone Age to the beginning of the Moslem period, is in itself rather unsatisfactory, since the links which existed between the region under review and various other regions should not be ignored. Similarly, the analysis by individual Republics as adopted here is open to serious criticism, since it dissects a vast and coherent subject. Such a fractional analysis may be convenient in a preliminary study of the material available in particular regions, but it makes it more difficult to distinguish the wood from the trees. As the Neanderthal and similar palaeolithic finds belong to primitive mankind and not to particular native civilizations, such an approach is all the more meaningless when dealing with remote antiquity. But even in the case of more recent periods this procedure may be inadequate, since any attempt to deal with the subject within the framework of the present national frontiers is defeated by the fact that archaeological areas and expeditions are largely independent of modern boundaries.

The exploratory work done in Soviet Central Asia under the auspices of the different national Academies of Sciences is mostly confined within the present political boundaries, but quite a number of expeditions cut across regional frontiers. The existing political divisions do not coincide with ancient cultural regions: e.g. Bactria north of the Oxus (i.e. other than Afghan) covered parts of Tadzhikistan and Uzbekistan, and so did ancient Sogdiana. Thus the old Bactrian Termez happens to lie in Uzbekistan and not in Tadzhikistan, and the famous site of Pendzhikent (Pianjikent), which is near the Uzbek town of Samarkand, happens to lie in a frontier district of Tadzhikistan; "Khorezm" consisted of parts of Northern Uzbekistan, but to a lesser degree also of regions in Turkmenistan and Kazakhstan. Similar insoluble problems arise in the case of the Fergana valley.

The method adopted cannot give a clear picture of geographically diffuse subjects (e.g. the Stone Age, the Bronze Culture, the Scythians, or wall-paintings), nor is it likely to ensure a proper treatment for some composite units, such as "Bactria", the Kushan Empire, or Khorezm.

The two sketch-maps 2 and 3 give, however, a rough outline of the Stone and the Bronze Ages in "Middle" Asia (i.e. Soviet Central Asia, less Kazakhstan). Map 4 gives a general idea of the Bronze Age.



Map 4. Main cultures of the Bronze Age

Most of the sites marked on these maps are dealt with more fully in the subsequent chapters.

Rock engravings and carvings, such as are found throughout Soviet Central Asia, do not yet appear to have been treated in Soviet publications with the same all-round scientific spirit as the other finds. Their chronology and interpretation are occasionally tentative with a large margin of uncertainty. It may, therefore, appear justified to look forward to a thorough and extensive study, not in the form of isolated local monographs, but rather comprehensive, scientific surveys covering the vast array of engravings in the Soviet Union, with due reference to those of Western countries (Bibl. two VI Formozov 1966).

The field covered by Soviet archaeological scholars—and consequently by the present author—is so vast and the numerous discoveries relating to it are succeeding each other at such a rapid pace, that it was felt that an all-round account made in a critical but unbiased spirit would be of greater value than “in extenso” translations of just a few publications. Similarly, unduly extensive general-purpose bibliographies are bound to be out of date and do not always give the reader the information he may need on specific points. Fully aware of his shortcomings in an almost encyclopaedic sphere of knowledge, the author has nevertheless attempted to provide, in a condensed form, up-to-date information on the outstanding achievements of Soviet scholars. This account is necessarily incomplete, since only inadequate attention could be devoted to widely different subjects, such as pottery, burial rites, anthropology, ethnography and last, but not least, linguistic problems, which are actually essential for a proper analysis of civilizations and their interrelationships.

## CHAPTER ONE

# KAZAKHSTAN

### I. GENERAL

The area of Kazakhstan, which stretches from the Caspian Sea to China (2,766,000 square kilometres or 1,078,000 square miles), is roughly equal to that of all western Europe (See General map 1). Largely composed of desert and steppes, its constituent regions nevertheless vary greatly, ranging from below sea level in the Caspian plain to mountains over 4000 metres high (13,000 feet) in the south-east.

Under the Tsars, present-day Kazakhstan was officially "colonial territory", part of Turkestan, a name used for all the Central Asian regions that accrued to Russia; but in 1920 Northern Kazakhstan temporarily became part of a new autonomous Kirgiziyan SSR, and Southern Kazakhstan part of a new Turkestan Republic. Alma-Ata was made the capital of the Kazakhstan Republic in 1929, replacing the former temporary capital Kzyl-Orda (Alampiev 1958).

The systematic archaeological exploration of Kazakhstan began on a large scale in 1936, when A. Bernshtam explored the Semirechiye (the customary name for a vast region between the basin of the Issyk-Kul and Lake Balkhash), including parts of both Kazakhstan and Kirgiziya (Bibl. ONE AN SSSR 1962b). Here, as in other parts of the Soviet Union, some of the explorations have been "rescue" operations, undertaken in connexion with huge schemes of industrial and agricultural development, and large-scale mechanization has given archaeological field-work a mighty impetus.

The enormous size of the new Republic probably accounts for the abundant field-work, which has in many cases been due to local initiatives.

During the war many major industries were hastily transferred from the European part of the Soviet Union to Kazakhstan, where they definitively took root. The country now has a vast mining industry, oil pipe-lines, industrial plants, power stations, major irrigation works, etc.

In recent years some of the barren plains have proved invaluable for launching stratospheric rockets.

The following are the main regions and places reviewed, where archaeology and economics are intertwined:

*Central Kazakhstan*: steppe, desert, mines; shortage of water, but large irrigation works. Main political and economic centre: Karaganda. A rapidly developing area with the largest coal and copper mines of Soviet Asia. The Dzhezkazgan copper mines were famous thousands of years ago (Alampiev 1958; AN Kaz. 1960).

*East Kazakhstan*: a) To the north, the Pavlodar region. Steppe, cattle breeding, new heavy industry. b) To the south, the Semipalatinsk region; light industry. The Naryn river, a right tributary of the Irtysh, with adjacent lead deposits, already being mined 4000 years ago. Huge new hydroelectric power plants and reservoirs. c) The "East-Kazakh" province is a mountainous region with rich mines; Ust-Kamienogorsk is an expanding industrial and mining centre, with big hydroelectric plants (Alampiev 1958).

*North Kazakhstan*: with Petropavlovsk as political centre. These northern provinces, which consist of vast steppes, were expected to become the planned "granary" of the USSR. The results of the tentative "virgin lands" development have so far been neither conclusive nor encouraging. It may, however, be premature to express any final opinion on this colossal experiment. To the south, Tselinograd (former Akmolinsk). In the north-east, Ekibastuz, with rich coal fields. To the west, Aktyubinsk with its metallurgy. Kustanay: rich mining area (coal, iron, chromium, asbestos, etc.) (Alampiev 1958).

*West Kazakhstan*: this district which from ancient times served numerous tribes as a route between the Caspian Sea and the Ural mountains is at present a rather backward, sparsely populated desert. Administrative centre: Uralsk. Rich, newly discovered oil fields in the Emba region; oil pipe-lines from Orsk to Guryev; agricultural development schemes (Alampiev 1958).

*South and South-East Kazakhstan*: mostly flat and desert in the west, mountainous in the east, it is in part densely populated, industrialized and irrigated. Its political and industrial centre, Alma-Ata (capital of Kazakhstan), possesses heavy and light industries. Among other

cities there are Chimkent with its heavy industry and Dzhambul (ancient Taraz), also an industrial centre. The mountainous district of the Ili and Chu rivers contains a chain of hydroelectric power-stations, and the Karatau mountain range is a rich mining area (lead, silver, phosphorus, etc.) (Alampiev 1958). East-Khorezm, a region of the lower Syr-Darya, happens to be the south-western part of Kazakhstan; it was considered preferable, however, to deal with it together with the other regions of Khorezm (see Chapter V, Uzbekistan 1).

## II. THE STONE AGE

Finds of the Stone Age were until recently as a rule limited to East and South-East Kazakhstan. Most of the archaeological work here was done by Chernikov, the leader of a big "rescue" operation, the East Kazakhstan Expedition, which covered in the first instance the valleys of the Upper Irtysh and its right tributary, the Naryn. Its finds belong to the Palaeolithic as well as the Neolithic age and the number of neolithic tools found exceeded 15,000 (Chernikov 1951, 1956, 1957a, 1959; Okladnikov 1966; with regard to Okladnikov, see Bibl. ONE Larichev 1958).

These "rescue operations" came to an end in 1956, when on account of the building of two huge electric power-stations on the Upper Irtysh the whole area was flooded (Chernikov 1959). Archaeological work in south-east Kazakhstan was also largely conditioned by the building of a hydroelectric station north of Alma-Ata on the Ili river, the waters of which were to cover a remarkable archaeological area (Akishev 1956). In 1954 Akishev, head of the Ili expedition, found, in addition to more recent materials, many tools of the Neolithic period (4th-3rd millennium B.C.) (Akishev 1958, 1959b).

Expeditions made by IIAE in South-West Kazakhstan since 1957 have yielded rich results, especially in and near the Karatau mountain range (map 6), where sites of the Lower and the Upper Palaeolithic were explored on the eastern and south-western slopes (Alpysbayev 1959, 1961, 1962). In the same region particularly interesting finds were made in Borykazgan and Tanirkazgan, district of Dzhambul, especially near the rivulet Arystandy, north of Chimkent (Alpysbayev 1962; Okladnikov 1966). These outstanding finds, which are in some cases

said to go back as far as the Chellean, the Acheulian and the Mousterian, recall discoveries made in Armenia (Satani-Dar), the Crimea (Kiik-Koba), Uzbekistan (Teshik-Tash) and Kirgiziya (On-Archa, see page 30). Excavations in the Karatau mountains continue, but archaeology is still in its early stages here and the discovery of more sites in this region may be expected.

Further to the north-west a site of the 3rd millennium B.C. explored at Saksaul, near Aralsk, contained many neolithic flint tools in addition to pottery (Vinogradov 1959).

A new feature is the discovery made in Central Kazakhstan of palaeolithic (Early Mousterian) and of neolithic sites. They all lie in the Sary-Su region, the Moinkum desert, Kzyl-Dzhar, and the Karaganda region (Klapchuk 1964, 1965, 1967).

### III. THE BRONZE AGE AND SUBSEQUENT PERIODS: SURVEY BY REGIONS

The evidence available so far suggests that the Bronze Age of Kazakhstan, which roughly corresponds to the 2nd millennium B.C., particularly its second half, was far more important than the preceding cultures. A region rich in deposits of copper and lead, it was the site of an epoch-making industrial and agricultural revolution (Margulan 1960). The population here was no longer composed entirely of primitive hunters and fishermen; more and more it included people who forged metal arms and tools and who were engaged in agriculture and stock-breeding.

The Andronovo culture—a collective name which may, in spite of some differences of opinion between archaeologists, be taken as covering various regional cultures of the Bronze Age over a long period (Zadneprovskiy 1966)—was originally thought to have been confined to the Siberian Minussinsk region, but numerous archaeological discoveries have shown that it was common to the major part of Kazakhstan as well (Margulan 1960). It thus extended from the Ural river in the west to the Yenissey in the east, and from Omsk—far beyond the boundaries of Kazakhstan—to the Aral Sea, where, in Khorezm, it united with the related Tazabagyab culture, as it is called by Tolstov (Margulan 1960, 1966; map 4). (Andronovo culture: V. Sorokin 1966; Andronovo pottery: Komarova 1962; Andronovo anthropology: Aleksieyev 1967).



As a possible result of gradual evolution the Andronovo Bronze culture was followed in the 1st millennium B.C. by the Nomadic Period, starting with the "Early Nomads" (Bernshtam 1957). Some of the objects in bronze left by the tribes, are of a typically early Scythian and Siberian "animal style" (Griaznov 1956, 1969) (fig. 1).

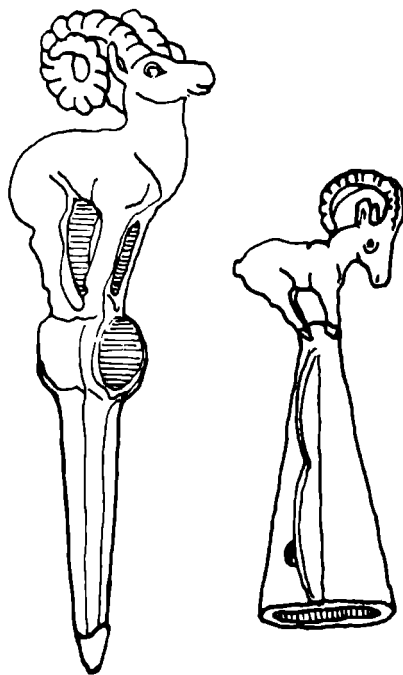


Fig. 1. Early animal style: Bronze tools from Lake Borovoye (N. Kaz.)

From a glance at the map it is apparent that Central Asia was, as stated before, a melting pot of peoples and cultures. It was largely South Siberia and the plain of Kazakhstan which formed between Europe and China an immense arena for the teeming masses of nomads (see in this connexion Bibl. ONE Chlenova 1966). Kazakhstan's past is illustrated by thousands of scores of kurgans (tombs), but they give a sad picture of an archaeologically sinister period. From ancient times down to the 19th century, mass plundering, especially in Siberia, deprived the majority of tombs of anything made of precious metals. This "gold rush" led to the melting down on a large scale of invaluable objects; others became

anonymous items in collections, and their exact origin and nature will now remain unknown for ever. Thus vandalism of the plunderers proved more destructive than millennial abandonment, wars, inundations or earthquakes.



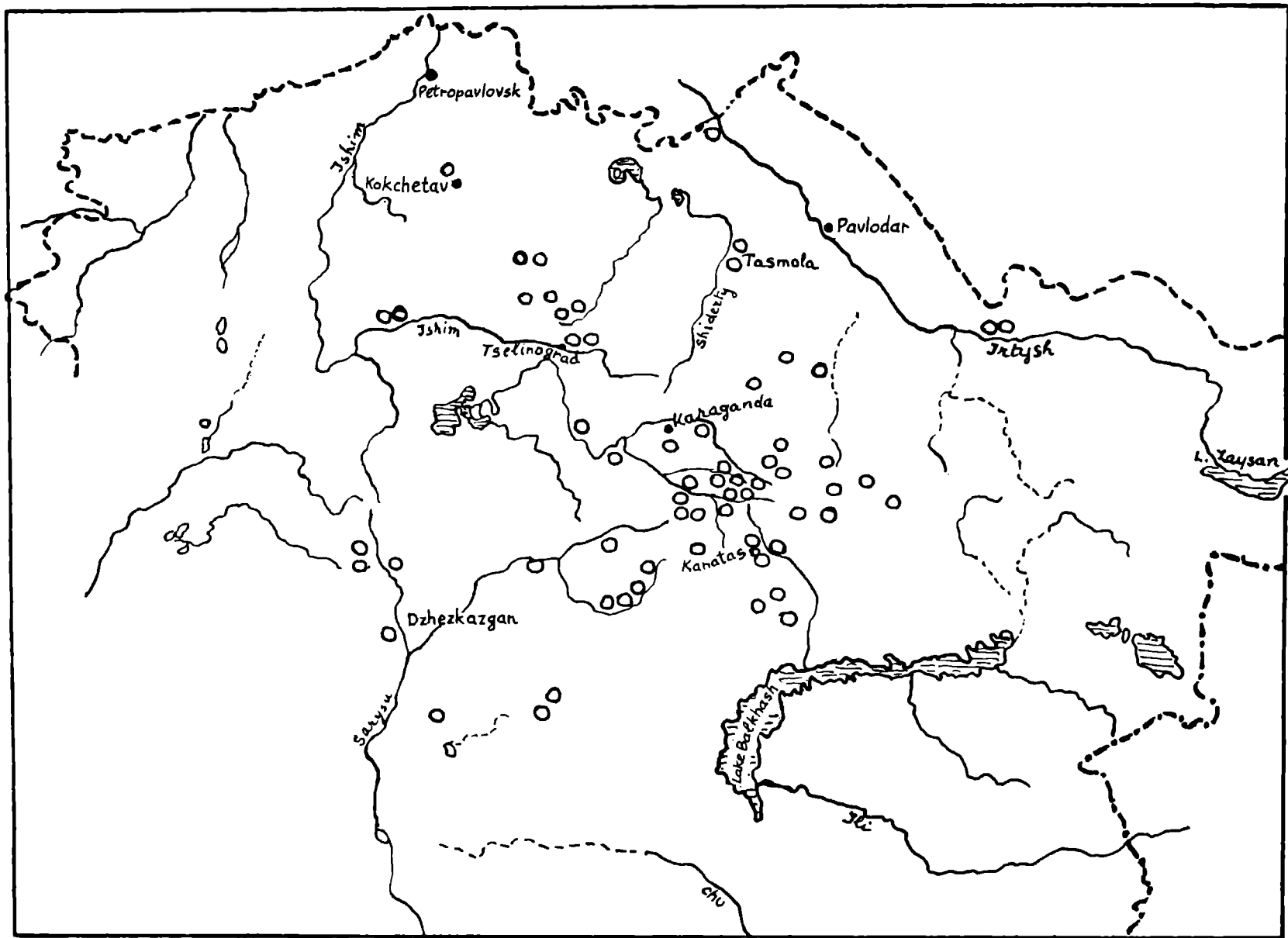
Fig. 2. Two specimens from the "Siberian Collection"

a) Spotted Stag, in gold

b) Wolves. Redrawn from a tiny round golden plate, an ornament of a garment

The magnificent "Siberian Collection of Peter I" kept in the Hermitage Museum gives at least an idea of the past splendour of the kurgans, not strictly limited either in space or in time. Most of the objects in this collection appear to belong to the 6th-4th century B.C., but some of them are as late as the 2nd century A.D. (Bibl. ONE Rudenko 1962 a) (fig. 2).

Many scholars have tried hard to identify the various nomad tribes and their ethnic origin, but there is still no consensus of opinion on this subject. In some cases different names used by ancient authors may designate the same, or at least related peoples (Zuyev 1960). Much



has been written on them both by Western and Eastern scholars, but this literature is sometimes more involved than conclusive. There still is uncertainty about such peoples as the Scythians, the Saka, the Wu-sun, the Massagetes, the Yue-chi, the Hsiung-Nu, the "Huns" and others (Chernikov 1960 b; Bibl. ONE Gankovskiy 1964). Without entering into these controversies, it is obvious that the archaeological discoveries made by Soviet scholars have added much to our factual knowledge by bringing the discussion down from a speculative level to material realities. The exploration of thousands of tombs, such as is taking place in Soviet Central Asia, is thus an essential substitute for non-existent records, and as a result of these "mass archives" prehistory is gradually becoming proto-history and even history.

Similar difficulties obtain in the case of the "animal style", commonly referred to as "Scythian" art, and have given rise to endless controversies (Kadyrbayev 1966; Bibl. ONE AN SSSR 1955a). Western authors tend to stress its Iranian features, but some Soviet scholars are rather of the opinion that, judging from recent discoveries in Soviet Central Asia that date from the 7th and the beginning of the 6th century B.C. the "animal style" may also have originated in Central Asia itself (Margulan 1966). Further archaeological discoveries may bring us nearer a solution; it is in any case essential that they should be well interpreted against their vast geographical and historical background.

One may indeed wonder whether this problem has not been somewhat exaggerated, as the result of the diverging attitudes rooted in different ideologies, and whether the origin of this nomad art can be contained within narrow geographical limits at all. Looking at it from a historical point of view over a long period, the contrast between "Iran" and "Central Asia" tends to shrink. The waves of mounted nomads who rushed back and forth between China, Europe and the Near East, assimilated numerous cultural features which they spread in the course of centuries over an enormous area largely inhabited by peoples of the same stock.

#### *A. Central Kazakhstan*

The Central Kazakhstan expedition of the IIAE (Margulan with Kadyrbayev and Orazbayev), which undertook its first excavations in 1946 has continued year by year (Margulan and others 1966; Akishev

1967). Its main object has been the investigation of the Andronovo culture of the Bronze Age, but it has also paid attention to the periods immediately preceding and following (Orazbayev 1959). (Map 5, Central Kazakhstan, Bronze Age).

The dwelling sites of the Andronovo period usually comprised ten to forty habitations—sometimes more—which took the form of primitive huts, partly underground. The burial-places, which consist of groups of tombs surrounded by megalithic granite slabs, sometimes several hundreds of them, are occasionally of gigantic size; this is one of the characteristic features of the Andronovo period in Central Kazakhstan, cf. the burial-place Begazy, south of Karaganda (Margulan 1960. See Bes-Shatyr, page 23 below).

Excavation of the more recent tombs of the Early Nomads has mostly taken place in a vast region south and south-east of Karaganda (Kadyrbayev 1959). These tombs, which belong to the second half of the 1st millennium B.C., were the first discovered to contain iron objects in addition to ornaments of gold. The tombs had, however, been thoroughly looted, and the number of gold objects found was limited. In a kurgan near the hamlet Kanattas, a golden diadem with numerous gems—various kinds of garnet and amber—together with a small girdle made of tiny silver plates had escaped the attention of the robbers. Both objects are said to date from the 4th-5th century A.D. (Kadyrbayev 1959).

In the course of the last few years Kadyrbayev has explored many kurgans of the Tasmola burial-site (near the Shiderty river, next to the railway line from Pavlodar to Tselinograd). These finds, which mostly belong to the 7th-3rd century B.C., are of great interest, not only because of the numerous ornaments in bronze, gold, bone and iron, but also because they afford the earliest evidence of the "Scythian" animal style in Central Kazakhstan, roughly in the 7th century B.C. (Kadyrbayev 1966).

### *B. East Kazakhstan*

Besides the "rescue" exploration devoted to the Stone as well as the Bronze Age (Chernikov 1956-59; Maksimova 1959), another expedition led by Chernikov has yielded valuable results of an artistic nature,

especially in the Chiliktin valley south of lake Zaysan (Chernikov 1960a). The number of gold objects found in kurgan 5, the so-called "Golden kurgan", runs into several hundreds. Among them were small reliefs

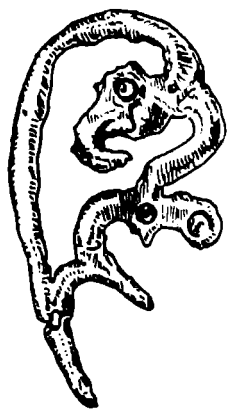
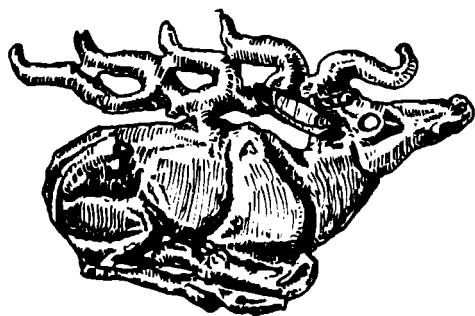


Fig. 3. Chiliktin kurgan.  
Golden objects



Fig. 4. Chiliktin. Wooden sheath  
with bronze arrows, adorned  
with four golden stags

of a typically early Scythian and Siberian "animal style" (fig. 3). Arresting bronze arrow-heads in a sheath, adorned with golden stags, point to the 7th or beginning of the 6th century B.C. (fig. 4).

An iron knife, harbinger of the new Iron Age, reflects the transition from bronze to iron, which is stated to have taken place in this region between the 5th and 4th century B.C. (Chernikov 1964, 1965).

A recent exploration in the extreme north-eastern part of Kazakhstan (the South Altay expedition under S. S. Sorokin) has covered the region of the Bukhtarma river as well as the adjacent regions beyond the Kazakhstan border. Some of the tombs, which all belong to the period of the Early Nomads, contained bronze objects, jewellery and pottery attributed to the middle of the 1st millennium B.C. (S. S. Sorokin 1963-67). The rock engravings and huge anthropomorphic cairns are referred to in section IV below.

### C. North Kazakhstan

During the years 1954-56 an expedition under Akishev covered the districts of Borovoye, Kokchetav, Petropavlovsk and Akmolinsk (Tselinograd). The tombs investigated were mainly of the Andronovo type and contained a great deal of pottery, some bronze tools and a few bronze ornaments with golden fittings (Orazbayev 1958; Akishev 1959a).

The tombs explored by Mrs. Ageyeva in the Pavlodar region (1955) were likewise mostly of the Bronze Age, though some belonged to the Early and Later Nomads (Ageyeva & Maksimova 1959). North of Pavlodar Mrs. Ageyeva made an interesting discovery in a nomad tomb: a stylized fish in metal with curious conventional ornamentation all over the body.<sup>1</sup>

A "rescue" expedition launched in N.W. Kazakhstan in 1955 by the IIMK (V. S. Sorokin 1958) in the Aktyubinsk region was this time connected not with the damming of waters and the flooding of whole regions, but with the imminent implementation of vast agricultural plans for converting the northern steppes and deserts, the so-called "tselinniy zemli" or "virgin lands", into agricultural land. The monuments investigated—mostly tombs, including Tasty-Butak<sup>2</sup>—range from the Andronovo period in the second half of the 2nd millennium B.C. to the Sarmatian period of the 2nd to 4th century A.D. (V. Sorokin 1962).

### D. West Kazakhstan

Two expeditions—one organized by the University of Saratov in 1948-52 and led by Sinitzyn, the other conducted by Mrs. Senigova—were made in the region of Novaya Kazanka or Dzhangaly, in the western-

<sup>1</sup> There have been many representations of fish in Central Asia and Siberia from the Neolithic period onwards, frequently with a religious significance. Some taboos with regard to fish have survived to the present day.

<sup>2</sup> According to a C-14 test the age of Tasty-Butak is 1220BC ± 80 (ZADNEPROVSKIY 1966).

most part of Kazakhstan, north of the Caspian Sea (Sinitzyn 1956, Senigova 1956). The tombs found in these sandy steppes and lake districts where no topographical changes had occurred since ancient times, give an uninterrupted picture of the peoples who lived here during more than four thousand years. The finds consist of neolithic flints, bronze objects, iron weapons, etc., as well as a great deal of pottery.

Another IIMK expedition of 1958 covered the region along the Emba river, which may be considered as the boundary between Europe and Asia (Kuzmina 1961). This region, which consists of sandy steppes and, on the lower part of the river, many lakes, has been inhabited since the Neolithic Age, but there are no records concerning its ancient peoples. Until recently it remained at an economically primitive stage, but it is now in the process of development, largely because of current operations in its vast oilfields (see page 12).

#### E. *South and South-East Kazakhstan* (not including East-Khorezm) <sup>1</sup>

Bernshtam's reputation is closely linked with his Semirechiye expeditions of 1936 and subsequently, which mainly covered the old Taraz (Dzhambul), the rivers Talass, Ili and Chu (see also Ch. II, Kirgiziya and map 6). In 1941, in view of the projected canal that was to cut right across regions of archaeological importance, Bernshtam concentrated on the "rescue" exploration of the Chu valley which turned out to be an archaeological paradise not only of the Bronze Age but also of more recent periods up to the Mongol invasion (Bernshtam 1950). He then explored the area between the Syr-Darya and the Karatau range (1947-51), a region familiar to Western readers through the writings of the Chinese Buddhist monk Hiuan Tsang of the 7th century A.D., who on his way from China to India followed a line roughly corresponding to the present boundary between Kazakhstan and Kirgiziya (Ageyeva and Patzevich 1958). Here Bernshtam collected massive evidence in support of the continuity of the various cultures.

Bernshtam died in 1956. <sup>2</sup> In the same year the archaeological exploration of two more regions of the Semirechiye, those of Alma-Ata

<sup>1</sup> Various sites in the southern deltas of the Syr-Darya are being dealt with in Chapter V, together with Khorezm.

<sup>2</sup> An obituary article and a detailed list of his numerous works will be found in *Bibl. "Kirgiziya"* (ZADNEPROVSKIY 1960b).



and Taldy-Kurgan, was assigned by the Kazakh Institute of History to Mrs. Ageyeva. The resulting rich finds are mostly to be connected with the Wu-sun tribes (3rd century B.C. to 3rd-4th century A.D.) (Ageyeva 1960, 1961).

In 1949 Rempel prospected the banks of the Talass river, north of Dzhabul, on behalf of the Dzhabul Museum, paying particular attention to the ancient settlement of Tik-Turmas (Rempel 1956). This region is said to have been the meeting place of such ancient tribes as the Asiani ("Asii"), Apasiaks, Tocharians, and others, who invaded Graeco-Bactria in the 2nd century B.C. and caused its fall. Today it is a region of steppes, barren deserts and swamps, deposits of vanadium and phosphorus ores, and of highly cultivated lands where archaeological monuments may be found in abundance among the kolkhozes.

A year later an old necropolis was unearthed in the ruins of Taraz (Dzhabul), with interesting Zoroastrian ossuaries in terracotta containing small human figures in clay (Rempel 1957). Taken in conjunction with similar Nestorian finds, the discovery provides not only interesting material on the different funeral rites, but also additional evidence for the coexistence of various cults.

In 1957 quite a tiny, but nevertheless interesting, find was made near Dzhabul, consisting of a small clay medallion representing a woman's head with lunar ornaments. Comparison with similar artistic motifs from other regions of Asia suggested to its discoverer that it might be a Manichaean lunar goddess of perhaps the 6th century A.D. (Senigova 1960).

In 1954 a "rescue" expedition was made to the Ili river, where a large archaeological area was to be flooded in connexion with the building of the huge Kapchagay hydroelectric station (Akishev 1956, 1959b). In the course of this expedition (referred to on page 13) Akishev found not only remains from the Neolithic Age (4th-3rd millennium), but also many tombs belonging to the Bronze Age (2nd-1st millennium), to more recent Early Nomad cultures (1st millennium B.C.) — especially Wu-sun tombs (2nd century B.C. to 1st century A.D.)—and finally later Turkish monuments. All this shows chronological continuity from the Neolithic Age down to the 8th century A.D. Most of the tombs had been looted, but some contained bronze ornaments and jewels with early indications

of the animal style. In recent years many objects have been found, the majority of which can be attributed to the Sakas, Wu-sun and Turks (Akishev 1956, 1959b, 1967).

While digging in 1957 on the right bank of the Ili river, Akishev explored two vast Saka burial-grounds dating probably from the 5th or 4th century B.C. of which one, Bes-Shatyr, consisted of twenty stone kurgans and ninety-four menhirs, some of gigantic size (Akishev 1959b). Most of them had been looted (See also Central Kazakhstan, page 18). Excavation has continued on an increasing scale since then and out of several thousands of tombs hundreds have been explored. It would seem that Bes-Shatyr was a highly venerated burial-ground of the Saka "Emperors" (Akishev 1962; Bibl. ONE Jettmar 1967). Among the objects found there are numerous arrow-heads in bronze (7th-6th century B.C.) (Akishev and Kushayev 1963). Analysis of the unearthed skulls suggests that their basic European type exhibited mongoloid features, possibly as a result of the influx of the "Huns" (Ginzburg 1959).

Stone Age finds in the Karatau range (see page 13) have in recent years led to the exploration of later sites on the northern slopes of the range (Ageyeva, Maksimova and Senigova). These include the Bronze Age site of Tau-Tary (Komarova 1962) and the more recent site of Aktobe (roughly 3rd century B.C. to 3rd century A.D.), which contains remains of a fire altar and numerous rock engravings (Senigova 1962).

#### IV. ROCK ENGRAVINGS

The number of sites with rock engravings in the USSR known to the author from detailed statements or references exceeds one hundred (see particularly Ch. II, Kirgiziya). In Kazakhstan they have been found only in the south and the east.

The engravings of animals recorded in Aktobe (South Kazakhstan) during the years 1957-59 are said to date partly from the 6th-5th century B.C., partly from the 1st-3rd century A.D., and even from later periods (Senigova 1962). A few years earlier similar engravings were found by Marikovskiy in the Chulak mountains. Those located in the Kuldzhaby hills, a small mountain range parallel to the Chu-Ili mountains, mostly represent animals, including curious two-headed goats together with dogs and even an elephant (Marikovskiy 1961) (fig. 5).

Finds made during 1957 in the Tamgaly mountain pass (south-western part of the Chu-Ili range) consist of about 1000 engravings said to belong to the Saka period of the 7th-5th century B.C., but they also include later representations from the Turkish period, 6th-8th century A.D. (Maksimova 1958). (See also Ch. II, Kirgiziya, Section IVB).



Fig. 5. Rock engravings from Kuldzhabasy

Rock engravings discovered in 1959 north of lake Balkhash in the Tesiktas and Karaungur mountains (South Kazakhstan) represent *inter alia* aurochs, which lived in this area in the Neolithic Age or earlier (Medoyev 1961) (fig. 6). In the Chirchik valley (South Kazakhstan), especially in the Bostandy district, there are quite a number of sites with representations of various animals, estimated to be of the Saka period, i.e. 1st millennium B.C. (Alpysbayev 1956). The engravings of animals

found in the hills adjacent to the Irtysh river are believed to date mostly from the 6th-1st century B.C., but some are probably more recent (Chernikov 1947).

In the last few years many rock carvings as well as huge anthropomorphic cairns (S. S. Sorokin 1963-65), have also been found in the easternmost part of Kazakhstan (Katon-Karagay).



Fig. 6. Rock engravings from Fesiktas and Karaungur

The above enumeration suggests that the rock engravings of Kazakhstan, while not equalling the masterpieces of the Kirghiz Saimaly-Tash, are nevertheless a valuable addition to those already known from the neighbouring republics.

(For "balbals" found in the Semirechiye, in part on Kazakh territory, see Ch. II, Kirgiziya, Section IVB).

#### V. CONCLUDING REMARKS

Many archaeological expeditions undertaken in Kazakhstan—some of them "rescue" operations—have been conducted almost in a spirit

of self-denial which is the more remarkable in that the archaeological and artistic potential of some of the regions might justifiably have been considered far below their immense economic resources. The archaeological remains of Kazakhstan do not consist of grand edifices or artistic shrines, but in large part of tombs which have been looted thoroughly. Valuable information on ancient cultures was thus irretrievably destroyed. The interest of the explorations lies rather in the historical field: they reveal a continuous record of the humble history of primitive peoples (mostly of the Bronze Age) who lived in caves, huts or other simple dwellings, and subsequently of nomad tribes whose tombs were not always alluring to the plunderers. Some of these peoples resisted Alexander the Great successfully and two centuries later invaded Bactria.

There is no consensus with regard to the origin of the Andronovo Bronze Culture, which spread across the steppes of Kazakhstan in the second half of the 2nd millennium (Itina 1960), nor as to the identity of the tribes commonly associated with the end of Harappa and Mohenjodaro. These urban centres of civilization in the Indus valley (now in West-Pakistan) are usually believed to have succumbed towards the middle of the 2nd millennium to the thrust of primitive Indo-European or Aryan tribes.

The hypothesis of an Indo-European origin for the Central Asian steppe tribes of the Bronze Age has attracted Soviet scholars, such as Bernshtam and others (B. 1957; Itina 1960; Tolstov & Itina 1960). The time interval which separates the date of the alleged invasion and that of the relevant archaeological finds—which point to several centuries later—remains, however, a disturbing factor (Bibl. Kirg. Zadneprovskiy 1962; Bibl. ONE Shchetenko 1966). If the end of the Harappa culture could be placed at a later date—which actually cannot be done—the awkward time lag would disappear. (A solution to this problem has been proposed in the West by van Lohuizen, who suggests that Harappa was destroyed not by the Indo-Europeans but by 'fringe tribes' of the Indus civilization who were in their turn conquered by the Aryans (Bibl. ONE van Lohuizen 1960).

Some Soviet scholars also believe that Harappa ceased to exist at an earlier date, viz, the 17th or 16th century B.C. (Bibl. ONE Kisselev 1965, Shchetenko 1966a, b). Shchetenko even disputes the theories

put forward by Indian scholars concerning the alleged evidence for a movement of Aryans to India after the collapse of Harappa (Bibl. ONE Shchetenko 1966b). V. Masson, who is familiar with the Western and Indian views on this subject considers that the reasons for the breakdown of the Indus valley civilization are not clear; according to him it may have been due to the increasing aridity of the soil, or internal disturbances due to changing social structures, etc. (Bibl. ONE Masson 1964).

Other Soviet scholars do not even believe that the flourishing Indus valley civilization had a violent end, but think that this civilization, which came into existence towards the middle of the 3rd millennium, began to decline in the 2nd millennium. The Aryan attack—if any—may at best have been a finishing stroke (Bibl. ONE Deopik & Merpert 1957; Gankovskiy 1964).

While it is thus impossible to say with certainty whether India was invaded by Aryan tribes coming from Central Asia or not, it does seem likely that these “barbarians” of the steppe were involved, either directly or indirectly, in the great upheaval of populations which was probably connected with the still mysterious end of the Indus valley civilization (Itina 1960; Bibl. ONE Kisselev 1965; Shchetenko 1966).

Westerners, who look at the collapse of this ancient Indus civilization from a Western watch-tower, tend to see it as the result of a devastating inward thrust by invaders coming possibly from somewhere in the North. Soviet scientists, surveying the steppe region of the Aral sea from an Eastern watch-tower, see it as an outward push to the south of teeming masses generated in the womb of Central Asia. The linguistic barrier between the two groups of scholars makes it rather difficult to test theories against a collective background of the archaeology of both sides. After the interesting finds made in Afghanistan (Bibl. ONE Casal 1961), in the western borderlands of Pakistan, in Western India, as well as in Soviet Central Asia, further explorations may throw some additional light on this still disputed problem.

## CHAPTER TWO

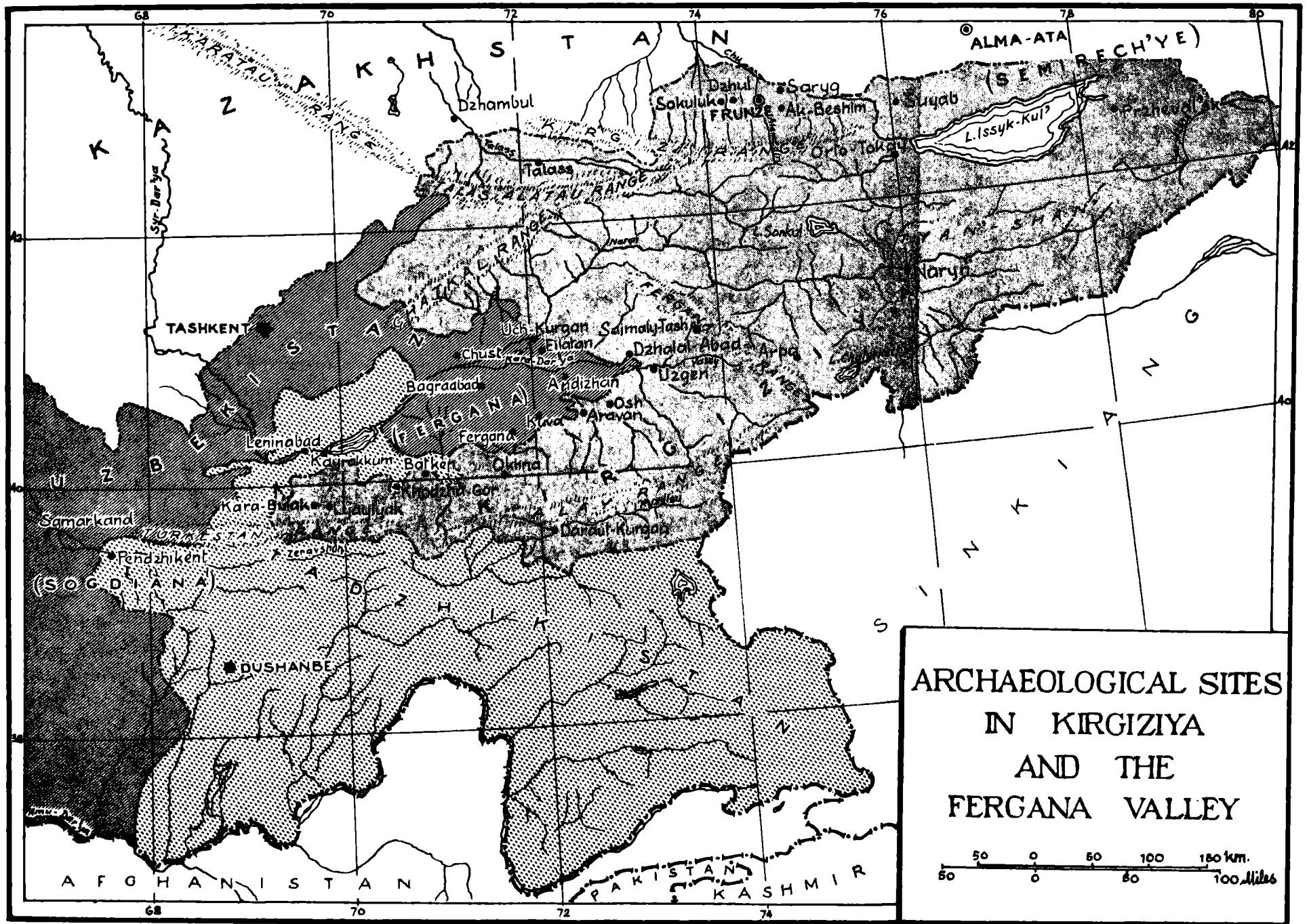
# KIRGIZIYA AND THE FERGANA VALLEY

### I. GENERAL

Mountainous, landlocked Kirgiziya—with an area of 198, 700 square kilometres or 87,000 square miles—is bordered on the north by Kazakhstan, on the west by Uzbekistan (a peninsular extension of which, Fergana, stretches far into Kirgiziya), on the south-west by Tadzhikistan (from which it is separated by the Alay range reaching over 7000 metres (23,000 feet), and on the east and south-east by China, the frontier being along the Tyan-Shan, whose peaks in the extreme north-east exceed 7000 metres. (map 6: Kirgiziya and the Fergana valley).

Owing to the peculiar topography of the country, in which successive mountain ranges are separated from each other by deep canyons, and where none of the mountain rivers are navigable, civilizations did not as a rule in the past develop along the rivers, which were obstacles to rather than means of communication. Influxes played a greater role than infiltration in this development (the Sodgian infiltration being the major exception to this rule), and the cattle-breeding nomad intruders blended to a large extent with the agricultural natives of the mountain valleys. The ancient sites discovered by Soviet scholars were more numerous in the valleys than in mountain districts. The latter served, however, as secluded sanctuaries for an admirable rock art.

Special tribute should be paid to the outstanding pioneer of the archaeology of Kirgiziya and its adjacent territories, A. Bernshtam, already referred to in the preceding chapter. His vast interests and stupendous activity ranged over scores of thousands of kilometres and millennia of various civilizations. Many of his explorations were concerned with the "Semirechiye", which is not a contemporary political designation, but a Russian translation of the local term "the seven rivers", covering the basins of the Issyk-Kul and Balkhash lakes, and including Kirgiziya as well as Kazakh territories. Among the masses of kurgans (tombs) explored by Bernshtam, some date from the Bronze Age and





### *Corrigenda*

page 151, line 16 *read* Yershov ✓

page 159, line 1 *read* page xviii ✓

page 161, line 10 *read* 1955 ✓

line 13 *delete* 1955b ✓

page 169, line 7 *read* 1960b ✓

page 176, line 13 *read* XXV, 3/4 ✓

page 177, line 43 *read* 1959 ✓

page 188; *after last line insert first four lines (1964 ... (B)) of page 190*

page 190; *transfer lines 1-4 to bottom of page 188* ✓

page 192, line 8 *read* (P)(B) ✓

even earlier, but the majority belong to the nomad tribes, i.e. roughly from the 7th century B.C. to the 4th century A.D., a period on which his interest was focussed. As in the case of Kazakhstan the material results of the explorations were, however, sometimes meagre, not only because the contents of the tombs were poor, but because most of them had been ransacked.

The tentative historical outline given below is largely based on Bernshtam's writings. Although in the light of recent Soviet research some details of his classification may be contested, Soviet scholars believe that in general it still holds good. There was, however, in Kirgiziya and the neighbouring regions such a blending of different civilizations that it is not always possible to date and distinguish them precisely, nor can the various tribes always be identified. Not only do the numerous archaeological sites belong to a long span of time, but there were substantial time lags between the cultures of valleys and those of remote mountain districts. Since some civilizations were characteristic of certain regions, and less, or not at all, of others, there can obviously be no single classification applicable to the whole country under review. The writer hopes, however, that the following tentative outline will serve as background to a proper understanding of Soviet archaeological achievements and enable the Western reader to find his bearings.

Though Bernshtam preferred to speak in terms of "Saka" rather than of "Scythians", the present tendency in Soviet archaeology is to use the expression "Early Nomads" to denote the multitude of tribes, whether Scythians, Saka, Wu-sun, Eastern Huns, etc. (Chernikov Kaz. 1960b). Nor did Bernshtam make a clear distinction between the Central Asian (or "Eastern") "Huns" who poured into the regions under review in the second half of the last millennium B.C., and the "Western" Huns who invaded Europe several centuries later. It has become a common, though not consistent practice of Soviet archaeologists to use in the first case the spelling "Khunny" (the Russian "X" stands for "Kh") and to spell the name "Gunny" when referring to the later, "Western" or Attilanic Huns. Whether or not the "Western Huns" were descendants of the earlier "Eastern Huns" is still a disputed problem.

## II. HISTORICAL OUTLINE

### A. *The Stone Age*

The remains of the Stone Age in Kirgiziya discovered so far are still rather scanty. Prior to Bernshtam's explorations practically nothing was known of the most ancient periods, and such finds as he happened to make were somewhat haphazard by-products of wide surveys of the Bronze Age and later periods.

More concrete evidence has been brought to light, however, since 1950, initially by Okladnikov, who discovered remains of the Lower Palaeolithic in 1953 in the Naryn district on the On-Archa river (Kibirov 1959; Okladnikov 1966). Two years later he found at Khodzha-Gor, next to the Tadzhik border, remains of the Upper Palaeolithic (Ranov 1965). In 1956 further finds of the Palaeolithic were made by Ranov in the Alay valley and on the Kyzyl-Su river, next to Daraut-Kurgan (Ranov 1958).

Remains of the Neolithic Age have been found in the Chu valley on the Alamedinka river (Okladnikov 1954).

### B. *The Bronze Age* (2nd to 1st millennium B.C.)

Under the pressure of nomad tribes approaching from the north, the ancient inhabitants of the Kazakh steppes and the territories adjacent to the Aral Sea withdrew to the south. This pressure resulted in great shifts of population as well as in racial intermingling, and the civilization of the Bronze Age—the Andronovo and the later Karasuk type—covered both Kazakhstan and Kirgiziya. In Kirgiziya this civilization, which received influences from China as well as from southern Siberia, was to be found mainly in the Chu and Talass valleys (Komarova 1962), but also in the mountainous Tyan-Shan districts (map 7, Central Tyan-Shan: kurgans and balbals). Moreover in the Fergana valley it gave birth to wonderful rock engravings (see pages 44-48).

### C. *Saka Period* (roughly 7th to 4th century B.C.)

Whatever the exact origin and ethnic composition of the tribes known comprehensively as "Saka", they inhabited, in so far as Kirgiziya is concerned, mostly the Tyan-Shan, Talass and Alay mountains, as well as the Issyk-Kul region. Archaeological discoveries—collections of tombs—have therefore been less numerous in the valleys. Interesting finds were,

however, made in the Chu valley, largely in connexion with the digging of the Great Chu Canal (in 1941); they usually consisted of stone-covered kurgans. The ritual objects they contained were frequently connected with the fire cult, Shamanism, and at a later stage, Zoroastrianism (Bernshtam 1949, 1950).

Figures of animals in an early "Scythian" style were found in the Semirechiye, for example, near lake Issyk-Kul (Bernshtam 1949).

It is not always possible, however, to draw a sharp line between the "Saka" period and the immediately following period of the Wu-sun. As stated before, different populations sometimes coexisted in the various parts of the territory under review and the newcomers intermingled with the resident population.

#### D. *Wu-sun* (2nd century B.C. - 1st century A.D. and later)

The origin of the Wu-sun, early pastoral nomads probably from Central Asia, is not exactly known. Bernshtam assumed a local origin, Tyan-Shan or Semirechiye (B. 1949), but others an immigration even from as far as the Ordos steppes. Some Soviet scholars identify the Wu-sun with the "Eastern Huns" (Zuyev 1960). (see E below).

Their progress towards the south coincided with the conquest of Graeco-Bactria by nomad tribes coming from the northern steppes (Bernshtam 1950). In Kirgiziya the Wu-sun centre was situated on the southern shore of lake Issyk-Kul, where they settled after having dislodged the Yue-chi (Bernshtam 1950).

Like the preceding "Saka" period, the Wu-sun period is characterized by many kurgans. The use of iron increased at the expense of bronze, and so did the use of gold (Bernshtam 1952).

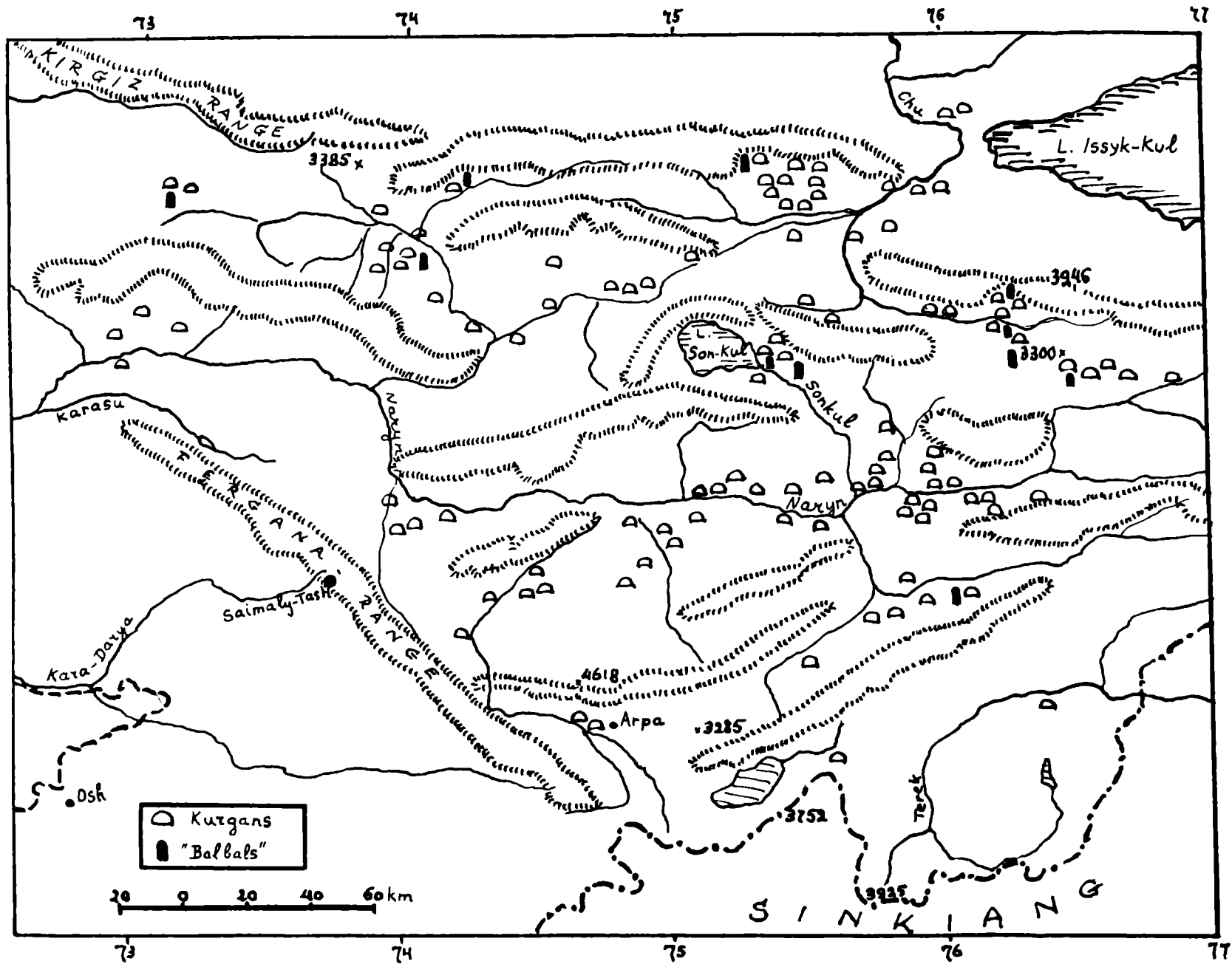
Pressure from China as well as from the northern steppes increased, and the Wu-sun were eventually pushed towards the Tyan-Shan by the "Eastern Huns" and their civilization then rapidly declined (Bernshtam 1950).

#### E. "*Huns*" (mid-1st century B.C. - 4th century A.D.)

After having ousted the Wu-sun and the related Yue-chi from East Turkestan the mongoloid (?) Central Asian tribes of the "Eastern Huns" (Hsiung-nu?) are believed to have occupied in their thrust to the south



Fig. 7. Noın-Ula. Embroidered wall-drapery (2nd-3rd century A.D.)



the territory of present-day Kirgiziya (Bernshtam 1951-4). It seems, however, that important as they were for the regions under review, these population shifts, as well as those of the subsequent periods, were merely marginal waves caused by major political events taking place on a large scale in the heart of Asia (Rudenko 1962). The "Eastern Huns" established a vast empire—as the Turks did after them—and their onslaughts via Semirechiye in the direction of Persia were a peripheral reflection of the tremendous population spasm which affected most of Europe.

One of the centres of these "Huns", Noïn-Ula, was located in the heart of present-day Outer Mongolia, some 100 km north of Ulan-Bator. The archaeological remains left by these mounted nomads are confined as a rule to kurgans, which contained easily movable property, such as felts, rugs and embroidered draperies. (The reader should however, be aware of the enormous distance between Outer Mongolia and Kazakhstan or Kirgiziya). (figs. 7 and 8).

Most of the discoveries in the Talass and Chu regions, Fergana, the Central Tyan-Shan, the Alay mountains and the southern Arpa territory (some of which included objects of Graeco-Bactrian and Chinese origin) were attributed by Bernshtam to the "Huns" ("Gunny" as he called them).

Irrespective of this ill-defined and rather misleading designation, some of the present Soviet scholars are of the opinion, that Bernshtam overrated the role of the "Huns" and that some of the alleged "Hun" tombs actually belong to the more ancient Yue-chi, a Central Asian tribe displaced by the Eastern Huns to the west and eventually their partners in the attack on Bactria (Sorokin 1956; Bibl. ONE Masson & Romodin 1964). The widespread deformation of skulls found in the graves, and the peculiar shape of the catacombs were in Bernshtam's opinion, characteristic of the Huns (Bernshtam 1950). Kibirov and Okladnikov oppose Bernshtam's views. According to them deformation was not introduced by the Eastern Huns, but was known in this and other regions prior to their arrival (Kibirov 1959). In any case the habit of deforming skulls is said to have been widespread among the "Western" Huns who invaded Europe centuries later. The initial lack of a clear distinction between the "Western" Huns and their "Eastern" predeces-

sors may possibly account for some mental extrapolation of this habit into the past, attributing it retrospectively to their namesakes of several centuries earlier.



Fig. 8. Fragments from Noin-Ula wall-draperies



## F. *Turks*

In their turn the Turks formed a vast nomad empire stretching from China to Persia (Bibl. ONE Bartold 1945). It was, as in preceding centuries, a succession of onslaughts by various tribes which, in the course of centuries, passed on to the south-west the pressure to which they themselves were subjected.

(i) *Western Turks* (580-704 A.D.): This period was characterized by population movements from two directions: firstly the inroad of pastoral nomads coming from the Altay and called for the first time "Turks", and secondly a steady and rather peaceful influx of people from Sogdiana, a region around the river Zeravshan, between the upper reaches of the Oxus and the Jaxartes (Bibl. ONE Bartold 1945). Though not on a massive scale, the arrival of the skilled agricultural and professional Sogdians was culturally of prime importance. These newcomers who from the 5th century A.D. onwards settled mainly in the Chu and Talass valleys, brought with them various arts and crafts (Bernshtam 1949); largely under their influence there was a remarkable urban development, as well as an economic and artistic expansion partaking at times of Iranian and Central Asian cultural elements. A second Sogdian wave is said to have set in during the 7th century. This may have been due to the advance of Islam (Bernshtam 1952). The population flows were many and various, and while Sogdians were moving into the territories under review, Sogdiana was itself gradually permeated by the Turks.

It was formerly believed that the Sogdians were mainly Zoroastrians (Bernshtam 1950), but recent discoveries suggest that Buddhists were more numerous among them than had been assumed (Kyzlasov 1959; Zyablin 1961; Bibl. ONE Frumkin 1968a). The Turks were as a rule Shamanists. Manichaeism, which represented an endeavour to blend Zoroastrianism, the Christian faith and Buddhism, made rapid headway among the Sogdians as well as the Turks. The latter do not appear to have left any archaeological monuments except funeral stones, called balbals (see IV B). The Buddhist monk-traveller Hiuan-Tsang, already mentioned in the chapter on Kazakhstan, who reached the Chu valley in 630 A.D., has left us a vivid account of Turkish rule in the Kirgiz territory he visited (Bibl. ONE Bartold 1945).

(ii) *Turgesh* (704-766 A.D.) and *Karluks* (766-940 A.D.) (Bernshtam 1952): After the short domination of the country by another local Turkish tribe—the Turgesh—the related Karluks, who came from the western Altay, settled in their turn along the Talass and Chu rivers as well as along lake Issyk-Kul (Bernshtam 1949). Suyab, a Sogdian town in the Chu valley was first held by the Turgesh and subsequently by the Karluks.

Although the Turkish tribes referred to were not yet Muslim, Islam was making steady progress among them.

New towns were built and the population gradually adopted a more settled existence.

(iii) *Karakhanids* (922-1125 A.D.): The Karakhanids, whose exact origin is still uncertain, were the first Turkish tribe to adopt Islam officially (Bibl. ONE Bartold 1945). Under their rule the Sogdian settlements in the Chu valley turned into fortified towns, such as Balasagun, Suyab, etc. (Bernshtam 1949). They were eventually defeated by the Kara-Kitay, a tribe of Chinese origin.

The 13th and 14th centuries witnessed the mass invasions of Mongols under Chingis Khan and later under Timur.

### III. SURVEY BY REGIONS

The vast explorations, which in addition to the easily accessible northern valleys also covered the mountain districts of the Tyan-Shan and the Alay regions down to Tadzhikistan, have yielded quantities of different material, such as skeletons and pottery, as well as stone and metal objects; these finds throw some light on the successive populations of the various regions, whether they were settlers or pastoral tribes on the move from Central Asia to the south-west. Rock carvings, being of paramount importance, are dealt with separately in Section IV.

#### A. *Talass valley*

In 1938-39 while excavating on behalf of the Hermitage Museum, Bernshtam discovered a number of tombs situated on the Kenkol river, a right-hand tributary of the upper Talass (Bernshtam 1940). Rightly or wrongly he attributed them to the "Huns" of the 1st c. B.C. A former

member of Bernshtam's team, Sorokin, and other scholars, subsequently dissented from Bernshtam's contentions (Sorokin 1956; Kibirov 1959). In their opinion the tombs dated from the 2nd to 4th century A.D. and had no direct connexion with the "Huns".

### B. *Chu valley*

In 1939-40 Bernshtam discovered numerous Buddhist remains at several sites in the Chu valley, such as Dzhul (10 km west of Frunze), Saryg (east of Frunze), Ak-Beshim (which he probably mistook for Balasagun) and Suyab (Bernshtam 1950, 1954).

Bernshtam believed that the Buddhist shrine in Saryg and the Buddhist monastery in Dzhul, both of which contain fragmentary wall-paintings, belonged to the mid-9th century A.D. if not later, at a period when Buddhist Uygurs in China were being driven by the victorious Confucian forces into East Turkestan and thence, in part, to northern Kirgiziya (Bernshtam 1952). The existence of this alleged belated Buddhist revival in a largely Zoroastrian country seems to have been disproved in recent years by the spectacular finds made in Ak-Beshim and Kuva. Still little known outside the USSR, these startling discoveries represent a considerable contribution to our knowledge of Buddhism in that region.

A large Buddhist shrine unearthed by Kyzlasov in the years 1953 and 1954 at Ak-Beshim shows various well-preserved Buddhist characteristics. This shrine which was attributed by its discoverer to the end of the 7th or the beginning of the 8th century A.D. and said to present numerous analogies with that of Surkh Kotal (North Afghanistan), consisted of a rectangle 76 metres long by 22 wide, with its axis running east-west. It contained a large quantity of architectural and sculptural fragments, as well as some badly damaged wall-paintings, but reference can only be made here to the remains of some huge images of seated Buddhas, smaller painted figures in clay, gilded metal medallions representing Buddhas and Bodhisattvas, as well as clay seals with the representation of an elephant and a Sogdian legend. The shrine appears to have been burned down in the second half of the 8th century A.D. and was subsequently destroyed by the Karluks. These Turkish nomads, as well as their successors, settled down in the ruins, as witnessed by many objects found *in situ* (Kyzlasov 1959).

A Christian church of the 8th century discovered nearby in 1954 combines a Syrian cross-cupola structure with a Central Asian open court and "aivans" along the walls. The adjoining cemetery is believed to be the oldest Christian burial-place so far recorded in Soviet Central Asia (Kyzlasov 1959).

One year later, another Buddhist shrine was discovered by Zyablin just 250 metres to the east of the first shrine (Z. 1961). Its architecture is rather different: just a square building without any courtyard. It contained many fragments of sculpture—some belonging to a Bodhisattva image of more than human size—, remains of wall-paintings, coins, etc. (The quality of the available reproductions does not, however, permit them to be utilized.) This shrine seems to have been destroyed towards the end of the 7th century A.D., possibly as a result of the inroads of Turgesh tribes.

And so there were in the same town, practically in the same period, two Buddhist shrines and one Christian church. This suggests the existence of a spirit of religious tolerance among the "barbarous" ruling classes.

A further Buddhist shrine of the 7th or 8th century A.D. containing a colossal Buddha image is said to have been excavated a few years ago in North Kirgiziya by Kozhemiako (Saryg, east of Frunze). No report has been published so far.

The city of Ak-Beshim was destroyed about the 10th century A.D. It was probably already in ruins when the Karakhanid capital Balasagan was at its zenith (10-11th century A.D.). The latter was conquered by Khorezmians at the beginning of the 13th century. An epidemic of plague in 1370 caused its final extinction (Bernshtam 1954).

### C. *Lake Issyk-Kul*

The region around lake Issyk-Kul, which was inhabited at least as far back as the Bronze Age, is known to have been an important centre of the Wu-sun who, at the end of the 2nd century B.C., had driven the Yue-chi towards Bactria. In the 7th century A.D. the former trade route between Western Asia and China was supplanted by the more northerly route from Samarkand and Tashkent along the Chu river and the southern shore of lake Issyk-Kul (Ivanov 1957).

As a result of subsequent changes in the lake bottom, possibly of a volcanic nature, various inhabited sites along the southern shore were submerged. cursory explorations suggest that these flooded sites, where "balbals" are still visible, belong to some late Turkish period (Vinnik 1961).

Such ruins of this period and that of the subsequent invasions as still exist, show vestiges of Islam, Nestorianism and Buddhism, but all evidence of a settled civilization disappears from the 15th till the 18th century (Zadneprovskiy 1957).

Among the rich material collected and published by Bernshtam are ritual bronze utensils, discovered on the northern shore of lake Issyk-Kul, including sacrificial tables, lamps, a cauldron, and a bronze figure of a recumbent yak (Bernshtam 1952). These objects of a Scythian-Siberian style, which probably date, according to Bernshtam, from the Saka period of the 5th to 3rd century B.C., may have been used in Shamanist or Zoroastrian fire cults.

In the years 1953-55 Zyablin and Kibirov explored many kurgans on the northern and southern shores of the lake (Zadneprovskiy 1957). Some of them are believed to date from the early Turkish period (6th to 7th century A.D.), but may have been of Wu-sun origin (Zyablin 1957). This confirms what is known of the survival of the Wu-sun after their conquest by the Turks. Other kurgans of that region belong to the Karakhanid and later Islamic periods (Kibirov 1959).

The contents of the kurgans explored were mostly meagre, but these explorations have nevertheless added to our knowledge of the ancient populations, such as the Yue-chi, Saka, Wu-sun, "Huns" and Turks.

The region of lake Issyk-Kul is, on the other hand, rich in rock engravings as well as in "balbals".

#### *D. Central Tyan-Shan and Chatkal*

(i) *Central Tyan-Shan*: Kibirov, who had taken on some of Bernshtam's explorations, confirmed the latter's conclusion that the tombs in the central Tyan-Shan belonged in part to the Saka, but mostly to the Wu-sun. He considered that the great number of Wu-sun tombs dispersed throughout the Tyan-Shan range may have been due to a belated re-unification of the Wu-sun after they had been driven away from lake

Issyk-Kul first by the Eastern Huns and later by the Turks. At any rate numerous Wu-sun appear to have reached Central Tyan-Shan in the 4th century A.D. and to have remained there throughout the 6th to 8th centuries under Turkish rule (Kibirov 1959). The exact origin of some tombs is, however, still open to doubt.

(ii) *Chatkal*: Situated in the most north-westerly part of Kirgiziya and surrounded by mountain ranges with passes leading towards the neighbouring regions, the Chatkal valley with its high pastures has from ancient times attracted pastoral nomads (Kibirov 1959).

During the years 1949 to 1951 alone, over 1500 kurgans were explored by Kibirov, who found fragments of interesting pottery with red-brown and black designs dating probably from the mid-first millennium B.C. The skulls found in the tombs were neither mongoloid nor deformed.

Many more recent kurgans and tepe belonged to the post-Kushan and early Turkish periods (4th-8th century A.D.), others are still later (8th-10th century). Their contents were rather disappointing; many tombs had, moreover, been looted (Kibirov 1959).

After the 12th century A.D. the occupation of the once thickly populated Chatkal regions ceased.

### E. *South Kirgiziya*

Until recently southern Kirgiziya was little explored and, with the exception of rock engravings, the material finds have, as a rule, been rather modest.

In 1953 Bernshtam's explorations in the Uzgen region were resumed by Zadneprovskiy and have been continued with skill and perseverance. The work was focussed especially on the large town of Shurabashat (near Uzgen, on the Yassy river) which excelled in original, richly painted, red-coated pottery. It was first thought to date from the 4th to the 1st century B.C., but subsequent explorations have shown that the place was already inhabited in the Bronze Age and that it survived spasmodically until the 10th or 12th century A.D. (Zadneprovskiy 1962).

Towards the 5th century A.D. its population—mostly agriculturists—appears to have undergone racial changes as the result of an influx of mongoloid nomads; there was at the same time a serious decline in handicrafts.

Pastoral nomads spread also to the south, to the 3000 metre high Alay valley, where agriculture is not possible. The type of kurgans found here suggests a different population, which Bernshtam considered to be "Huns", while, according to some other authors, notably Zadneprovskiy, they were probably Yue-chi (Zadneprovskiy 1960a).

In 1954 and 1955 striking results were obtained in the westernmost part of southern Kirgiziya by an expedition initiated by the Osh Regional Museum and continued on behalf of the Historical Institute of Kirgiziya. The contents of over 900 kurgans explored in Kara-Bulak (Batken district, Osh region) proved to be particularly rich and well preserved (Baruzdin 1956, 1957). They consisted of huge quantities of various kinds of pottery, including a type not found elsewhere, wooden objects, textiles, iron knives and arms, bronze articles such as mirrors, bracelets and inlaid ear-rings, all of which may be attributed to the period 2nd-4th century A.D. In one of the tombs there was a female skeleton apparently richly dressed, with jewels and other ornaments. Two human heads punched on a tiny bronze plaque (2,5 × 2 cm), which was part of a head-dress, display skilful workmanship. The male head shows a halo of rays, whilst the female head is accompanied by a crescent moon.

Among the other finds at Kara-Bulak there was a mirror of a Chinese type, and the bronze handle of another representing a female figurine of Indian (Amaravati?) style, at least as regards the attitude and the body (Baruzdin & Podolskiy 1961).

These interesting finds indicate the existence of a composite culture of native elements mingled with foreign influences, both from the West and from the East.

In Batken (near Kara-Bulak referred to above) and Lyaylyak (more to the west), two small territories situated on the northern slopes of the Turkestan range where explorations headed by Zadneprovskiy took place in the years 1956-60, some of the numerous tombs were evidently "symbolical", since they contained no skeletons but, instead, stone figurines, probably dedicated to persons who had died far from their habitual residence. Most of these tombs have been dated from the 2nd to 4th century A.D. (Baruzdin and Brykina 1962), but according to Mrs. Gorbunova they are not later than the 1st century A.D. (Gorbunova 1966)

F. *Fergana valley* (Zadneprovskiy 1962, 1966, 1967; Ginzburg 1956, 1962)

The Fergana valley is a rich agricultural oasis, some 300 km long, including in addition to vast pastures, deserts and mountains where agriculture is no longer possible. It is surrounded by mountains on all sides—in the north by the Chatkal range, in the east by the Fergana range and in the south by the Alay and the Turkestan ranges.

Ancient Fergana was a country of agricultural civilization as early as the Bronze Age (2nd millennium B.C.). It had close connexions with the Tyan-Shan, Semirechiye, and Tashkent regions and also with more distant countries, such as southern Turkmenistan, Iran, China, and probably Central India.

For some time Fergana lay on the borders of the Kushan Empire; at present it is a geographical and cultural area, which is politically broken up, and the juncture of intricate frontiers (see map 6). Although most of it lies within Uzbekistan and to a lesser extent within Tadzhikistan and Kirgiziya, it was considered appropriate to include it here. This entirely practical solution is open to justifiable criticism, but given the framework of the present book, it is possibly no worse than any other. It so happens that several places such as Kuva, Chust, Dalverzin, Eilatan, Fergana city, Margelan, Kokand, Andizhan, Namanga, etc., actually lie in Uzbekistan, while some other archaeological sites in Uzbek Fergana are not mentioned here. On the other hand some western places such as Leninabad, Kanibadan, Isfara, etc., are all in Tadzhikistan and are dealt with in Chapter IV Tadzhikistan.

With the exception of many stone tools of the Upper Palaeolithic Age found in the valley of the river Okhna, during 1952 and 1955, discoveries made in Fergana are mostly of the Bronze and Iron Ages (see map 8); they have yielded an unusually large quantity of pottery but few other material remains. The literature on Fergana archaeology is likewise very rich and it is a matter for regret that neither the publications in question, nor the discoveries can be adequately dealt with in this volume. Prominent among the numerous authors, in addition to such veterans as B. Latynin, V. Sprishevskiy and A. Bernshtam, is the latter's disciple Zadneprovskiy (see also Gorbunova, Kozenkova).

The main finds belonging to the ancient settled agricultural population of the Bronze Age are those of Chust (Zadneprovskiy 1962, 1966b, 1967)





and of the related Dalverzin, near Andizhan. Their chronology is still somewhat conjectural: according to Zadneprovskiy they are not older than the second millennium and on this assumption the interesting pottery, found in great quantities, may be considered to be contemporary with that of Anau IV-A of Southern Turkmenia (Sorokin 1954, Zadneprovskiy 1966b).

The early Iron Age is mainly represented by the large town of Shurabashat dealt with under E above, and by Eilatan near the Naryn and Kara-Darya rivers, first explored by Latynin (L. 1961) and later by Zadneprovskiy and Mrs. Obolduyeva. These sites also contained much painted pottery.

The Chust culture came to an end in the 8th-7th century B.C.

Further to the south, near Kuva, just across the border, in Uzbekistan, Mrs. Bulatova-Levina unearthed in 1957-58 the remains of a shrine containing a Buddha image. It was over twice human size and was found with numerous fragments of other sculptures. While the lower strata of the site belong to the period of the 1st century B.C.-1st century A.D., the Buddhist monuments may be of the 7th-8th century A.D. (Bulatova-Levina 1961, 1966). No full report on these excavations has been published as yet.

#### IV. ROCK CARVINGS

The preceding chapters have not taken into account the rock carvings, which are, in the case of Kirgiziya, of paramount importance. They consist of rock engravings and the more recent stone "balbals".

##### A. *Rock engravings*

Rock engravings are a characteristic feature of the artistic activity of ancient Fergana, but by no means peculiar to this area. Similar engravings have been found in large numbers throughout the Soviet Union, particularly in the far North, Siberia, the Urals, Kazakhstan, Tadzhikistan, Uzbekistan, the northern and southern Altay, and the Caucasus (Bernshtam 1954, Umanskiy 1959).

Among the finds in the area under review, only sites in the Osh region and Saimaly-Tash will be noted.

(i) *Osh region*: Airymach-Tau, 8 km from Osh, tentatively explored in 1961 by Zadneprovskiy; most of the drawings represent horses, in profile silhouette. Similar to those of Aravan, mentioned below, they are characteristic of a region which was famous for its horse breeding. Zadneprovskiy assigns them to the second half of the 1st millennium B.C. (Z. 1962).

The engravings of horses at Aravan were surveyed for the first time in 1946 by Bernshtam. Carved on a rock wall with small but dense dots,

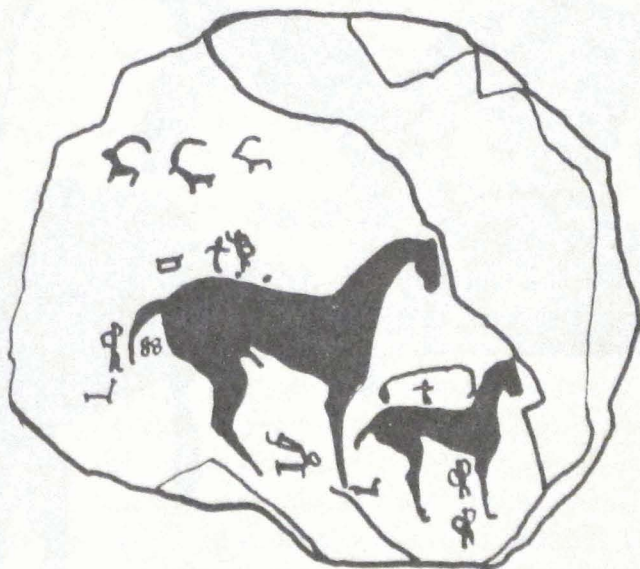


Fig. 9. Aravan. Horses engraved in rock

these horses put one in mind of the legendary "heavenly" Fergana horses "sweating blood". These were highly prized, above all in China, where they were first introduced at the beginning of the 2nd century A.D. (Bernshtam 1948) (fig. 9).

(ii) *Saimaly-Tash*: In a remote place in the midst of the Fergana range lies the stupendous Saimaly-Tash at a height of 3200 metres, surrounded by impassable mountains on the east, west and south. Discovered in 1903, it was not surveyed until much later. Zima explored the eastern part of the site in 1948, and Bernshtam the whole of it in 1950 (Bernshtam 1952, 1954; Zima 1958; Pomazkina 1969).

Saimaly-Tash which has served as a secluded open air archive of a great many generations, represents with its well over 100,000 engravings

in rock a unique panorama of wild animals, hunting scenes, domestic animals, vehicles, ploughs, and human beings. Their chronology is occasionally difficult to ascertain because of rock falls, which have caused a disorderly accumulation of engraved stones belonging to different periods. Many stone walls have, however, remained intact (pl. I).

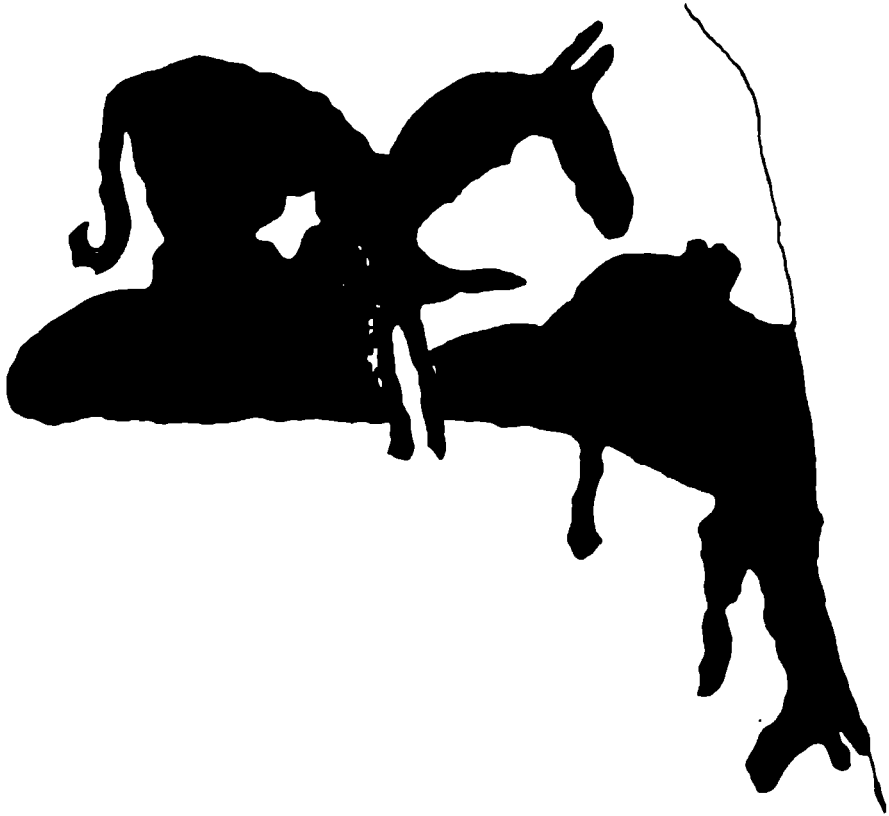


Fig. 10. Saimaly-Tash. Two horses. One horse (damaged) is falling over a precipice; the other stops at the edge.

In Bernshtam's opinion the hardness of the basalt rock made engraving impossible except by means of metal tools and the *oldest possible period* represented would therefore be the Bronze Age; the engravings end with the Hun-Turkish period of the 3rd to 8th century A.D. (Bernshtam 1952). In the absence of any thorough and systematic survey it may, however, be reasonable to consider any chronology as highly tentative.

It is, in fact, regrettable that the awe-inspiring site of Saimaly-Tash

seems to have been neither thoroughly explored and catalogued nor analysed in a comprehensive and scientific way. Such information as has been published by Zima and Bernshtam, although useful, is at most of a fragmentary and tentative nature (Zima 1958) (fig. 10 and pls. II-VIII).

### B. *Stone Babas or Balbals*

According to some authors "balbal" denotes a symbolic stone put up by the Turks on tombs, whereas "babas" are supposed to be similar, but more or less schematic human representations in stone, ranging from flat, engraved outlines of human faces to more elaborate reliefs. In practice the two expressions are frequently interchanged. As confirmed by Chinese records, babas and balbals were a characteristic feature of the Western Turks (6th-8th century A.D.) and are widely dispersed throughout the regions occupied by them—the whole of Kirgiziya, part of Kazakhstan, areas of the Caucasus, the Altay, Siberia, the Tuva territory (east of the Upper Altay, north of Western Mongolia) and Mongolia (Bernshtam 1952). They have been found neither in Uzbekistan, nor in Turkmenistan. Although their significance is still a subject of controversy among Soviet scholars, these stone images are rightly or wrongly believed by some to represent male enemies killed in battle who were supposed after death to serve the man who vanquished them (Sher 1966) (pls. IX-XII).

The schematic presentation is usually the same: a big head (frequently with a triangular face), tiny arms, the right arm bent at the waist, with a cup in the right hand and the left hand resting on a sword (Sher 1964, 1966). The dress of the stone images is of various kinds and the representations sometimes show elements common to Eastern Turkestan and India. It is usually assumed that the enemies killed were, as a rule, Eastern Huns (Ephthalites?), who dominated the country until they were defeated in 567 A.D. by the Western Turks and the Persians. This is at least the opinion of A. Grach who published a detailed survey of babas found in the Tuva territory (Grach 1961, 1968). This view is opposed by Kyzlasov, according to whom the babas are memorial representations of deceased persons (Kyzlasov 1964). Similarities between the stone babas and certain figures in paintings of the Ephthalite period, discovered at Balalyk-tepe, are at any rate striking (Bibl. Uzbekistan, Albaum 1960b).

## V. CONCLUDING REMARKS

As we have shown in the preceding sections, most of the discoveries in Kirgiziya date from the Bronze Age and subsequent periods. As in the case of Kazakhstan, material remains have frequently been disappointing. The recent finds of the Stone Age, especially those of the Palaeolithic, are, however, noteworthy, and it may be anticipated that their number will increase.

There is little evidence of Hellenistic influence and few Buddhist remains had been found in the regions under discussion before the recent remarkable discoveries of shrines in the Chu valley (Ak-Beshim), and at Kuva (Uzbek Fergana). An outstanding feature are the Fergana rock engravings; in view of their paramount importance, their thorough study is overdue.

With these exceptions, the interest of the explorations largely lies, as in the case of Kazakhstan, in their historical significance; they shed light on the ancient population—tribes from the Eurasian steppes—who may have been involved in the turmoil caused by the expansion of the "Indo-Europeans" in the middle of the second millennium B.C. and in the assault on Bactria in the 2nd century B.C. As stated in the preceding chapter, Soviet scholars are thus led to deal increasingly with the problems of the origin of the Aryans and their wanderings. (Bibl. Kazakh. Bernshtam, Itina, Tolstov & Itina; Bibl. ONE Deopik & Merpert, Shchetenko, Kisselev, Litvinskiy, V. Masson.)

Zadneprovskiy has pointed out some curious analogies between the pottery of Fergana in the Bronze Age and that of post-Harappan Central India (Z. 1962). Litvinskiy has also dealt at length with the problem of the Aryans and the role played in this connexion by Central Asian peoples of the Bronze Age, but his views were developed in a publication on Kayrak-Kumy which may not have reached many Western scholars (Bibl. Tadzh. Litvinskiy, Okladnikov and Ranov 1962; Bibl. ONE Shchetenko 1966).

## CHAPTER THREE

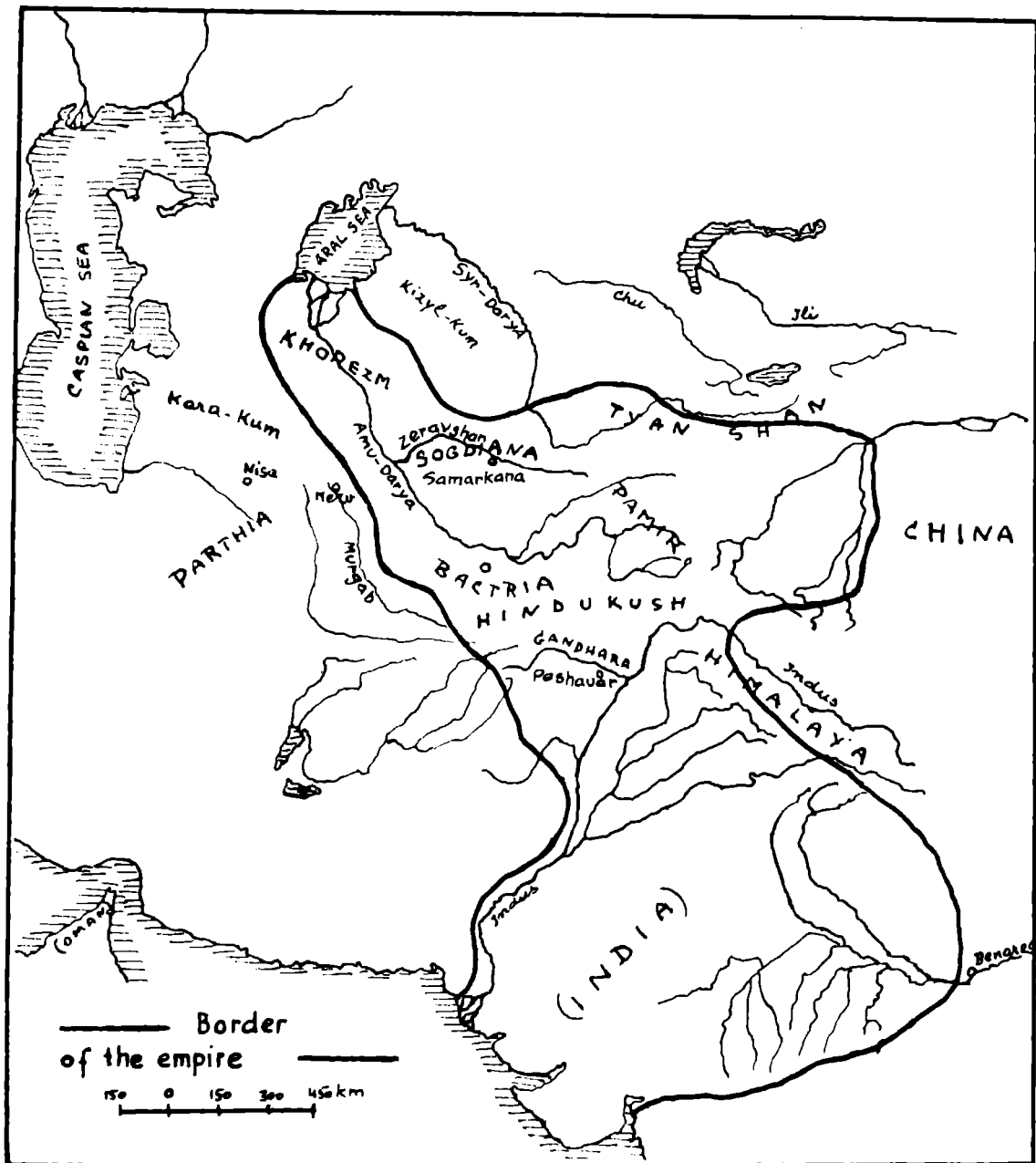
### HISTORICAL EXCURSUS: THE KUSHAN EMPIRE <sup>1</sup>

This chapter is merely meant to serve as a general background to a better understanding of the subsequent chapters dealing with Tadzhikistan, Khorezm and Uzbekistan, which were mostly parts of the Kushan Empire at the beginning of our era. In spite of its paramount cultural importance, the history of this empire is known rather inadequately (Mandelshtam 1968). Our main sources were until recently Latin and Greek authors, ancient Chinese chronicles, and coins. A critical discussion of the divergent opinions on this subject is, however, beyond the scope of the present book. (See also Ch. IV, Tadzhikistan).

Soviet scholars have been fortunate in being able to draw extensively on the writings of a Russian monk of the second half of the 19th century, the Rev. Father Iakin (Hyacinth), alias Nikita Bichurin (Bibl. ONE 1950-53). This outstanding and versatile scholar was whole-heartedly devoted to Chinese studies, having lived in China for many years. He mastered Chinese and other Oriental languages as well. Among many other works he left a vast treatise in Russian on the ancient peoples of Central Asia, largely based on Chinese chronicles from which he had made a great number of excerpts. (The scientific material he gathered on one of his expeditions to China—some six tons—was carried to Russia by a caravan of 15 camels.)

The present note is largely based on the writings of Soviet scholars, especially Staviskiy. This distinguished exponent of Soviet archaeological research takes into account not only Bichurin's writings, but also those of many other Soviet scholars; a good knowledge of archaeological finds enables him to test them against the ancient chronicles (Staviskiy 1963, 1966). In addition, he considers the writings of several Western scholars such as Ghirshman, Mrs. van Lohuizen-de Leeuw, Tarn and others. Much, though not all of his picture, thus depends on actual Soviet research.

<sup>1</sup> For additional material see Bibliography pages 176-177. (Dushanbe Conference 1968).



Map 9. The Kushan Empire



As far as the Kushan Empire is concerned, the views of Soviet scholars appear to be more in agreement with one another than those of Western scholars. Most authorities would, however, agree that after the attack on Graeco-Bactria by Central-Asian nomads—whether Saka, Hsiung-nu or Yue-chi—and its final collapse in 128 B.C., the territory was occupied for one or two centuries by various tribes (Bibl. ONE Masson & Romodin 1964). The latter eventually formed a unified empire under the rule of Kushan chiefs. This new empire probably lasted from the 1st to the 4th or 5th century A.D., when, as stated below, it succumbed to the Iranian Sassanians.

According to the majority of Soviet scholars, the Kushan Empire reached its greatest expansion under the emperor Kanishka, when it extended from the Aral Sea—consequently including Khorezm—across Afghanistan to Central India; urbanization and irrigation, as well as cultural activities, reached their zenith. The artistic centres of this period in Afghanistan and some adjacent regions are rightly famous. (Pugachenkova 1968, Yurkevich 1968; see also Ch. VI, Uzbekistan).

The probable borders of the Empire at the end of the first century A.D. are shown in map 9 (Belenitzkiy 1956; see also Staviskiy 1961 and Bibl. ONE Guliamov 1968).

Whereas according to Soviet authors the Kushan Empire did not extend beyond Margiana, some Western scholars have wondered whether the Kushans did not penetrate for a while as far as the Caspian Sea. According to Bivar certain of the finds made in the Iranian Gurgan province (near the Caspian) may be attributed to the Kushans. On the other hand M. E. Masson thinks that the usual views on the extension of the Kushan Empire to the north may be exaggerated (M. Masson 1968; Bibl. Turkm., M. Masson 1966).

If there is no consensus with regard to the boundaries of the Kushan Empire, the differences of opinion as to its chronology are still more serious.

The reigns of various Kushan emperors, as well as the events connected with them, are, it is true, recorded with exact dates (numerous coins and inscriptions), but the opinions as to the calendar on which these dates are based vary considerably (van Lohuizen-de Leeuw 1949; Ghirshman 1957 and others). According to some the calendar started with Kanishka's

reign. But when? Was it 78 A.D., as believed by Tolstov and most of the other Soviet scholars, 104, 126, 128 (Bibl. ONE Bivar 1966), or 144 A.D., as upheld by Ghirshman and various other authors or was it even appreciably later? Such dates as 219/20, maintained by Altheim, or even 278 as put forward by Zeymal, do not find many supporters among scholars (Bibl. ONE Altheim 1965; addendum to Kushan bibliography page 177: E.V. Zeymal; B. I. Vainberg. See also Ch. V, Khorezm).

Be this as it may, it was a composite empire comprising regions inhabited by people of different origins, creeds, and artistic traditions, a kind of centralized "Commonwealth" with some of its component parts connected more or less loosely with each other, their relationship with the central government being often that of tributary allegiance rather than complete submission.

It is usually accepted that Buddhism was protected and favoured by Kanishka—a thesis repudiated by Altheim—but there is no consensus among scholars as to whether it actually was a State religion, nor can it be said that it covered all parts of the State in a uniform way. Judging from recent archaeological finds it may be safely assumed, however, that Buddhism expanded widely under Kanishka (Frumkin 1968). The syncretism prevailing throughout the Empire—Buddhism, Hellenism, Hinduism, Zoroastrianism and other creeds—is well reflected in the coins minted during the rule of the Kushans.

According to various Soviet scholars a serious crisis occurred in Central Asia during the 3rd-5th centuries, leading to a deterioration of the irrigation system and to vast stretches of land turning into desert (Bibl. Uzb., Shishkin 1963).

The country could no longer resist the growing pressure of the Sassanian Iranians or escape the control of the White Huns or Ephthalites, federated with the Sassanians (Bibl. ONE Altheim 1959-65, especially vol. II; Dyakonov & Mandelshtam 1958). According to the majority of authors, it came after multiple vicissitudes under Sassanian vassalage in the 3rd century (Staviskiy 1963) and ceased to exist as a separate state in the 4th century. More recent dates are put forward by Altheim (Bibl. Khorezm Altheim & Stiehl 1965).

Post-Kushan history is even more conjectural than the still obscure history of the Kushan period (Bibl. ONE Mandelshtam 1958). In the

middle of the 6th century a clash that occurred between the Ephthalites and the advancing Turkic tribes resulted in victory and hegemony for these pre-Islamic Turks. There thus came into being another composite and decentralized empire, and as before, some of its regions were governed by local dynasties which now became tributary to the Turkic rulers, subsequently subjected in their turn to Chinese pressure.

The little that is known of the 6th and 7th centuries suggests an economic and cultural development accompanied by a distinct improvement in irrigation (Staviskiy 1963).

It was in the latter half of the 7th century that Arab invaders first crossed the Amu-Darya but the gradual occupation of the territories beyond the river did not begin until the first half of the 8th century.

A succession of vast and composite empires in the areas under review was the characteristic feature of the millennium which preceded Islam. Some of these empires were short-lived or even ephemeral, and they arose and dissolved with equal suddenness. The changes were not always caused by deep-seated waves but occasionally consisted of a mere bubbling on the surface. They manifested themselves in a succession of independent or tributary ruling classes of different origins, creeds, and cultures that left an imprint on old-established substructures. Whereas the upper layers and their official culture were changing, the substratum largely persisted. Religions, languages, and traditions, new and old, frequently continued in a spirit of coexistence rather than of mutually exclusive fanaticism.

The whirlwind of the Arab conquest meant a sharp break in the ancient rhythm of civilizations.

## CHAPTER FOUR

# TADZHIKISTAN

### I. GENERAL

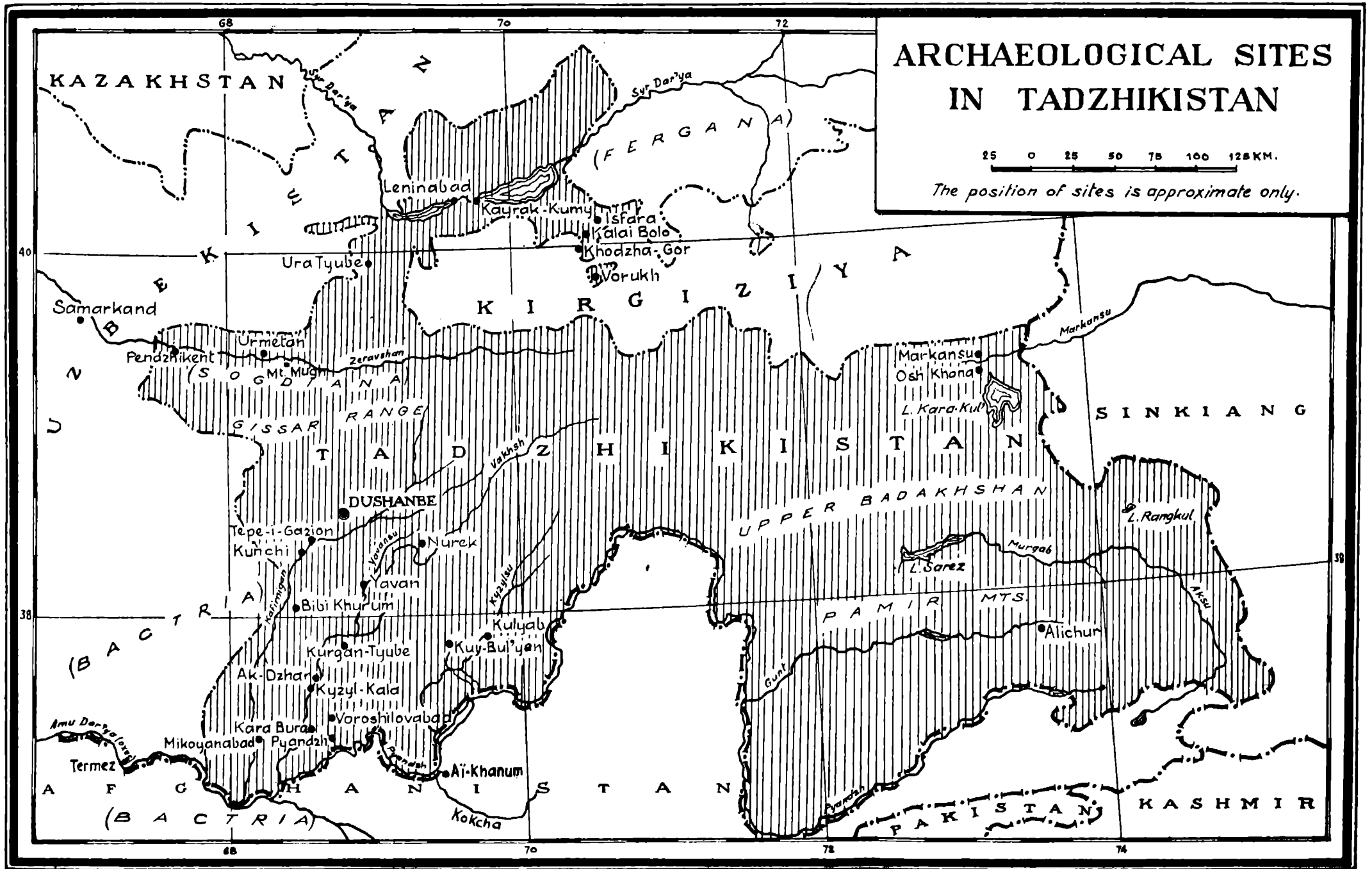
It is convenient to divide the highly mountainous, land-locked Tadjhikistan into two parts: the eastern, largely impassable half, consisting mainly of the network of the Pamir mountain ranges with many peaks between 4000 and 7000 metres high, and the western half stretching from Kirgiziya and Uzbekistan in the north to Afghanistan in the south, and backed by Uzbekistan in the west. (See map 10, Tadjhikistan).

This western half may be divided into the Bactrian region south of the Hissar range (Russian transcription: "Gissar") and the Sogdian provinces to the north of it.

The area of Tadjhikistan—142,000 km<sup>2</sup> or 55,000 square miles—is appreciably smaller than that of Kirgiziya. Its unevenly distributed population of over two millions is 60 per cent Tadjhik, the other 40 per cent being Uzbek, Kirgiz, Tatar, Russian, etc. In contrast with the other Islamic Soviet Republics of Central Asia with Turkic populations, the Tadjhiks are of Iranian tongue, their language being closely related to that of modern Persia. Throughout their long history they have experienced many invasions (Persians, Alexander the Great, Kushans, Huns, Turks, Arabs, Mongols, etc.) and repeated changes of language and religion.

As in the case of Kirgiziya, there exists no large-scale urbanization. In addition to the capital Dushanbe, formerly Stalinabad (roughly 350,000 inhabitants), there is Leninabad, formerly Khodzhent, on the Syr-Darya, approximately where Alexander the Great founded the town Alexandria Eschate, the terminus of his Sogdian expedition. Some of the minor towns are of recent origin.

The upper part of the Amu-Darya (ancient Oxus), called Pyandzh, represents the southern limit of the country. In the north the Syr-Darya



flows across the narrow district of Leninabad. Also in the north is the archaeologically famous river Zeravshan, which runs parallel to the Hissar range towards Uzbekistan. Two tributaries of the Pyandzh river, the Kafirnigan and the Vakhsh, flow through archaeologically-important territory in Southern Tadjikistan.

The enormous Nurek works are the most important of a series of hydroelectric power-stations built on the Vakhsh. The "Tadjik Sea" (Kayrak-Kumy reservoir) is a huge water basin which covers most of the Kayrak-Kumy district.<sup>1</sup> Similar work was carried out on a big scale in the Pamirs.

Archaeological research in Tadjikistan has made such rapid progress since the thirties, that any survey is bound to be out of date as soon as published. On account of the outstanding importance of its Stone Age civilization and the spectacular discoveries dating from the pre-Islamic period in Western Tadjikistan, it is on these aspects that the attention of the reader should be focussed. Rock engravings in the Zeravshan valley, as well as in the Eastern Pamirs are referred to in the bibliography (Dalskiy, Litvinskiy, Mandelshtam, Ranov).

The student who would like to know more about the multifarious archaeological work done in Tadjikistan before 1954, will find the necessary information in the surveys published by Litvinskiy, the head of the archaeological section of the Tadjik Institute of History created in 1951 (Litvinskiy 1954).

Apart from the Pamirs, the activity of the Soviet archaeologists has been mostly connected with Sogdiana, north of the Hissar range, and Bactria to the south of it. It should be noted in this connexion that in the opinion of Soviet archaeologists, ancient Bactria extended northwards beyond the Oxus (Amu-Darya), and consequently included territories of the present Uzbekistan and of Western Tadjikistan as far as the Hissar range (Yakubovskiy 1953).

Both Bactria and Sogdiana had been part of the Achaemenid Kingdom, of Alexander's realm and subsequently of the Seleucid Empire (3rd century B.C.). Under the Hellenistic rulers of the 3rd and 2nd century B.C. the territory of Graeco-Bactria fluctuated, extending sometimes to

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<sup>1</sup> Not to be confused with the Karakum desert of Turkmenistan.

the north and the west, as it did under Euthydemus, and sometimes towards India, as it did under his son Demetrios and after him under Eucratides. As Bactrian civilization could anyhow hardly have been arrested by a river, the archaeology of the Soviet territories north of the Oxus (Transoxiana) is necessarily tied up with that south of the river (Map II, Bactria and Transoxiana).

Systematic archaeological exploration of Tadzhikistan began in 1946 with the Sogdian Tadzhik Expedition, subsequently known as the Tadzhik Expedition (Yakubovskiy 1950). After the death of its first leader, Yakubovskiy, in 1953, the work was taken up by M. Dyakonov who died, however, in 1954. Belenitzkiy then became the head of the expedition (Litvinskiy 1967a).

## II. THE STONE AGE

The Stone Age in Tadzhikistan is an archaeological newcomer, a precocious giant, since most of the finds are not more than 10-15 years old. Its systematic exploration has been going on since 1953, when A. Okladnikov (Bibl. ONE Larichev 1958) and V. Ranov—the two Soviet archaeologists responsible for the majority of these finds—explored the upper part of the Syr-Darya valley, the Kayrak-Kumy desert, and the Isfara region (Okladnikov 1958). The Kayrak-Kumy region has proved to be the richest area for palaeolithic finds to be discovered so far in Soviet Central Asia (Litvinskiy & Okladnikov & Ranov 1962).

The exploration of the Kayrak-Kumy was a "rescue" operation begun in 1954, prior to the flooding of its western part and the creation of a big reservoir, the "Tadzhik Sea". The remarkable records we owe mainly to Okladnikov and Ranov are thus an epitaph of sites lost this time for ever. Ranov recently gave an illuminating and vivid picture of the actively pursued exploration of the Palaeolithic Age (Ranov 1965). It is very likely that many more finds will follow.

The sketch-map 12 (West Tadzhikistan—Palaeolithic Age) gives the tentative location of a number of the palaeolithic sites discovered so far accompanied by a list of them. The neolithic sites of the East Pamir are roughly shown on the sketch-map 13 (East Tadzhikistan—Neolithic Age).



Map 11. Bactria and Transoxiana



*Stone Age: rough list of sites shown on the maps 12 and 13***A. Lower Palaeolithic**

- 1 Shorkul (Kayrak-Kumy)
- 2 Khodzha-Bakirgan
- 3 Kizyl-Kala (right bank of Vakhsh)
- 4 Koyki-Tau (right bank of Kafirnigan)

**B. "Mousterian"**

- 5-7 Kayrak-Kumy (Khodzha-Yagona and others)
- 8 Khodzha-Gor (Isfara basin, Fergana)
- 9 Ura-Tyube
- 10 Dzhar Kutan
- 11-18 various small sites, mostly isolated finds
- 19 Ak-Dzhar (right bank of Vakhsh)
- 20 Kara-Bura (left bank of Vakhsh)

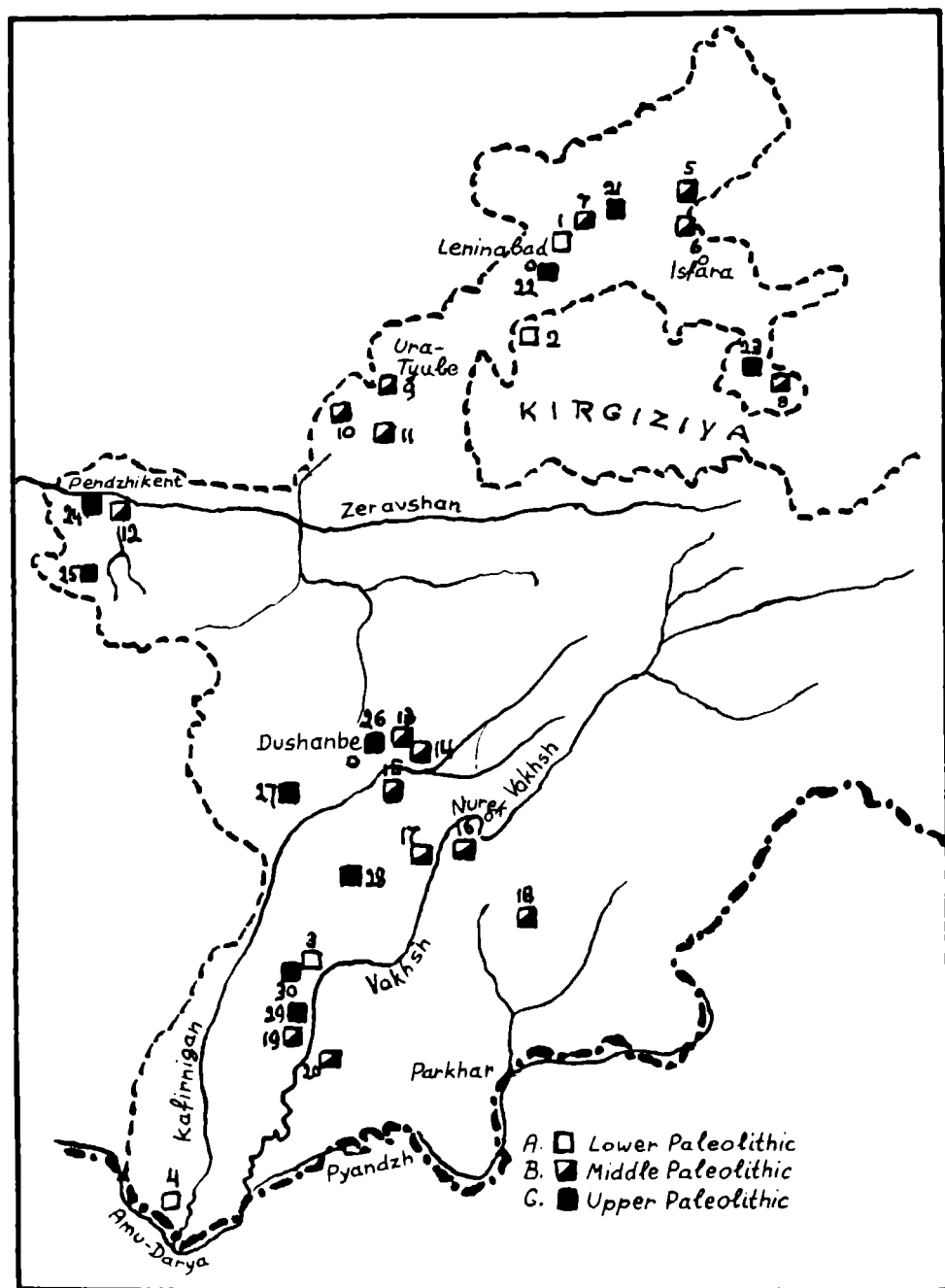
**C. Upper Palaeolithic**

- 21 Kayrak-Kumy
- 23 Khodzha-Gor
- 24 Pendzhikent
- 25 Magiyan river
- 22, 26-28 various small sites
- 29 Ak-Dzhar (right bank of Vakhsh)
- 30 Kizyl-Kala (right bank of Vakhsh)

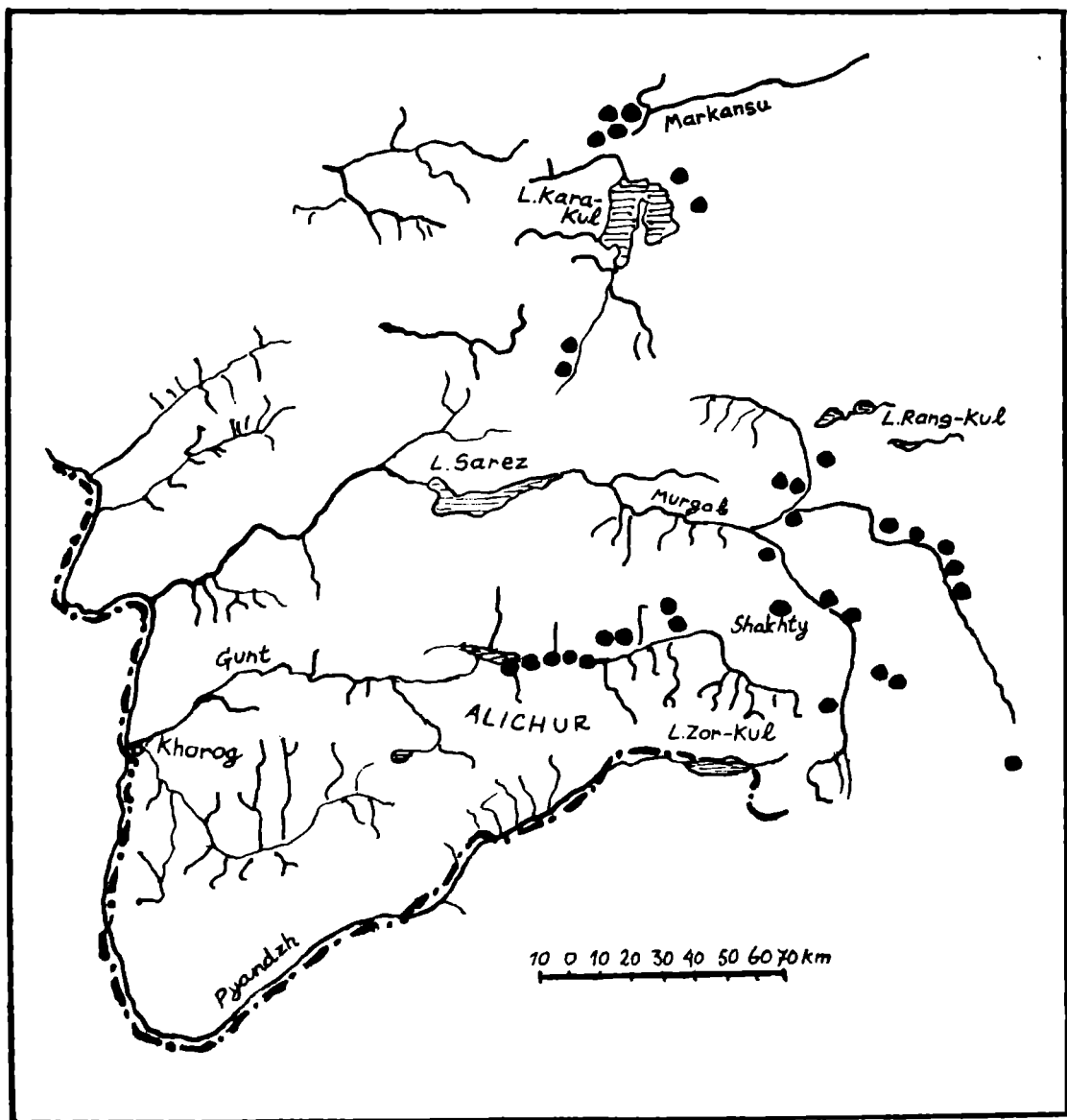
**D. Neolithic: East Pamirs**

- Markansu river (rich finds in the "Death valley")
- Osh-Khona (the richest collection of mesolithic and neolithic tools found so far in Soviet Central Asia. C-14 test: 9530 ± 130 years)
- Lake Kara-Kul (Northern Pamirs, some 4000 meters high)
- Shakhty caves (Upper Alichur valley)
- Kulak-Kesty (Upper Alichur valley)
- Lake Rangkul (rich finds)
- Nurtek

(Sources: Ranov 1964, 1965, 1967 (East Pamirs); Okladnikov 1966, etc.).



Map 12. West Tadzhikistan—Palaeolithic Age



Map 13. East Tadzhikistan—Neolithic Age

It is evident from the above that even if we allow for occasional vagueness or uncertainty in chronology, the palaeolithic sites are mostly in North-West and South-West Tadzhikistan, whereas the neolithic sites are more numerous in the Pamir mountains (Okladnikov 1958). In the last area, palaeolithic and neolithic industries appear to have occasionally coexisted. Thus the Shakhty caves contain rock engravings of the Palaeolithic, among which is a human figure with a bird's head (Ranov 1961, 1967), a feature found in the Palaeolithic of Western Europe also (e.g. at Lascaux).

The rich material gathered in the last ten years suggests that the regions omitted here because of the absence of Stone Age sites, may merely be those where no exploration has as yet been made.

### III. THE BRONZE AGE AND SUBSEQUENT PERIODS

#### A. *The Pamirs*

With the exception of the discoveries in the Kayrak-Kumy desert in North-West Tadzhikistan and the recent finds in the Bishkent valley (Kafirnigan), most of the Bronze Age sites belong to the Eastern Pamirs (Upper Badakhshan).

It would appear that in ancient times nomads from Kirgiziya in search of good soil and a mild climate were compelled to go round these impenetrable Pamirs, via the east to the south, before they could reach the more hospitable western lands.

After 1946 Bernshtam explored a great many kurgans, of which the Saka tombs in the Eastern Pamirs were the oldest (Bernshtam 1952). His work has been continued by Litvinskiy (L. 1967c). The rather poor and primitive burial grounds yielded a mass of information on the funeral rites of the ancient populations, who, judging from the absence of settlements, must have been nomadic. Among the material finds, which date mainly from the 6th-2nd century B.C., there were bronze objects, ornaments, jewelry in bronze with semi-precious stones, and rather clumsy bronze figures of animals, heralds of Scythian animal art (Litvinskiy 1960, 1967a, c). According to Litvinskiy these Saka may be connected with the movements of the Yue-chi and the Wu-sun. Part of them participated in the attack on Bactria, but they stopped on their way to India and settled in the Pamir region (Litvinskiy 1967c).

### B. *South-West Tadzhikistan: the Vakhsh and Kafirnigan valleys*

So far little is known of ancient Bactria in the first half of the last millennium B.C., but thanks to Soviet archaeologists who are keen on unveiling its mystery, our knowledge of this particular period has begun to increase (Monchadskaya 1961; see also page 67 and 81). The subsequent periods are better known but the records are still incomplete and their interpretation is frequently tentative.

As stated in several other chapters of this book, the Graeco-Bactrian kingdom collapsed as a result of the attack of nomads against Sogdiana and Bactria, towards 130 B.C. Similarly, the vast Kushan (Indo-Scythian) Empire which followed it, was conquered in its turn in the 4th century A.D. by the White Huns (Chionites, Ephthalites). Their empire was itself defeated in the second half of the 6th century A.D. under the combined assault of the Western Turks and the Iranian Sassanians. The 8th century witnessed the advance of the Arabs and the gradual islamization of the countries they conquered (see also Ch. III, Kushan Empire).

#### (i) Vakhsh valley

There is at present ample evidence of ancient irrigation systems in this region which is reviving as a result of the installation of big hydro-electric works and modern irrigation systems (T. Zeymal 1959, 61, 62).

Recent explorations of kurgans made by Litvinskiy in the lower Vakhsh region, where the rivers Vakhsh and Kizyl-su join the Pyandzh river, have yielded valuable results, since the tombs contained, in addition to bronze objects, a large quantity of ancient high-grade pottery dating approximately from the end of the 2nd and the beginning of the 1st millennium B.C. (thus roughly contemporary with Namazga VI; see Ch. VII, Turkmenistan). These noteworthy discoveries relating to ancient Bactria may be connected, according to Litvinskiy, with the Kobadiyan I civilization (see (ii) Kafirnigan below), as well as with the movements of Aryans from South Turkmenistan to Tadzhikistan. The problem of the Aryans which is dealt with in various chapters of this book, remains, however, controversial (Litvinskiy 1967c).

The later Graeco-Bactrian period is represented, *inter alia*, by the ruins of the fortified building-compound of Kukhna-Kala, discovered in 1954 by Litvinskiy near Voroshilovabad (T. Zeymal 1959) (pl. XIII).

This compound which was probably begun in the 2nd or 1st century B.C. was never finished (Litvinskiy 1956). It apparently presents some analogies with Kei-Kobad-Shah (Kafirnigan) and Begram (Kapisa), the famous, but later, site of the Kushans in Afghanistan. As it was situated on the track of the nomad invaders, it seems reasonable to assume that the building was stopped because of events connected with the fall of the Graeco-Bactrian kingdom (second half of the 2nd century B.C.).

The excavations begun by Litvinskiy in 1963 on the site of Yavan (Vakhsh) are not sufficiently advanced to permit of final conclusions; they have yielded an overwhelming quantity of high-grade pottery of the 3rd to 4th century A.D. (possibly also of the 5th century) with dark-red coating, which is said to have exceeded by far the amount of pottery found at Begram or in the Kobadiyan region (see (ii) Kafirnigan below) (Litvinskiy 1964, 1967c, Yurkevich 1964, 1965). There were, *inter alia*, a collection of seals, clay vessels with human and animal heads on the sides and handles, as well as a steatite tray of the "Taxila type" with a person riding on a hippocampus dragon.<sup>1</sup> The explorations have continued in recent years and the archaeological yield of this Kushan site is most promising (Litvinskiy 1967c).

Splendid Buddhist remains of the 7th-8th century A.D. have been dug up since 1959 in Adzhina-tepe (the "Devil's Mound", 12 km off Kurgan-Tyube) by Litvinskiy, assisted by his close collaborator Mrs. T. I. Zeymal (Zeymal 1961, 1962, 1967; Litvinskiy 1967a, b, 1968); the work is still in progress. Pending the publication of a comprehensive report, the data given here are tentative and fragmentary. There is, however, no doubt as to the paramount importance of this discovery, which throws new light on the diffusion of Buddhism. In a huge, fortified Buddhist monastery which ceased to exist in the middle of the 8th century A.D., and was composed of two parts, with twenty-two well-preserved quarters or shrines, a large stupa was found with many miniature stupas. Some of their architectural features are said to be similar to those of Buddhist and Hindu shrines in India of the 4th-5th century A.D. Among the finds there are fragments of wall-paintings, some thirty

<sup>1</sup> This round tray is almost a twin of the "toilet-tray" found at Taxila (see J. MARSHALL, *Taxila* vol. II, p. 496, No. 74; vol. III, pl. 144, or MARSHALL, *The Buddhist Art of Gandhara*, pl. 13, fig. 15). The *Treasure of the Oxus* contains a similar relief (see DALTON 1964, pl. XXVI, fig. 197).

heads of Buddhas and Bodhisattvas, as well as numerous other images (figs. 11 and 12). These sculptures which were made of clay and formerly painted, vary in size, ranging from minute ones to some well over human size. They are said to present analogies with discoveries made in Eastern Turkestan, Gandhara, the Indian Gupta style, as well as with finds from Afghan sites, such as Kunduz and Fondukistan (pl. XIV).



Fig. 11. Adzhina-tepe. Head of a Buddha (redrawn)

A sensational discovery that was made in Adzhina-tepe in 1965-1966 consists of a reclining Buddha in "Parinirvana" attitude (pls. XV, XVI); it is now in the laboratory of the Dushanbe museum where it is being restored. The sculpture is some 12 metres long (39 feet) and the fingers alone are roughly 70 cm long. This gigantic image with its conventional position reminds us of a similar Buddha in Polonnaruva (Ceylon), at the opposite end of Asia, which is, however, 14 metres long (46 feet) and



Fig. 12. Adzhina-tepe. Bodhisattva in clay



is hewn from a solid piece of granite, while its less fortunate Adzhina counterpart was made of perishable materials such as clay, plaster, and straw (Litvinskiy 1967b).

Over three hundred pre-Muslim coins found in the monastery bear inscriptions of local rulers; they are being deciphered by V. Livshitz.

As stated by B. Litvinskiy in his "Outline History of Buddhism" published for the Dushanbe Conference of 1968 (page 63): „The masterpieces of Adzhina-tepe give us a deeper and broader insight into the evolution of art both in Western Turkestan and all of Central Asia, as well as the contribution made by the peoples of the former to the development of Oriental culture”.

Other finds that have recently been made at various sites in South Tadzhikistan comprise remains of stone architecture and terracottas. In the Parkhar district, Saksanokhur, a site some 70 km east of the lower Vakhsh, appears to be especially promising in this respect (pl. XVII). Architectural fragments of Hellenistic type found there are said to be reminiscent of the Afghan Surkh Kotal, Hadda and Ai-Khanum (Litvinskiy 1967a, b, c).

Interesting explorations have been made in 1967-1968 by the Litvinskiy team at the periphery of Kolkhozabad (in the same region as Adzhina-tepe): in the fortress Kafyr-Kala there was a huge hall—some 20 x 10 metres—as well as a smaller round hall. Among the finds which belong to the early and the late Kushan period, there was a document written in Brahmi script on birchbark, which denotes the relations which existed with India.

## (ii) Kafirnigan valley

Explorations in the Kobadiyan region that started about 1946 have yielded remains belonging to the pre-Kushan, Kushan, and post-Kushan periods (Dyakonov 1950). The site of Kobadiyan itself—nowadays Mikoyanabad—has proved to be of outstanding archaeological interest (Dyakonov 1950, 1953). Takht-i-Kobad (or Takhty Kuwat) is considered by Soviet scholars to represent the cradle of the famous Treasure of the Oxus which has been in the possession of the British Museum since the end of the 19th century (Dalton 1964). Contrary to the view of O. Dalton, this spectacular collection is believed by some Soviet archaeologists,

especially M. Dyakonov, not to be a hoard of golden objects imported from Iran and found together at one site, but the result of continuous looting. These objects found their way to the Peshawar and Rawalpindi bazaars, and from there to the British Museum. There is, however, no consensus of opinion on this question and some Soviet scholars lean towards the thesis defended by Zeymal and his wife (Zeymal & Z. 1962), who are in some respects rather in favour of Dalton's views. The problem thus remains open.

The Kafirnigan explorations have been focussed on two salient sites, where the ancient settlements lie on a narrow stretch of land, already extensively irrigated in the 7th or 5th century B.C., viz., Kalai-Mir and, particularly, Kei-Kobad-Shah (Dyakonov 1953; Mandelshtam & Pevzner 1958). On the whole all the periods are represented in the finds.

The following summary is largely based on Dyakonov, Mandelshtam, etc.

- Kobadiyan I (6th-4th century B.C., Kalai-Mir)
- Kobadiyan II (3rd-1st century B.C., especially the town of Kei-Kobad-Shah; coinciding with the rise and fall of the Graeco-Bactrian kingdom)
- Kobadiyan III (1st century B.C.-1st century A.D.; red-ware and grey-ware pottery, numerous human and animal figurines)
- Kobadiyan IV (2nd century A.D., Kanishka period; exceptional wealth of red-ware pottery—the grey-ware having disappeared—as well as of figurines)
- Kobadiyan V (3rd-4th century A.D., late Kushan period, rich in pottery and coins)

The Kobadiyan I period in Kalai-Mir referred to above, is represented by an ancient Bactrian dwelling of the 7th or 6th century B.C., discovered below the Kobadiyan II layer by two women archaeologists, N. Zabyelina and E. Monchadskaya. This ancient site is said to have contained pottery similar to that of the same period, discovered at Giaur-Kala (Turkmenistan), Afrasiab (Samarkand) and Balkh (Afghanistan) (Zabyelina 1953).

A wider range of finds was made, however, in Kei-Kobad-Shah, a typical fortified Bactrian town on the Kafirnigan, now buried in the cotton fields on the outskirts of Mikoyanabad (Dyakonov 1953, V. Masson 1966). It is said to have been founded in the 3rd or 2nd century

B.C. and to have been inhabited throughout the Kushan period down to the 4th-5th century A.D., when it ceased to exist, together with many other Central Asian towns. Like Kukhna-Kala (see page 62) it presents analogies with Begram in Afghanistan. Among the remains found in the Kobadiyan region (Munchak-tepe) are big bases of columns and "Corinthian" capitals, witnesses of Hellenistic influence (Dyakonov 1953).

Among similar capitals found at other sites, there is the recent find made at Ai-Khanum. While this is on the Afghan side of the border, it definitely belongs to one and the same archaeological area (see the end of the present chapter).

The Kobadiyan region is of unusual interest since the tombs investigated here cover a period of some 1500 years or more. There are hundreds of them and while many have been thoroughly looted, others miraculously escaped plundering.

The explorations, which were conducted mostly by Mandelshtam, covered in their initial stage the pre-Kushan period, but later on that of the Kushan and post-Kushan times also. The centre of the excavations was the little known and remote Bishkent valley (west of the Kafirnigan river) and especially the Tulkhar cemetery which presents a vivid and continuous record of the history of the ancient populations of Transoxian Bactria, concerning which almost no written records are available. The explorations are, however, too recent and too limited in scope, confined as they are to a narrow strip of land, to give more than a tentative and fragmentary glimpse of a chapter of the ancient history of the southern part of Central Asia (Mandelshtam 1966a,c; Litvinskiy 1967a,c, 1968).

The oldest tombs of Tulkhar (map 3), explored between 1955 and 1959, appear to belong to the late Bronze Age. They are of three different types: while two of them show no signs of cremation, the third type of tomb is of special interest, since the corpses they contained had been incinerated, a process not generally in use, and were accompanied by some solar emblems and swastikas. This suggests that these people came from the north, where cremation and swastikas were known to the tribes of the Andronovo culture. Incineration was not practised in Iran, but was actually customary in India. Similarly, solar emblems were closely connected with the Vedic hymns (Mandelshtam 1966b).

Although the other types of tombs of the Bronze Age, characterized

mainly by bronze knives, mirrors and pins, did not betray any evidence of cremation, they did also show some analogies with Indian funeral rites (Mandelshtam 1966c). Mandelshtam was therefore inclined to believe that all these tombs might be related to tribes on the move from the northern steppes to India.

No tombs were found for the subsequent period, 7th-3rd century B.C. The pre-Kushan and the early Kushan periods (2nd-1st century B.C.) were, on the contrary, rich in tombs, which run into several hundreds; they were explored by Mandelshtam methodically one by one. Many of them had not been looted and there was no evidence of cremation (Mandelshtam 1966a). He found much wheel-made pottery, some weapons of iron, knives, bronze mirrors, ornaments (some of gold or brass), necklaces of glass beads, coins, etc. (Mandelshtam 1965, 1968).

The establishment of the pre-Kushan and of the early Kushan chronology was difficult, especially as there existed no precise landmarks for these periods and no concordance between the Tulkhar pottery and that from Kobadiyan, on which Dyakonov's chronology was based (Mandelshtam 1959b, 1966a). Mandelshtam therefore had to work out an independent Bishkent chronology, based not on analogies with the adjoining Kobadiyan region, but on a study of the coins that had become available in the meantime (Mandelshtam 1966a). This chronological analysis suggested to him that at the beginning of the 1st century B.C. there was a drift of nomad tribes from the Bishkent valley which was in part occupied by a settled population.

The Tulkhar cemetery is consequently considered to provide the most promising evidence for the establishment of proper dates for many other tombs and sites of the whole region to the north of the Amu-Darya (Mandelshtam 1966a). In Mandelshtam's view all the evidence points to the existence of an unsettled population, and to nomad tribes, apparently connected with the attack on the Graeco-Bactrian kingdom and its fall (Mandelshtam 1959, 1963, 1966a; Litvinskiy 1967a). These discoveries therefore constituted an invaluable substitute for non-existent documents and an important complement to what was hitherto known of the last stage of this kingdom on the verge of extinction.

Whereas there is little to be said about tombs of the Kushan period, new evidence of great interest has become available for the late or the

post-Kushan era (4th-5th century A.D.). For this period there is in the Tulkhar cemetery, as well as in several other places, a limited number of tombs which not only differ from the majority of those prospected so far, but also contain remains of cremated bodies. This means a new form of burial not known in the preceding centuries and in other parts of the region. In Mandelshtam's opinion it is connected with the inroads made during the 4th century A.D. by new nomad tribes (possibly the Chionites) advancing from the north through the Bishkent valley towards Afghanistan (Mandelshtam 1963, 1964a). After having witnessed in the late Bronze Age a passing flow of steppe tribes who practiced cremation (Harappa?), Tulkhar was thus the scene, some 1500 years later, of the arrival of similar transient tribes practising the same rite.

At almost the same time the country declined rapidly; there are practically no tombs of the 5th century A.D. Tulkhar shared the general extinction which was the result of a wide political and possibly social upheaval (Mandelshtam 1964a).

### *C. North Tadzhikistan*

#### *(i) Kayrak-Kumy, Isfara*

In contrast with Kazakhstan and Kirgiziya which possess many Bronze Age sites, in North-West Tadzhikistan such sites are mostly confined to the Kayrak-Kumy desert, mentioned in connexion with Fergana, and which, as already shown, is also of outstanding importance for the Palaeolithic period (Ranov 1965).

The explorations have yielded in the settlements as well as in the kurgans of nomads, remains of metal foundries, huge quantities of pottery and a certain number of metal tools, bronze ornaments and other metal products pertaining to a period extending over one thousand years, roughly from the middle of the 2nd millennium B.C. (Litvinskiy, Okladnikov & Ranov, 1962). Whether there was an original Kayrak-Kumy bronze culture, as believed by Litvinskiy, or whether it was merely a local variety of the Andronovo culture, the finds are probably connected with the still disputed problem of the origin of the Aryans.

More recent kurgans of nomad tribes have been explored by Litvinskiy and others in the Isfara district, especially at Vorukh. In spite of some difficulties of chronology the kurgans, which included funeral

objects, iron tools and much pottery, appear to belong to the period 2nd century B.C. to 6th-7th century A.D. (Litvinskiy 1959, 1967a).

## (ii) Mount Mugh

A manuscript fortuitously discovered in 1933 by a shepherd in an almost inaccessible site on the Zeravshan some 70 km east of Pendzhikent, gave a mighty impetus to a new chapter in Soviet archaeological research (Dyakonov 1956) (map 10). The manuscript was identified by Professor A. Freyman as an old Sogdian document and, in the same year, a scientific expedition was organized by the Academy of Sciences (Freyman 1962). The site explored, locally called Mount Mugh (not to be confused with Kalai-Mugh and other sites of the same or similar names), consisted of ruins of an ancient castle destroyed by the Arabs in the 8th century A.D. A great many of the objects found there are now in the Hermitage Museum; they have been described in detail by Mrs. I. Bentovich (B. 1958). The most precious find was, however, a collection of some 90 manuscripts, likewise kept in Leningrad, most of which are in the Sogdian language. These documents, the first Sogdian texts to be discovered in the territory of Sogdiana, represent the archives of Divashtich, the ruler of Pendzhikent who fled in 722 from the Arab attack (Bele-nitzkiy 1958b); he was captured and later on killed (Bibl. ONE Altheim II 1960); the Mugh castle was destroyed. The documents deciphered by Freyman, and subsequently by Livshitz, are an invaluable source of knowledge for the history and civilization, as well as of the economic and social conditions of Sogdiana at the time of the Arab invasion (Livshitz 1960; Bogoliubov 1960). It is thus a discovery connected with that of Pendzhikent dealt with in the following paragraph. Two specimens of the Mount Mugh manuscripts are reproduced on pls. XVIII and XIX, and their considerably magnified seals are shown on pls. XX and XXI.

Promising finds are those made in 1964 at Gardoni-Khissor near Madm, 13 km from Mount Mugh. Here archaeologists have discovered the residential palace of Divashtich (or his representative), containing wood sculptures. The exploration is still in progress (Litvinskiy 1967b).

### (iii) Pendzhikent

Situated some 70 km east of Samarkand on the Zeravshan, just where this impetuous river leaves the mountain gorges and enters a wider valley, and little explored until 1946, Pendzhikent, a great artistic centre, has rapidly become in the last twenty years one of the most spectacular archaeological sites of Asia. Its main explorers were Yakubovskiy and from 1953 onwards Belenitzkiy (Yak. 1951; Bel. 1953-67).

This vast and splendid aggregate of Sogdian buildings which date from the 5th century A.D. onwards (Belenitzkiy 1962), was the centre of a remarkable civilization and outstanding artistic activity, but it was doomed to a swift death when Pendzhikent was first conquered and partly destroyed by fire in 722 under the impact of Islam. Its local ruler was Divashtich, mentioned above. After having survived for a while on a reduced scale, this city was definitively destroyed in 760. The Sogdians then practically disappeared from history.

Pendzhikent consisted of a fortress, the actual town (Shahristan) which included shrines, of a suburb and a necropolis (Marshak 1964). In addition to the architecture itself, the major features of the site are great quantities of splendid wall-paintings, sculptures and ornaments in clay or stucco, as well as remarkable wooden sculptures and carvings, all dating from the 7th-8th century A.D. They present a fascinating picture of the history of pre-Muslim Sogdiana, its mythology, language, arts and crafts, warfare, religious beliefs, burial rites, as well as the way of life and the clothing, especially of the "upper classes".

In spite of their frequently bad state of preservation, the secular and religious wall-paintings convey a spirit of mysterious grandeur; they form a bewildering and varied kaleidoscope of fighting warriors, banqueting knights, religious ceremonies, mythological scenes, charming females, as well as monsters and demons. The length of one of the best preserved paintings is almost 15 metres. A small fragment of a large mural, viz. two men feasting under a baldachin, is shown in fig. 13. The "Scene of Mourning", related by Yakubovskiy and some other scholars to the legendary Siyavush, is among the most conspicuous Pendzhikent paintings (fig. 14). The corpse is surrounded by weeping mourners mortifying themselves. (For a similar scene see fig. 24 Tok-Kala and fig. 38 Merv vase). A further analysis of the paintings, but with a some-



Fig. 13. Pendzhikent. Two men feasting under a baldachin (fragment of a huge wall-painting)



Fig. 14. Pendzhikent. "Scene of mourning" (drawn from a large wall-painting)



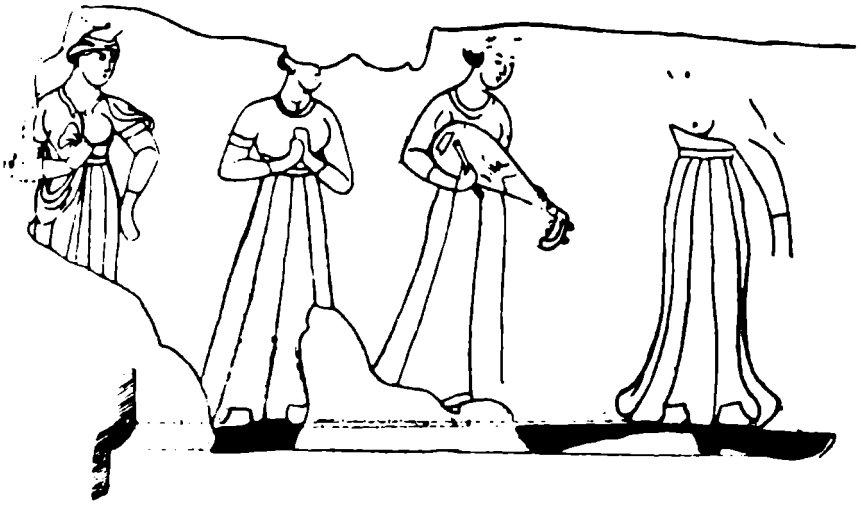


Fig. 15. Pendzhikent. Female musicians (drawn from a wall-painting)



Fig. 16. Pendzhikent. Mirror-image of an earlier painting on the rear of fig. 15

what different conclusion, was published by Dyakonova & Smirnova (1960). A notable feature is the tall representation in the left-hand half of the painting of a four-armed personage, in all probability a goddess. (Four-armed deities are referred to in *Bibl. ONE* Dyakonova 1961, Dyakonova & Smirnova 1967).



**Fig. 17.** Pendzhikent. Personage of Shaiva type (redrawn from a painted panel)

Among the paintings discovered in 1958 there was the surprising representation of four female musicians in floating robes with a high waist. These unusual dresses recall the French Empire style rather than ancient Sogdian times (fig. 15).

When removing this mural and a second underlying layer of plaster the puzzled archaeologists found on its rear the mirror-image of an older painting representing a couple of a distinctly foreign type, possibly Chinese (fig. 16). (A similar discovery of one painting superimposed on another had already been made in 1950).

Another interesting painting, unearthed in 1962, represents a male dancer of a distinctly Hindu character (Belenitzkiy 1964b) (fig. 17). Representations of Shiva were known in the Kushan Empire centuries earlier and had spread over Central Asia, including Sinkiang. (See Bibl. ONE Dyakonova 1961, Belenitzkiy 1964a, b).

Many new wall-paintings were discovered in the years 1964 to 1966, but survive only in fragments (fig. 18). In addition to inscriptions on the wall-paintings, there were many new finds of coins, as well as inscriptions on shards, including a complete Sogdian alphabet; these inscriptions are being studied by the unequalled V. Livshitz.

Excavations continue in the apparently inexhaustible Pendzikent art gallery.

It may be argued that some features of the paintings point to a more recent period than the 7th or 8th century, in particular the representation of stirrups which are believed by some authors not to have been known before the coming of Islam. Soviet archaeologists emphatically reject these arguments on the strength of ample evidence available, both historical and archaeological, among others masses of coins. While the Arabs had conquered Samarkand in 711 A.D., their conquest of the more remote valleys, such as that of Pendzhikent, was actually not completed before the middle of the 8th century and even later. Born in pre-Muslim times, "Turkish" representations survived in subsequent centuries. Before being subdued by the Arabs, the country was permeated with Turkish, Ephthalite and Chinese influences. "Turkish" did not necessarily mean "Muslim" and "Muslim" did not always mean "Arab". Islam was undoubtedly present, but *"ante portas"*. The resemblances which the Pendzhikent paintings bear to work of a later period, may thus be accounted for by the common cultural background of the pre-Muslim and Muslim Turks. This is in itself a striking but hardly unexpected feature.

Fascinating, almost life-size female figures in wood of a graceful "Indian style" (pls. XXII and XXIII), as well as other carvings have

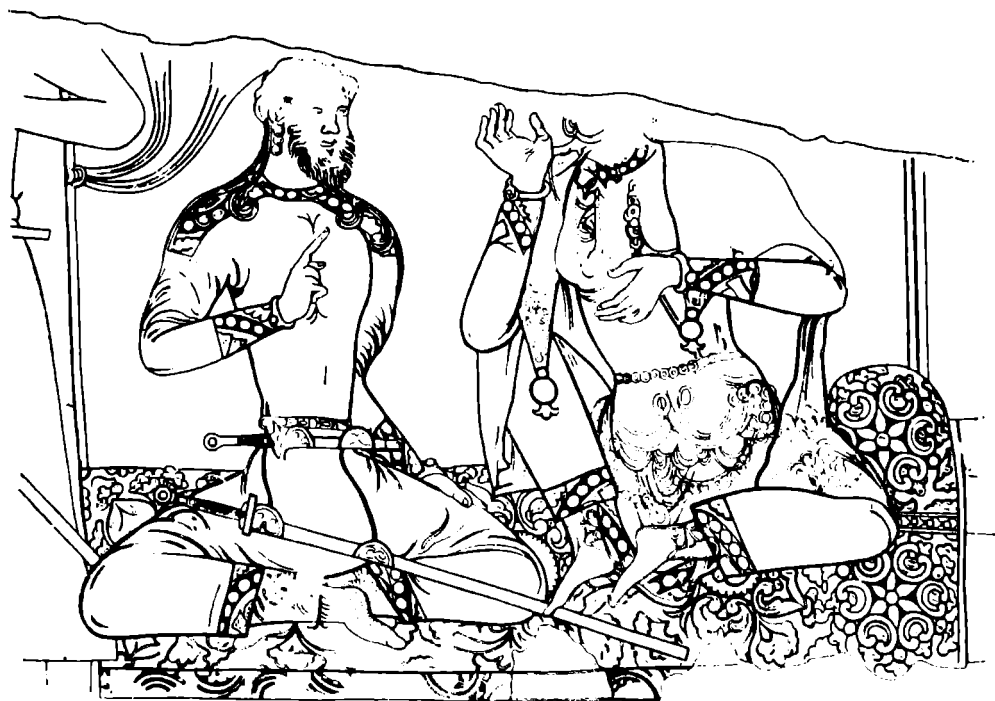


Fig. 18. Pendzhikent. Fragment from paintings discovered in 1965 (redrawn).



Fig. 10. Pendzhikent. Fragment of relief (aquatic rites; redrawn)

been preserved not only due to the fact that the wood was carbonized when the city was burnt down, but also thanks to their remarkable restoration (Belenitzkiy 1956a and subsequently, especially 1964). The carvings shown on pls. XXIV, XXV and XXVI represent three fragments of huge mythological ensembles. In addition to the solar representation (a chariot drawn by two horses, pl. XXIV), there was in the same panel a scene, not reproduced here, representing a goddess (?) seated on a throne consisting of two animals merged into one, a representation widely spread in the regions under review. Similarly plate XXV shows a goddess (?) seated on the back of a lion, and plate XXVI a hunter on horseback defeating a lion.

Some of the sculptural ensembles in clay appear to reflect aquatic rites, such as the fantastic relief showing a seascape with marine monsters, tritons, a human body emerging from the waters, etc. (Belenitzkiy 1958a). It may be recalled in this connexion that the Zeravshan river (the Greek "Polymetos" which means "the most precious") was actually highly venerated in ancient times on account of its vital importance for the irrigation of a vast region (Belenitzkiy 1958b). Pl. XXVII shows the central part of a huge panel, a fragment of which is likewise reproduced in fig. 19.

The above-mentioned reliefs were located along the whole "aivan" of a shrine on either side of the entrance. While the present writer is, as a rule, rather sceptical with regard to spectacular reconstructions, pl. XXVIII may possibly give at least a rough idea of the architectural set-up of the shrine and the location of the reliefs.

A remarkable discovery made in 1966 was that of some huge stucco sculptures: a goddess sitting on a throne and surrounded by flames—golden colour on an ultramarine background—as well as a six-armed and three-faced deity, reminding one of the Hindu Trimurti-type (Belenitzkiy 1967).

As was noted above, the famous "Scene of Mourning" was connected by Yakubovskiy with the widespread Central-Asian cult stemming from other ancient creeds of the seasonally dying and resurgent nature, as personified by the legendary Siyavush (Yakubovskiy 1951). Carvings or paintings of a goddess sitting on a lion (sometimes holding emblems of the sun and the moon), as well as the representations of four-armed deities, not only suggested to Belenitzkiy links with ancient and remote

religious beliefs, in some cases astral, but they also show striking analogies with some of the so-called "Sassanian" silver dishes which are now in the Hermitage and in the British Museum and which reproduce kindred subjects (Belenitzkiy & Staviskiy 1959). There is also some correspondence with Kushan coins, where the goddess is identified as the Sogdian Nanaya or Nana, the equivalent of the Iranian Anahita, or Ishtar, one of the most popular deities in the ancient Near and Middle East (Bibl. ONE Dyakonova & Smirnova 1967).

A characteristic feature of Sogdian civilization, as is witnessed by the vast material on which this chapter is based, was the multiplicity of religious beliefs, among which were Zoroastrianism, Buddhism and Manichaeism. There were moreover, Nestorian bishops in Samarkand and Merv. This multiplicity of influences largely accounts for the still tentative and debatable interpretation of the finds. Whereas some Soviet archaeologists have thought in terms of Zoroastrianism and Buddhism, others advocate pan-Manichaeism. Some scenes in the paintings are believed to be closely related to the content of Ferdausi's famous "Shah Nameh", especially to its heroes Rustem and Siyavush (Yakubovskiy 1951). The fact that Ferdausi's masterpiece was written three centuries later and presents some dissimilarities with the paintings is not necessarily, however, an argument against such an interpretation, which, in the light of recent excavations, remains quite credible.

It becomes in fact increasingly evident that in this, as in other cases (e.g. Surkh Kotal), local worship which stemmed from immemorial traditions and mythology, coexisted with other cults. In Asia the word "and" has been and still is more in favour than the word "or". It is thus a matter of doubt whether any single religious belief can provide the key to a satisfactory interpretation of the Pendzhikent representations.

Until twenty years ago there were no Sogdian documents known except in Chinese Turkestan, nor was there much evidence on the spot of a Sogdian civilization, Sogdian language or Sogdian coinage. Things have changed dramatically as it were by a magic wand. Until recently the number of Sogdian coins available throughout the world was quite insignificant; today the finds in the Pendzhikent region alone exceed 1500 coins, which have been duly examined and classified thanks to the unsparing efforts of Mrs. Smirnova (Sm. 1950-1958). As in the case

of the rulers of the Graeco-Bactrian kingdom, Sogdian rulers are known at present through their coins produced in a variety of mints. Sogdian numismatics thus have become an indispensable source of information for the knowledge of the history, and the political, social and economic conditions of the Sogdian people (Belenitzkiy 1958b).

Mrs. Smirnova has made a detailed study of such features as the monetary policy of the Sogdian rulers (*viz*, the gradual deterioration of coins due to reduction in weight) and the purchasing power of the currency. According to her, in the last period of Pendzhikent, a young and healthy slave cost the equivalent of 42-43 grams of gold, or of two "large" pieces of cloth (Smirnova 1958). The study of the excavated coins found suggests that local coins practically disappeared when the site was partly destroyed in 721, but that a second period set in shortly afterwards, marked by the use of Muslim coins. All came to an end when the city was finally destroyed towards 750 or 760.

#### IV. CONCLUDING REMARKS

In contrast with Kazakhstan with its primitive tombs and dwellings, or Kirgiziya with its widespread Bronze Age culture and its marvellous rock engravings, Tadzhikistan displays within a limited area an outstanding diversity of archaeological sites. Although its fame is mostly due to the apparently inexhaustible Pendzhikent paintings, recent explorations throughout the country have led to unexpected discoveries of numerous Stone Age sites, including the most ancient types of the Palaeolithic periods. On the other hand less is known, so far, of its Bronze Age.

After the reign of the Kushans had come to an end, Buddhism is thought to have declined in the territory under review. The recently discovered Buddhist shrines in the Vakhsh valley (Adzhina-tepe) were, therefore, all the more surprising. These, as well as other recent discoveries of Buddhist monuments in Soviet Central Asia, add greatly to our knowledge of the expansion of Buddhism.

With regard to Bactria, evidence has been found for the existence of ancient irrigation systems, which, to some Soviet archaeologists, implies the concomitant existence of large centres as far back as the beginning of the last millennium B.C. Little is actually known of ancient Bactria

during that period, but our knowledge on this subject is beginning to grow. The finds made on the lower Vakhsh, as well as on the Kafirnigan, especially in the Kobadiyan region (Bishkent valley, Kalai-Mir and Kei-Kobad-Shah) were the more valuable as the history of these regions could be traced back to the 7th century B.C. and possibly still earlier.

It should be noted in this connexion that statistically trained scholars are well aware of the fact that lack of reliable records usually leads to over-statements: this is especially so with regard to the size or the number of cities, of populations, armies (especially those of the enemy!), enemies killed, etc. Lack of factual data and the mania for large numbers probably account for the "1000 cities of Bactria" and for the alleged splendour of Balkh, "mother of cities".

Though the chronology is perhaps still approximate, and the analysis of pottery and other material is still tentative, the results obtained so far are sufficient to suggest that cultural analogies between the territories to the north and those to the south of the Oxus existed at least as early as the first half of the last millennium B.C.

The sites in South-West Tadzhikistan are dear to Soviet archaeologists as records of Bactrian civilization. Being contiguous to northern Afghanistan (map 11) this region is bound to be of special interest in connexion with archaeological work done by Western archaeologists, mostly French, south of the Oxus, e.g. Surkh Kotal (Schlumberger 1953-1955, 1961, 1964) and Ai-Khanum where the explorations began in 1965 (Schlumberger 1965; Bernard 1965, 1966).

The latter site is a remarkable archaeological new-comer in Afghanistan and affords a fine example of a genuine Greek town in the 3rd-2nd century B.C., i.e. prior to the invasion of the steppe tribes and their assault on Graeco-Bactria. In addition to fragments of Greek architecture, inscriptions in Greek were discovered in 1966.

Although the sample excavations carried out in Balkh represent a rather slender base for Gardin's discerning analysis of Balkh pottery (G. 1957), it nevertheless remains a remarkable effort to have co-ordinated the available scanty material with the Soviet finds. The same may be said of the most promising analysis of the Ai-Khanum pottery made by P. Bernard (B. 1965, 1966).



## CHAPTER FIVE

### UZBEKISTAN, PART I: KHOREZM AND ITS BORDERLANDS THE DELTAS OF THE OXUS AND JAXARTES

In the present chapter the two rivers Oxus and Jaxartes are referred to by their modern names of Amu-Darya and Syr-Darya. There is neither a standard name for the country here called "Khorezm", nor a standard spelling. In addition to "Khorezm" and "Khorezmian" the following are frequently employed: Chorezm, Choresmia, Khorasmia, Khwarezm, Khwarizm, and Khwaresm.

Although most of ancient Khorezm lies within the boundaries of Uzbekistan, it was considered appropriate to divide the survey on Uzbekistan into two parts: 1) Khorezm (map 14) and 2) Uzbekistan excluding Khorezm, which will be treated in the following chapter VI (map 17). In both cases our survey stops at the Arab invasion.

#### I. GENERAL

Nowadays largely desert and uninhabited, Khorezm, the former "northern outpost of civilization", lies along the lower Amu-Darya, and also includes its vast delta, situated in the Kara-Kalpak ASSR <sup>1</sup>) attached to Uzbekistan. It experienced periods of independence and vassalage, of expansion and contraction, but it was in any event much larger than the "Khorezm" province of modern Uzbekistan. Its early civilization, whose existence is manifest in view of the profusion of ancient monuments, is, however, insufficiently known and still debatable. It is usually admitted that it was, for some time at least, part of the Kushan Empire, but there is no complete consensus on this point (Masson 1966a; see also Ch. III).

According to al-Biruni and some Soviet scholars, the paucity of ancient written records is due to a systematic extermination of the

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<sup>1</sup> Autonomous Soviet Social Republic.

Khorezmian "intelligentsia" and the destruction of written evidence by the Arabs who invaded the country in the early part of the 8th century A.D. (Tolstov 1951). As shown below, Toprak-Kala and above all Tok-Kala, where many written documents have been found, are notable exceptions to this rather dogmatic view. In fact, some dissenting scholars are inclined to believe—probably rightly—that with the possible exception of their hostility towards Zoroastrianism, the Arab invaders were not so destructive as has often been alleged; after all, pre-Islamic civilization in Khorezm may not have consisted essentially of written records.

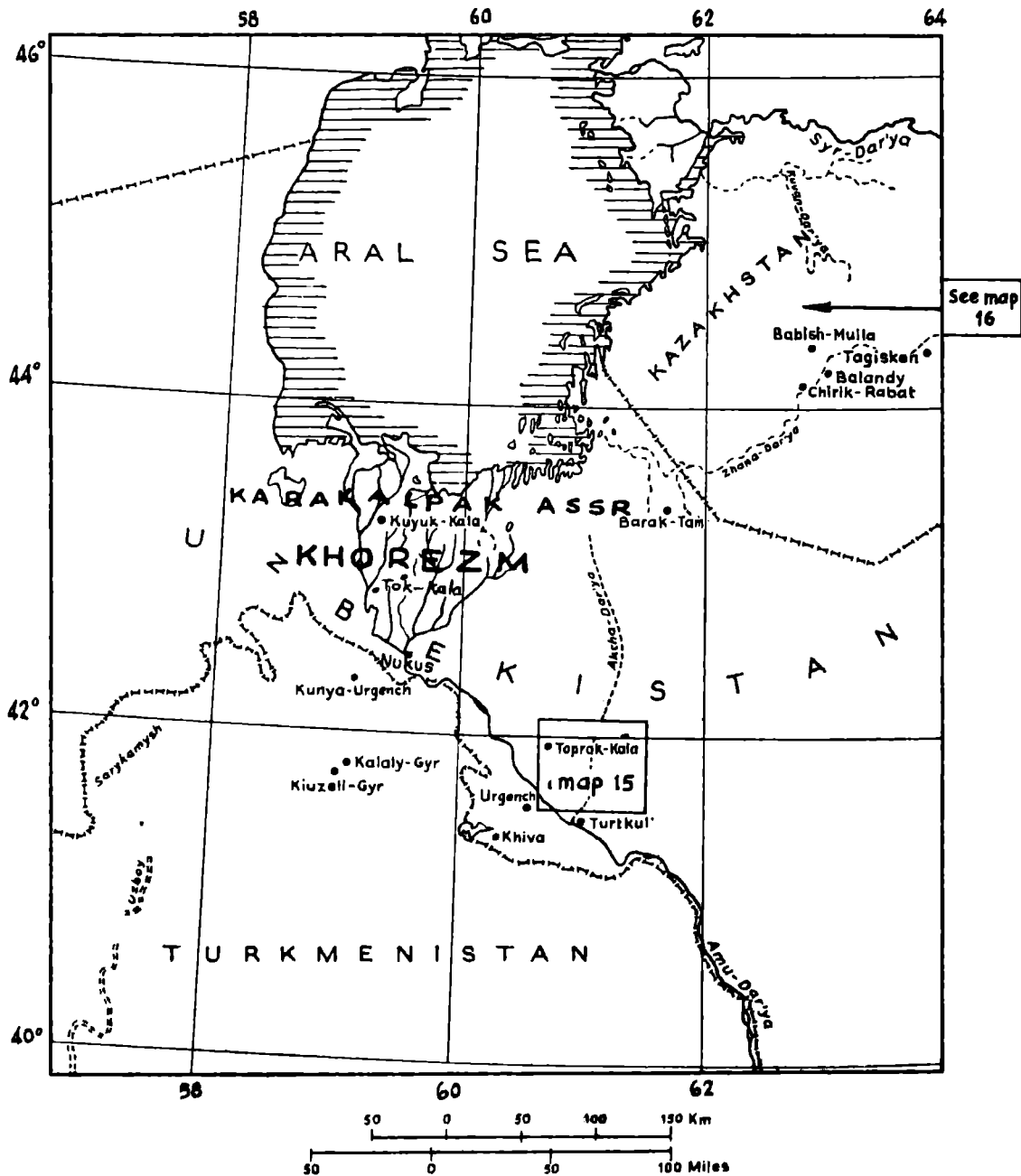
During the subsequent centuries of Islamic rule a remarkable development of civilization unquestionably took place in Khorezm and even more in the adjacent regions. As early as the 9th and the 10th century A.D. not only Bukhara and Khiva but also the Khorezmian Gurgandzh (now Kunya-Urgench) were famous centres of arts and science.

The explorations which started in 1937 but were interrupted during the war, have ever since been under the general direction of S. Tolstov, a renowned Soviet archaeologist and ethnographer. His explorations which cover a period of some 5000 years, have been mostly carried out in territories lying within the boundaries of Uzbekistan, but in addition to Turkmen regions in the west, they include, on the north-eastern shore of the Aral Sea, regions which happen to lie in Kazakhstan (map 14).

It is unreasonable, however, in this particular case, to speak of boundaries, and it would be absurd to try to delimit Tolstov's work within modern frontiers, drawn as they mostly are across deserts of sand.

To this Marxist philosopher of history, archaeological material is mainly a source for historical research. The vast regions of the ancient deltas of the Amu-Darya and the Syr-Darya had been irrigated in ancient times. They underwent manifold changes and witnessed vast fluctuations in their civilization and therefore appeared to be a good test-case for such an inquiry.

These tides in civilization were in Tolstov's opinion due not to changes of climatic conditions, but rather to purely human—social and political—factors. The discovery of a great many remains of ancient irrigation systems probably of the middle of the first millennium B.C. (Tolstov 1948b), suggested to him that whenever there was a strong centralized authority, irrigation developed and was well under control.



Map 14. Deltas of the Amu-Darya and Syr-Darya

According to Tolstov new techniques due to the introduction of iron and to the mass-employment of slave manpower gave a strong stimulus to irrigation. Subsequent political upheavals, which resulted in the development of a feudal system at the expense of a central authority, caused a deterioration of the irrigation system which was vital to the country (Tolstov 1962a).

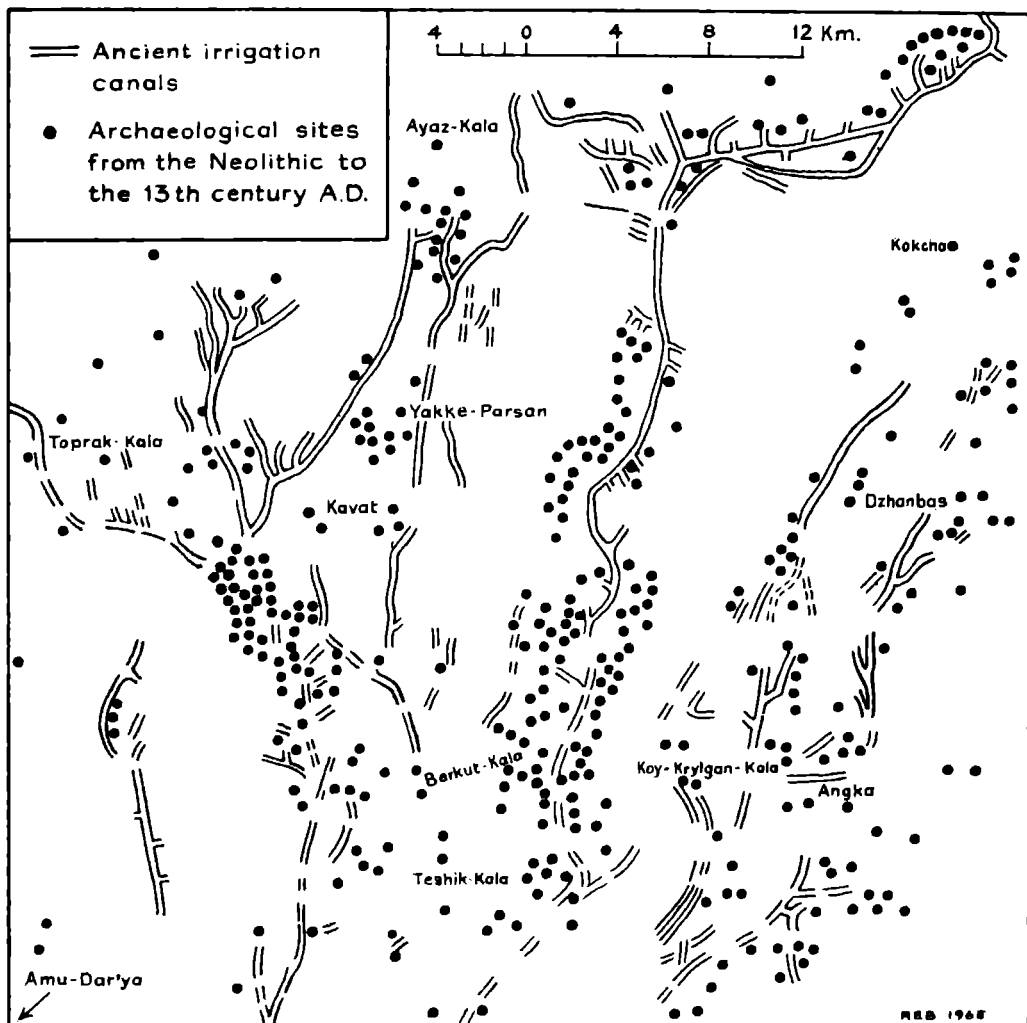
In an endeavour to study the social and economic history of the peoples of Central Asia, Tolstov, as stated above, included in his field-work the deserts and marshy regions between the deltas of the Amu-Darya and the Syr-Darya. These two meandering rivers, which are at the present time separated by the Kyzylkum desert, changed their courses repeatedly in ancient times. Not only the old estuary of the Amu-Darya, Akcha-Darya (from Turtkul to the north), but also the ancient beds of the Syr-Darya, Zhana-Darya (south-west of Kzyl-Orda) and Kuvan-Darya (west of Kzyl-Orda), which once lay in densely populated regions, can still be mapped out by strings of ruins which trace in the deep sands a sequence of cultures from antiquity to the Middle Ages. (See map 15. Khorezm, irrigation system and map 16. Zhany-Darya and Kuvan-Darya).

In the Akcha-Darya region which stretches into Kazakhstan, the original excavations uncovered remains which were mainly of the Neolithic period, called by Tolstov the "Keltiminar" culture (Masson 1966b), but as the explorations followed the river-bed northward, the neolithic sites gave way to ones of the Bronze Age—the so-called Tazabagyab culture—closely related to the Andronovo culture already referred to (Tolstov 1959).<sup>1</sup> Tolstov was confirmed in this opinion that in the second half of the 2nd millennium B.C. a shift of population took place along the rivers from the Central Asian steppes through Khorezm to the south, i.e. towards Turkmenistan, Persia and Afghanistan.

Advancing northward along the Akcha-Darya belt, Tolstov later discovered sites like Chirik-Rabat (Shirikrabat) (T. 1960b), which had been buried by the Kyzylkum sands in the middle of the Zhana-Darya; some 40 km to the north-east was the once densely-populated Babish-Mulla (T. 1960c). These places, together with the whole delta region,

<sup>1</sup> Some authors, among whom ZADNEPROVSKIY, disapprove of the multiplicity of names used for mere variants of a given culture, such as the "Tazabagyab" and "Suiyargan" cultures (TOLSTOV), or the "Kayrak-Kumy" culture as suggested by LITVINSKIY, which are actually off-shoots of the well-known Andronovo culture.

are said by him to have been inhabited by the Apasiaks, "Water Sakas" or Massagetes, referred to by classical authors such as Strabo, Ptolemy, Trognus Pompeius, etc. (T. 1960c).



Map 15. Khorezm—irrigation system

These Saka remains, although not always spectacular, throw some light on the little-known tribes which, towards the end of the 4th century B.C. obstructed the advance of Alexander the Great along the Syr-Darya

and two hundred years later invaded Graeco-Bactria. Evidence for this last event may be found in the fact that Apasiak localities between the Amu-Darya and the Syr-Darya ceased to be inhabited in the middle of the 2nd century B.C., i.e. when the invasion of Bactria took place (Tolstov 1960c).

Tolstov also explored Turkmen desert territories to the west of the Amu-Darya, as well as those lying in the south-west, near the Sarykamysh depression and the ancient Uzboy bed (T. 1962a).

Among the major irrigation works discovered in Khorezm some are said to date back as far as the first half of the first millennium B.C. (Tolstov 1948a). With the "industrial revolution" referred to above, the irrigation network developed rapidly and extended from the Akchadelta in the east to the Sarykamysh depression in the west (Tolstov 1962a). As shown below, this irrigation system underwent a substantial reduction in the 4th-6th c. A.D. when, following the collapse of the Kushan Empire and the consequent breakdown of efficient government, the country entered a period of severe economic and social crisis (Tolstov 1948b).

The work of the Khorezmian expedition in the northern part of the Amu-Darya delta was taken over from 1958 by the Kara-Kalpak Historical Institute of the Uzbek Academy of Sciences (Gudkova & Yagodin 1963, Gudkova & Livshitz 1967). Continued from 1960 to 1962 by Mrs. Gudkova this expedition yielded spectacular results in Tok-Kala. They are dealt with in greater detail on pages 99 ff. (Gudkova 1964).

As a result of the Arab invasion in the 8th and 9th centuries A.D. the irrigation system of Khorezm was further reduced (Tolstov 1948a), but a remarkable recovery, accompanied by the setting up of a strong authority, eventually took place. The Mongol invasion of the 13th century destroyed the whole system.

Large-scale aerial surveys of the desert have yielded spectacular results and have helped the archaeological teams to discover river-beds and civilizations buried in the sands (Tolstov 1948a,b). The ancient glory of these vanished places, so fraught with legend and history, seems to come back to life and arouses in the mind of the student a feeling of keen and nostalgic interest. (See plates of aerial photographs XXIX-XXX Koy-Krylgan-Kala prior to and in process of digging; XXXI-XXXII Toprak-Kala).

The monolithic structure of almost all the Khorezmian expeditions carried out by Tolstov calls for a presentation different from that adopted in the other parts of the present volume. It would obviously be futile to enumerate the great number of archaeologists composing Tolstov's teams and to consider the work done by them year by year. The results of the numerous explorations in Khorezm and the adjacent territories are embodied in such a mass of books, reports and articles, frequently superseding each other, as to perplex the student not familiar with the subject. The material is, moreover, occasionally published somewhat outside the standard sources of Soviet archaeology. It would, therefore, be useless to include in the bibliography more than a selection of sources.

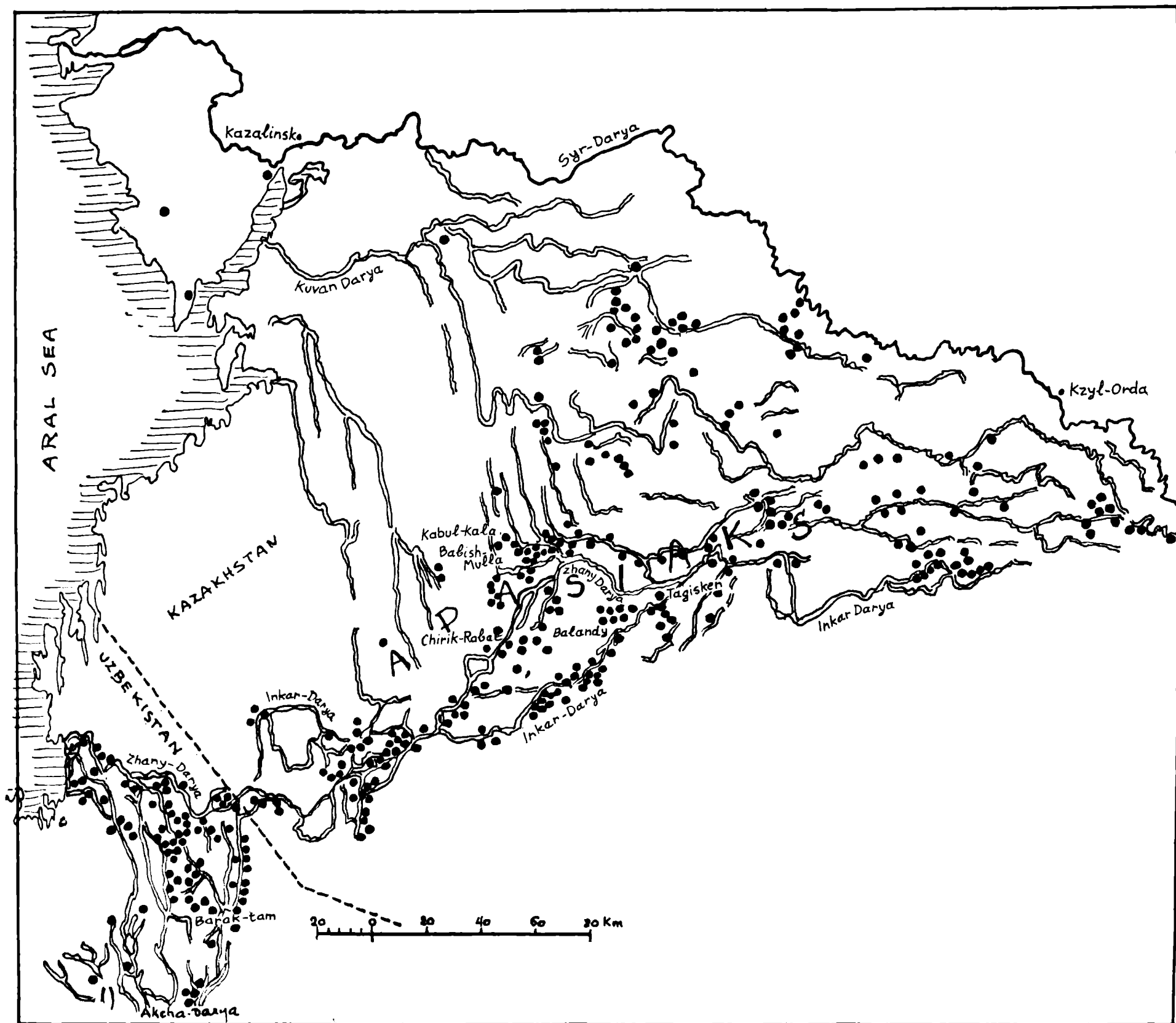
## II. SEQUENCE OF PERIODS

The following paragraphs which are largely based on the writings of Tolstov and his collaborators, give an approximate and tentative survey of the various periods of Khorezmian civilization from the Stone Age to the Mongol invasions (Vorobyeveva 1958). This classification obviously cannot claim to exclude other conceivable classifications. In several cases the specific terminology is that devised by Tolstov (e.g. Kelteminar, Tazabagyab, Suiyargan etc.). The centuries as specified for each period are bound to be approximate and to vary occasionally. The individual archaeological sites referred to in the Synoptic Table on page 93 are shown in map 14 and its more detailed sections 15 and 16.

### A. "Primitive" period

No major *palaeolithic* finds appear to have been made so far.

(i) *Neolithic Age*, end of the 4th-3rd millennium B.C., the so-called Kelteminar Period (Tolstov 1948b). The oldest sites, which lie along the Akcha-Darya, are said to have belonged to populations of fishermen and hunters living in huge dwellings of some 100-120 people. Dzhanbas-Kala 4, the most important site discovered, contained a great variety of stone tools and stamped pottery (Vinogradov 1963). Kavat was likewise inhabited during the Neolithic Age and so was Barak-Tam on the Syr-Darya, known, however, mostly as a settlement of the Kushan period. Many neolithic sites were also discovered further to the north-east in the Zhana-Darya region, as well as in the opposite direction in the





Sarykamysch depression—a large lake at that time—and along the much debated ancient bed of the Uzboy which dried up several thousand years ago.

(ii) *Bronze Age*, mid-2nd to beginning of 1st millennium B.C. The so-called Tazabagyab culture was, according to Tolstov, a variety of the Andronovo steppe culture of Kazakhstan and of Southern Siberia. It flourished throughout the Akcha-Darya region and extended along the waterways to the ancient Sarykamysch lake in the west as far as the Uzboy bed (Itina 1960b).

While its anthropological type appears to have been mostly Caucasoid and Dravidian, the “Suiyargan” Bronze culture—as Tolstov calls it—contemporaneous with late Tazabagyab (Tolstov and Itina 1960), was that of a different human type; its pottery was also of another pattern.

#### B. “Ancient” period (*beginning of the Iron Age*)

(i) “*Archaic*” period of the 7th-5th century B.C. Whatever may have been Zoroaster’s precise date and place of birth, scholars are increasingly inclined to believe that he was born during the first years of the 6th century B.C. in Bactria, or a region nearby. The country referred to in the sacred Avesta may or may not be Khorezm, but judging from subsequent tradition and later records it was, at any rate in that region.

In the 6th century B.C. the Persian armies under Cyrus II (the Great) and subsequently under Darius I (Vorobyeva 1958) invaded this area with the result that Khorezm became for a while part of the Sixteenth Satrapy of the Achaemenian Empire (Masson 1964).

The characteristic feature of this period, when the Bronze Culture of the early Scythians coexisted for some time with the newly introduced Iron Culture, was an incipient “industrial revolution” due to new techniques, the building of a huge irrigation system (Vorobyeva 1958), and possibly the use of slave manpower on a large scale. This slave system is said to have continued during the first millennium A.D.

Tolstov believed that the population of some places lived in peculiar extended mass-dwellings, so-called “living-walls” (Tolstov 1948b), each containing thousands of people together with their cattle, but this idea is no longer accepted by all Soviet scholars.

(ii) "*Kangha*" (or *Kanghiu*) *period*, 4th century B.C.- 1st century A.D. "Kanghiu", which according to Chinese records was a vast empire, does not appear to be mentioned by any Greek, Roman or Persian author. On the other hand "Khorezm" was apparently not known to the Chinese annalists (Vorobyeva 1958). For this and other reasons Tolstov believed the two names "Khorezm" and "Kanghiu" were synonymous (Tolstov 1948b), a view which now seems to have been discarded by the majority of Soviet scholars; according to some of them Kanghiu was a huge nomad empire which extended from the Tyan-Shan range to the Caspian Sea and is supposed to have included Khorezm among its constituent parts. According to other scholars it was no more than a loose federation of nomads on the middle Syr-Darya. Be this as it may, Khorezm witnessed a remarkable expansion of towns, irrigation, arts, and handicrafts during this post-Achaemenian and pre-Kushan period (Vorobyeva 1958). In several parts of Asia this was a time of expanding Hellenism. The expeditions of Alexander the Great (second half of the 4th century B.C.) and the subsequent rise and fall of the Graeco-Bactrian kingdom both occurred during this period.

(iii) *Kushan and post-Kushan period*, 1st-3rd century A.D. Whether Khorezm became an integral part of the great Kushan Empire or not, it may be assumed that it was possibly until the 3rd century A.D., under Kushan suzerainty (see Ch. III, page 51). Anyhow, a remarkable urban development appears to have taken place in Khorezm during this period, but after having reached its zenith under the early Kushans irrigation began to decline.

Khorezm seems to have remained outside the sphere of Gandhara art and the direct route of Buddhism, which was expanding over the Kushan Empire, but influences from Gandhara, as well as Hellenistic and Indian elements can be traced in the remarkable artistic development of some of its towns, especially Toprak-Kala (see below).

### C. *Middle Ages* (Nerazik 1958)

(i) *The "Afrighid" period*, of the 4th-9th century A.D. (so called by Tolstov after Afrigh, the first ruler of a new dynasty). This period of rising feudalism, was also one of serious political and social crisis, of a further substantial decline of irrigation and breaking up of towns,

which gave place to many thousands of "castles". (Tolstov 1948b, Vorobyeva 1958).

"White Huns", or Ephthalites, advanced against the Sassanian Iranians and in the middle of the 5th century A.D. founded a large empire corresponding roughly to that of the defunct Kushan Empire (see Ch. III). (The presumably Ephtalite towns of Barak-Tam and Kuyuk-Kala are dealt with below). This short-lived empire began to disintegrate towards the middle of the 6th century A.D. and was succeeded by the Empire of the Turks (Bibl. ONE Yakubovskiy 1955; Mandel'shtam 1964).

As for the religions professed at that time in Khorezm, it would appear that, apart from local cults, Zoroastrianism was prevalent. This has been confirmed by the recent finds at Tok-Kala (pages 100, 103). In addition there were Jews (Tolstov 1948b), and a small community of Christians.

The political disintegration which also occurred in the adjacent regions eventually paved the way for the invasion of the country by Muslim Arabs. In the 8th century Khorezm became a province of the Arab Caliphate (Bibl. ONE Yakubovskiy 1955). All the occupied territories have since that time remained Islamic, but gradually became largely independent of the Caliphate. Conspiracies and dynastic upheavals were a common feature of the subsequent period.

(ii) *Feudal Age*, 10th-early 13th century. In the 10th century Khorezm was a vassal state of the Samanids, whose capital was Bukhara (Bibl. ONE Yakubovskiy 1955). The Khorezmian town of Urgench (now Kunya-Urgench, not to be confused with modern Urgench) was a renowned centre of arts and sciences—Abu Ja'far Muhammad ibn Musa al-Khorezmi, an eminent mathematician, astronomer, geographer, and historian lived there at the beginning of the 9th century A.D.—attracting such famous scholars as Ibn Sina (Avicenna), al-Biruni and others. In 1017 Khorezm was conquered by Mahmud of Ghazni, whose empire did not last long. At the end of the 12th century under the Khorezmshahs it became a powerful state (Bibl. ONE Yakubovskiy 1955), vaster than ever before, and more than twice its previous size. This final splendour arose and passed suddenly: towards 1220 Khorezm was raided by the Mongol hosts under Chinghis Khan and 170 years later it succumbed to the devastating Mongol invasion under Timur Lenk (Tamurlane).

## III. SYNOPSIS BY SITES

In order to facilitate the task of the reader an attempt has been made to condense the scattered information given in a variety of sources in a Synoptic Table showing some of the most important sites by periods and regions. The selection made, as well as the uncertainty with regard to chronological divisions, obviously calls for some reservations. There is, moreover, such a multiplicity of layers extending over long periods that some of the places mentioned should have been given under various headings. This was not always possible.

Column (1) of the table refers to three Turkmen sites west of the Amu-Darya (i.e. its left bank); (2) refers to places east of the Amu-Dayria (i.e. its right bank), situated in the present and former deltas of the river. Finally, column (3) refers to the ancient delta of the Syr-Darya (south of this river); with the exception of Barak-Tam all the places in this column lie in Kazakhstan.

The columns in the Synoptic Table give the sites in alphabetical order within each period. These places are referred to in the same order in the comments which accompany the Table. Koy-Krylgan-Kala, Toprak-Kala and Tok-Kala are dealt with in greater detail.

*Comments on the Synoptic Table*<sup>1</sup>

*Column (1):* Amu-Darya, left bank (Turkmenistan)

*Kiuzeli-Gyr*, next to Kalaly-Gyr: an ancient fortified site of the late Archaic period (6th-5th century B.C.), which has yielded an exceptional amount of pottery, made by hand and on the wheel (Tolstov 1962a; Masson 1966a).

*Kalaly-Gyr*: this huge, probably Achaemenian fortress was begun in the 5th century B.C., but its construction was stopped in the 4th century (transition from the Archaic to the Kangha period). Although badly preserved, it nevertheless shows numerous traces of its Iranian splendour. Many ossuaries. (Tolstov 1962a; Rapoport & Lapirov 1963).

*Urgench* or *Gurgandzh*, now Kunya-Urgench: already in existence

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<sup>1</sup> As there is an exceptional number of reports dealing with Khorezmian sites, the reader may find it most convenient to use Tolstov's latest book on the ancient deltas (Tolstov 1962a).

*Synoptic Table of Sites* (see maps 14, 15, 16)

<i>Period</i>	<i>Amu-Darya</i>		<i>Syr-Darya</i>
	(1) <i>left bank</i> ( <i>Turkmenistan</i> )	(2) <i>right bank</i> ( <i>Uzbekistan</i> )	(3) <i>southern deltas</i> ( <i>mostly Kazakhstan</i> )
<b>A. Primitive period</b>			
(i) Neolithic (4th-3rd mill.)		Dzhanbas-Kala	Barak-Tam (Uzb.)
(ii) Bronze Age (2nd-1st mill.)		Angka-Kala Dzhanbas-Kala Kavat Kokcha Yakke-Parsan	Tagisken
<b>B. Ancient period</b>			
(i) Archaic (7th-5th c. B.C.)	Kiuzeli-Gyr		Tagisken
(ii) Kangha (4th c. B.C.-1st c. A.D.)	Kalaly-Gyr	Angka-Kala Dzhanbas-Kala Koy-Krylgan-Kala Yakke-Parsan	Babish-Mulla Balandy Chirik-Rabat
(iii) Kushan (1st-3rd c. A.D.)		Angka-Kala Koy-Krylgan-Kala Toprak-Kala	
<b>C. Middle Ages</b>			
(i) Afrighid (4th-9th c. A.D.)		Berkut-Kala Kuyuk-Kala Tok-Kala Yakke-Parsan	Barak-Tam (Uzb.)
(ii) Feudal Age (10th-13th c.)	Urgench (Kunya-Urgench)		

before the beginning of our era; in the 10th c. A.D. it became the capital of Khorezm, famous as a cultural centre (Tolstov 1958a).

*Column (2): Amu-Darya, right bank (Uzbekistan)*

*Dzhanbas-Kala 4:* a well-known neolithic (Kelteminar) site, mostly of the 3rd millennium B.C., comprising some more recent large dwellings of the Bronze Age as well as of the Kangha period. Much pottery (Tolstov 1962a; Masson 1966b).

*Angka-Kala*: consists of various sites typical of the Tazabagyab Bronze Age (second half of the 2nd millennium B.C.). A later, small Kushan fortress of the 3rd-4th century A.D., Angka-Kala, survived until the Arab invasion. The finds contained in addition to a "Corinthian" capital much pottery dating from various periods (Tolstov 1960b, 1962a).

*Kavat*: there are several archaeological sites belonging to the Bronze Age (second half of 2nd millennium B.C.), some of which were already inhabited during the Neolithic period. The fortress Kavat-Kala built in the 4th-3rd century B.C. existed until the Mongol invasion (Tolstov 1962a).

*Kokcha*: end of the 2nd millennium B.C.; the large quantities of pottery and jewellery found in the cemetery of the late Bronze Age Kokcha 3—over 100 tombs—suggest to Tolstov the existence of links between Central Asia, Iran, India, Siberia and even Eastern Europe (Tolstov 1962a; Trofimova 1961; Itina 1961).

*Yakke-Parsan*: its several sites of the late Bronze Age (mostly 8th-7th century B.C.) afford a rare example of early agricultural settlements just prior to the "slavery" periods. A castle of the 7th century A.D. (pl. XXXIV) contained among other objects a fragment of leather with old Khorezmian script (see Tok-Kala, page 103; Tolstov 1962a; Nerazik 1963).

*Koy-Krylgan-Kala*: at the southern border of the Kyzylkum desert, was discovered as early as 1938; more recently aerial photographs have brought to light a fascinating site: two almost perfect concentric circles, of which the inner circle is much better preserved than the outer (AN SSSR 1967; Tolstov 1962a; fig. 20 and pls. XXIX, XXX).

Koy-Krylgan-Kala is one of the numerous fortified pre-Kushan sites which go back to the ancient Kangha period of irrigation and of economic prosperity, but which lie at present in a waterless, desert region, buried in sand for almost 2000 years. Started in the 4th century B.C., the work on this monumental building came to a sudden end in the 1st century A.D., when Khorezm is said by Tolstov to have been incorporated in the Kushan Empire. The site survived until the 4th century A.D. (Vorobyeva 1967).

The outer circle, with a diameter of roughly 87 metres (92 yards), appears to have consisted of dwellings; the inner circle of some 42 metres

(46 yards) was probably in the beginning a burial-ground for Khorezmian rulers with a temple for a dynastic cult. All the buildings were repeatedly modified.

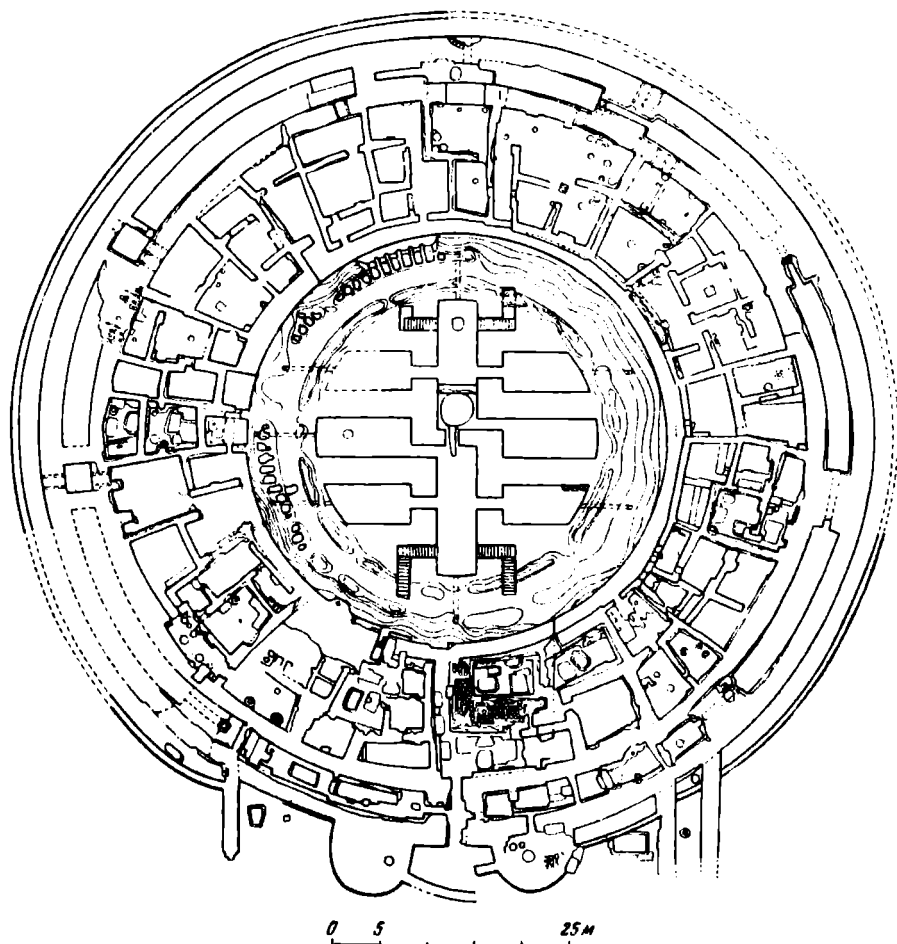


Fig. 20. Koy-Krylgan-Kala: drawing from an aerial photograph

In spite of serious destruction the site contained much valuable archaeological material which throws light on the civilization of the country in a comparatively ancient post-Achaemenian period. The finds did not, however, include any coins (Masson 1966a).

The pottery, found in large quantities, is particularly fine: variegated vessels, rhytons, jugs and plates, decorated with reliefs representing human

heads, animals, griffins, a mounted Scythian warrior, etc. There are also numerous terracotta figurines of gods and goddesses (especially Anahita, goddess of fertility; pl. XXXVa), human heads, horses, a monkey with its baby (Indian influence), a griffin with the body of a horse, a human head bearing a bird's mask, and in a higher layer a so-called Khorezmian Madonna suckling a child. As from the 2nd century B.C. the sculptures show, however, a gradual deterioration which presumably took place as a result of the influx of steppe tribes (Tolstov 1962a, 1967).

Small but colourful wall-paintings were found in a more recent layer, probably of the 1st century A.D.; in spite of their bad state of preservation they are valuable indications of Khorezmian artistic activity some centuries before other sites in the same region (Tolstov 1967). Thus the paintings of Toprak-Kala referred to below date from the 3rd century A.D., those of Balalyk-tepe (Uzb.) from the 6th century, and those of Varakhsha (Uzb.), Pendzhikent (Tadzh.), and the recently discovered Afrasiyab paintings (Uzb.), are roughly of the 7th or 8th century.

There are also inscriptions on shards, probably of the 2nd century B.C. to the 2nd century A.D. in Khorezmian language (Oranskiy 1963, Tolstov 1967) and Aramaic script.

One ossuary contained numerous human figures, some of natural size. The burials appear to belong to two different types: cremation and exposure of the body on an elevated site (Rapoport 1960).

*Toprak-Kala* (see pls. XXXI, XXXII): situated in the same region as Koy-Krylgan-Kala, it was the brilliant, fortified residence of the Khorezmian kings (Tolstov 1962a). While the town, which is said to have been founded in the 1st century A.D. (Masson 1966) survived until the 6th century A.D., the castle appears to have ceased to exist much earlier. This huge three-towered building, measuring some 11,000 square metres (2.7 acres) is better preserved than Koy-Krylgan-Kala and its architectural features are easily discernible; it admirably reflects the cultural development of Khorezm in the early centuries A.D. (pl. XXXIII). It contained a range of palatial halls, among which was the so-called Hall of Emperors of 280 square metres (3,000 square feet), adorned with variegated wall-paintings and many large statues, mostly of unfired clay, but some of alabaster, representing probably the Khorezmian rulers, their wives and guardian-deities. (pls. XXXVI, XXXVII).



Badly preserved fragments of wall-paintings were found throughout the whole castle. As far as can be judged, some of them may not be "great art"; others are said to call to mind the paintings at Ajanta. As shown in fig. 21, their artistic motifs have survived in popular art until today.

Another hall contained large-size "hauts-reliefs" of an emperor and the goddess Niké.

Statues of emperors and of dark-skinned, armour-plated warriors of an exotic, allegedly South Indian type, were a feature of the so-called Hall of the Black Guards. This led Tolstov to believe that Khorezmian troops at that time included Indians, a view which is not shared by some Soviet scholars.

The occurrence of exquisite friezes of deer and of griffins which decorated another hall reminds one of the more ancient Scythian art.

Among the approximately 140 documents discovered at Toprak-Kala, written in ancient Khorezmian (Tolstov 1958a) on wood or leather, some were first believed by Tolstov to have been dated in an Indian era, but as a result of the Tok-Kala discoveries the problem of the Toprak-Kala chronology may have to be reconsidered (see Tok-Kala below and pls. XXXVIII, XXXIX). There were also a great quantity of Kushan coins. Some authors believe that the local Khorezmian mint having been closed down, its coins were replaced by coins of the Kushan emperors (Staviskiy 1966). An analysis of both documents and coins made prior to the Tok-Kala finds (see below) confirmed Tolstov in his belief that the year 78 A.D. represents the beginning of the Indian Saka era and of Kanishka's reign (Tolstov 1962a), a view which is by no means unanimously accepted (see page 52).<sup>1</sup>

*Berkut-Kala*: like many smaller fortified Afrighid places in the region, this large compound of a feudal castle of the 6th-7th century A.D. when the number of towns was diminishing rapidly, ceased to exist in the 8th century. The finds included quantities of pottery, jewellery and ornaments (Nerazik 1959a; Tolstov 1962a).

<sup>1</sup> A detailed analysis of the above problems of chronology will be found in TOLSTOV 1962a, pages 222-226; ALTHEIM & STIEHL 1964, 1965. See also GUDKOVA & LIVSHITZ 1967 on Tok-Kala.

For additional material see Bibliography page 176, Addendum relating to the Dushanbe Conference.

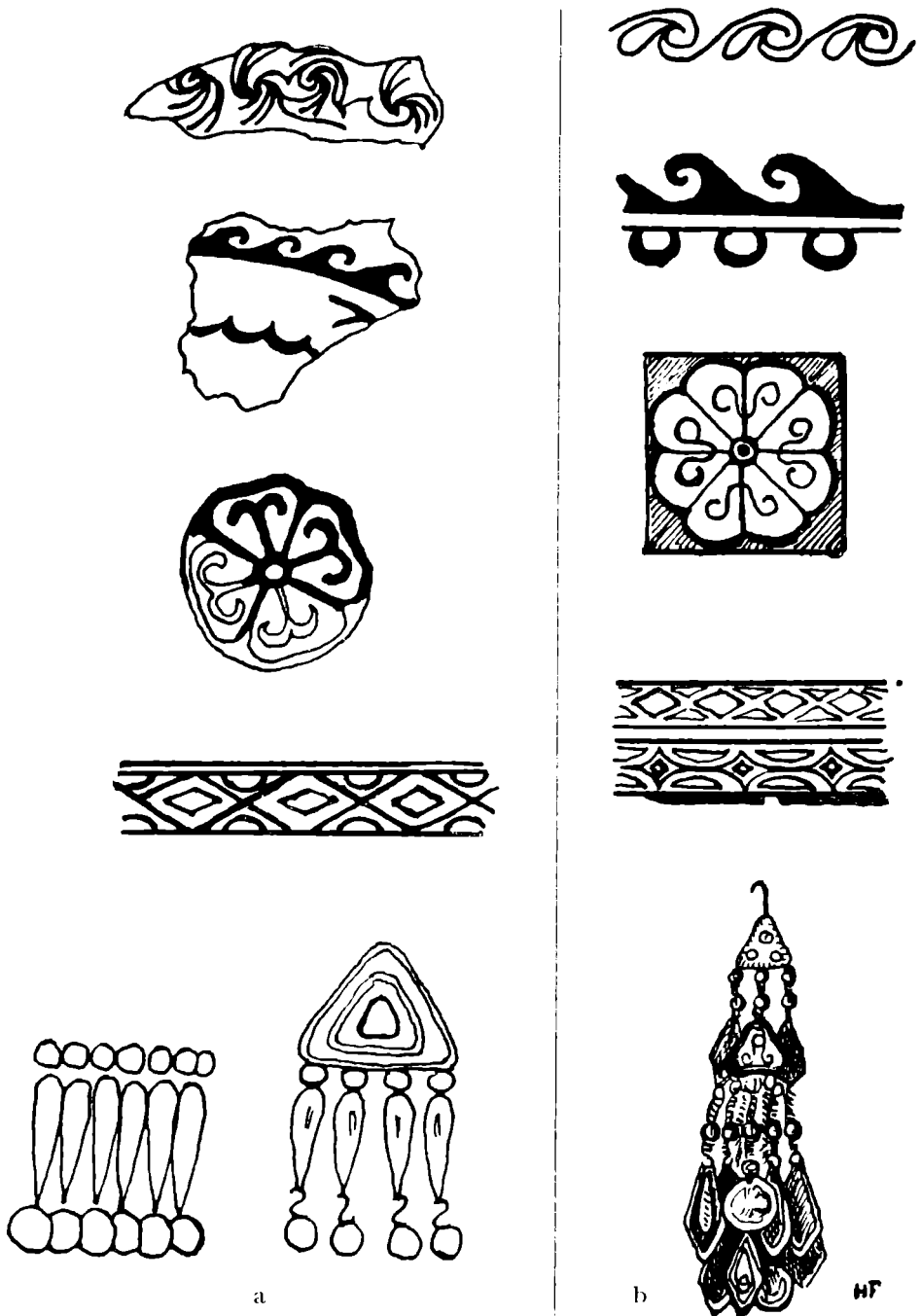


Fig. 21. a) Ancient (Toprak-Kala) and b) modern Khorezmian Karakalpak designs

*Kuyuk-Kala:* was according to Tolstov a fortress of the 5th-8th century A.D. in the Amu-Darya delta—probably of Ephthalite origin—

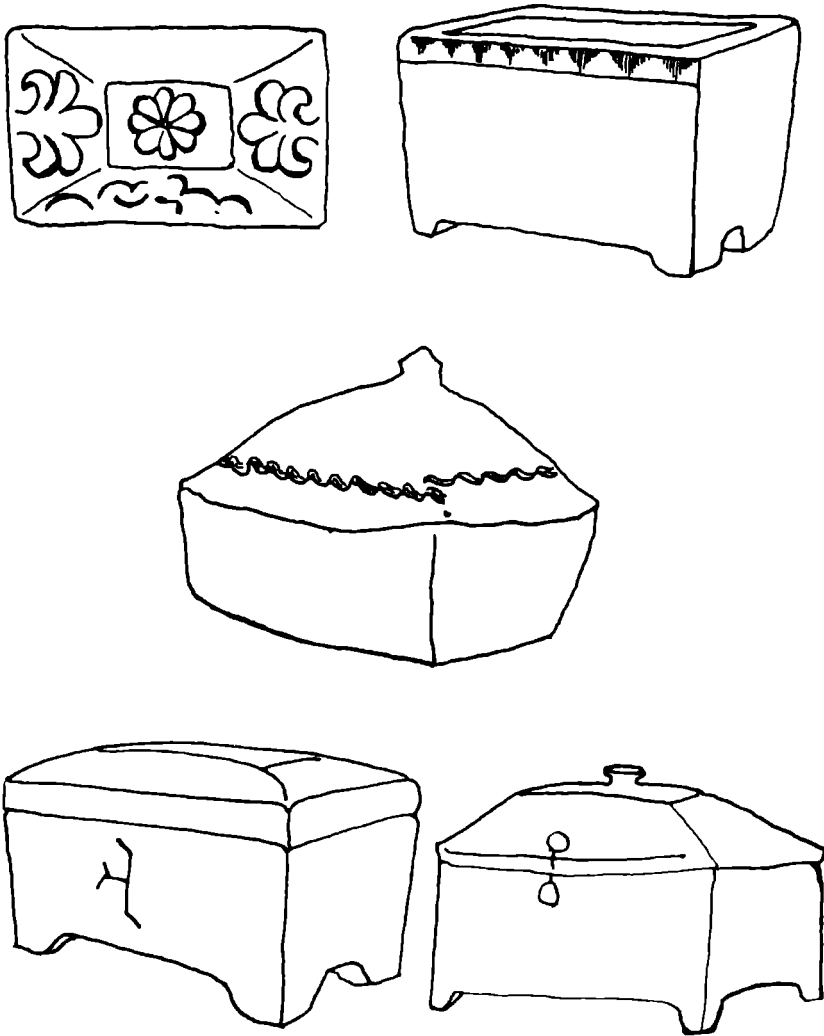


Fig. 22. Tok-Kala. Funeral chests

as well as a burial-place containing ossuaries, much pottery and numerous bronze ornaments (Nerazik & Rapoport 1959; Tolstov 1962a).

*Tok-Kala:* this fortified place, which existed from the 4th or 3rd century B.C. to roughly the 11th century A.D., was until recently

practically unknown. It is situated on the mound Tok-tau, in the extreme north of the Amu-Darya delta, 14 km NNW of Nukus, and was first explored on behalf of the Kara-kalpak branch of the AN Uzb. SSR by Mrs. A. Gudkova in the years 1960-62. Exploration was continued in 1964 (Gudkova 1964; Staviskiy 1966). As it contained more layers than any other site in Khorezm, its chronology presented some problems. During the fifteen centuries of its existence the place witnessed several periods of expansion and decline, and was repeatedly abandoned.

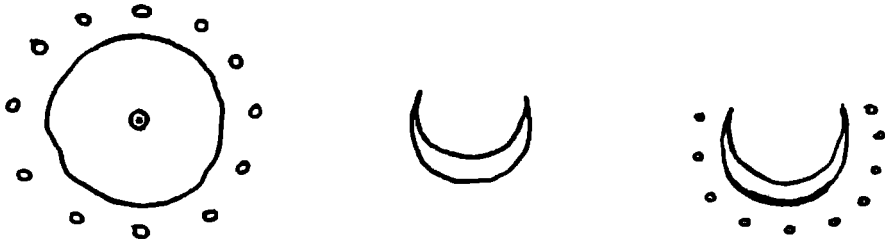


Fig. 23. Tok-Kala. Astral emblems on chests

In addition to a large quantity of pottery belonging to various periods, the most striking discovery was a huge necropolis with ossuaries of the 7th-8th century A.D. Their exploration proved to be crucial in connexion with the study of the historical and cultural conditions of the region in pre-Islamic times.<sup>1</sup>

Underground chambers contained numerous ossuaries ("astodans") in the form of chests of alabaster, stone or clay; these chests which were inserted in sepulchral walls, contained the bones of the deceased left after the corpses had been exposed to beasts and birds of prey, a process similar to that in use among the Parsis in India. According to Mrs. Gudkova the burial rites were unquestionably Zoroastrian.<sup>2</sup> A remarkable

<sup>1</sup> Another detailed account of ossuaries and funeral chests of the 6th-7th century A.D. found in the necropolis of Bayram-Ali (near Merv) was published by YERSHOV (Bibl. Turkm. 1959). The finds likewise point to Zoroastrian worship, but the numerous illustrations are not good enough to permit their analysis.

<sup>2</sup> Several Soviet scholars make a distinction between Zoroastrianism and Mazdaism. According to them, Mazdaism is the uncodified aggregate of Central-Asian religions and moral precepts, some of which were of ancient origin. Zoroastrianism proper is the reformed and codified form of Mazdaism as laid down in the final canon, the Avesta. This duality is stated to account for the occasional divergencies between the rites of the original and those of reformed Mazdaism.

feature of some of these Tok-Kala chests is their decoration with paintings, inscriptions, or astral emblems (figs. 22 and 23; pl. XL).

The obviously primitive and almost puerile paintings, or rather

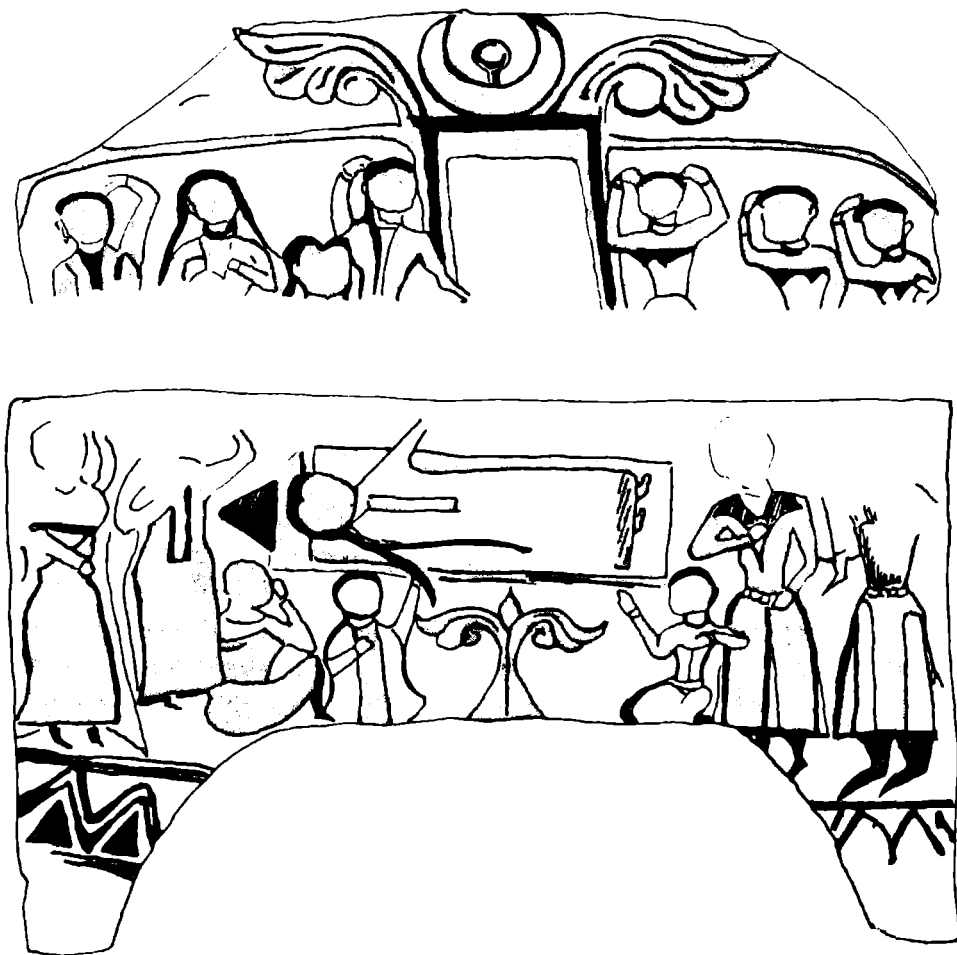


Fig. 24. Tok-Kala funeral chest. Scene of Mourning

drawings, outlined in black on the lids or sides of the chests, are hardly of an artistic nature, but iconographically they are of exceptional interest. One of them is strikingly analogous to the "Scene of Mourning" of Pendzhikent (see page 73); the upper part of the scene is drawn on the lid, the lower part on the body of the chest (fig. 24).

The dresses of the attendants—all shown frontally—reproduced on the chests, have certain features in common with those of the Sogdians and other Central Asian peoples; they are familiar to us from Bamiyan, Fondukistan, Pendzhikent, Chinese Turkestan, etc.

The crescent moon in the "Scene of Mourning" is a symbol well-known throughout Central Asia, including Sinkiang. In Tok-Kala it is shown together with the solar emblem in a most simplified form on some otherwise undecorated chests: the crescent points upwards and the solar emblem is represented by a circle with a dot in the centre and surrounded by a border of white "pearls" (fig. 23).

Like the Pendzhikent and similar paintings, the Tok-Kala drawings disclose "Sassanian" features. It may be tempting to postulate a Sassanian origin for them and to reject any other interpretation. In fact, affinity does not necessarily indicate origin or even impact. Some of the alleged Sassanian elements found in Tok-Kala may be explained by a common origin in remote antiquity, the regional features stemming from a stock of old traditions and creeds (Rapoport 1960, 1962). Solar cults are largely "pre-Khorezmian" and "pre-Sassanian" and the sphere with a crescent over it could be traced back to Egyptian iconography (Rapoport 1962).

Gudkova is in all probability right in declaring that the similarity between "Sassanian" and Khorezmian emblems does not necessarily imply a "borrowing" from Sassanian art. When she maintains, however, that the permanent antagonism between the Sassanians and their neighbours made such a borrowing unlikely, this argument seems less convincing.

In connexion with the Tok-Kala finds it may be noted that a strange silver dish, discovered in 1951 near Bartym in the Perm region, i.e. far away from Central Asia, displays a chest with ornaments, carried by two lions. At that time Soviet scholars pointed to the probability of a Central Asian origin, but the significance of the chest, which is surmounted by an astral emblem very similar to that of the Tok-Kala chests remained uncertain. The recent Tok-Kala finds not only confirm the Central Asian origin of the Bartym dish, but also the sepulchral nature of the chest reproduced on it (Rapoport 1962).

The funeral inscriptions on the chests—roughly 100—were partly

deciphered by Livshitz (Tolstov & Livshitz 1964; Gudkova & Livshitz 1967); they are invaluable from a linguistic point of view, since they are said to be the first Zoroastrian texts in a practically unknown language. Their script appears to derive from the old Khorezmian alphabet used in the documents of Toprak-Kala and Yakke-Parsan referred to above. (With regard to the controversies on these problems, see Altheim & Stiehl 1965).

As many of the inscriptions are dated, they are also of great importance in connexion with the ever-recurrent problem as to which era was in force in the different regions at varying times.

As long as this problem of the era is not solved, neither the chronology of the rulers in the first half of the 1st millennium A.D. (especially that of the Kushan emperors) can be fixed exactly, nor can the closely related chronology of civilizations be worked out definitely. As we have seen before, the era of the Kushan ruler Kanishka is believed to have started with the year 78 A.D., 128, 144 or even in the third century (see Ch. III).

After the decipherment by Livshitz of some Tok-Kala inscriptions, Tolstov felt once more confirmed in his belief that their dates referred to the "Kanishka" or "Saka" era, beginning in the year 78 A.D. This thesis seems to have been endorsed by some Soviet scholars as being final; others contest it, since they do not believe in the identity of the "Kanishka" and "Saka" eras. There appears, however, to be a fair amount of agreement that the Khorezmian era began in the early 1st century A.D. (roughly 20-30 A.D.). Gudkova and Livshitz, who accept this view, reject Tolstov's thesis of the year 78 as the basis of the "Kanishka" era; they are similarly inclined to doubt some of the interpretations made by Altheim and his criticisms of the contentions of W. B. Henning.

In any case it is obvious that the remarkable discoveries made at Tok-Kala are of great value, since they afford a much needed key towards the solution of hitherto obscure and debated problems concerning the religion, customs and languages of Khorezm (Gudkova 1964; Staviskiy 1966; Gudkova & Livshitz 1967). But contrary to Tolstov's views the Tok-Kala and the Toprak-Kala era appears not to have added anything to our knowledge of Kanishka's date.

Archaeologically speaking the site is far from exhausted and the number of finds is growing incessantly (the new discoveries are going to be dealt with in a further report to be issued shortly). However, many more ossuaries remain to be explored.

*Column (3):* "Scythian" deltas of the Syr-Darya (all sites in Kazakhstan, except Barak-Tam).

*Barak-Tam:* on a site already inhabited during the Neolithic Age; it consists of several castles of the 4th-5th century A.D.; according to Tolstov probably of Chionite or Ephthalite origin, prototypes of Afrighid castles (Nerazik & Lapirova 1959; Tolstov 1962a).

*Tagisken:* a huge necropolis of the Bronze Age, with tombs said to date from the end of the 2nd millennium B.C., but also some later graves (probably Saka) of the 6th-5th century B.C. (Griaznov 1966a). Although looted and severely damaged by fire these monumental tombs show numerous marks of exceptional splendour. They presumably represent the burial-ground of the ruling classes. In addition to ornaments of bronze and gold the tombs contained much pottery, some of which was fine, black, glazed ware with white designs (Griaznov 1966a,b; Tolstov 1962a,b) (pl. XLI). This pottery which probably contained food for the deceased, is not necessarily of the same type as the Khorezmian pottery and it is said to be related rather to the pottery of Central Kazakhstan and Siberia.

*Babish-Mulla:* a fortified, densely inhabited site of the 4th-2nd century B.C., on the Zhana-Darya, consisting of a town with a fortress, a burial-place, and numerous other settlements; the excavations produced many gold and silver ornaments, as well as Scythian arrows. Its end may have been due to the southward drift of its Apasiak population (Water Sakas)—one of the tribes probably responsible for the fall of the Bactrian Kingdom (Tolstov 1962a).

*Balandy:* south of Babish-Mulla and contemporary with it. This site, which is also Apasiak, ceased to be occupied in the 2nd century B.C. (Tolstov 1962a).

*Chirik-Rabat:* an important place of the Kangha period, town, fortress and a circular cemetery (probably of the 5th century B.C.). Presumed to have been the ancient capital of the Apasiak tribes, it came to an end in the



2nd century B.C., as did Babish-Mulla and Balandy. The finds included quantities of pottery, jewellery, and ornaments in gold and bronze (Tolstov 1962a).

#### IV. CONCLUDING REMARKS

Tolstov's activity in Khorezm is an excellent example of a large-scale exploration conducted on Marxist lines. This philosopher of history considered as his essential task the reconstruction of the main periods of the ancient social, economic, political and cultural history. While some of his views were largely tentative, he was undoubtedly most successful in his research and brought ancient, forgotten civilizations to light. The exploration of Tok-Kala by his disciples was the crowning success of the long and glorious career of this first-class scholar.

In spite of his outstanding merits it could not be reasonably expected that all his ingenious hypotheses and interpretations would be accepted as final. Being somewhat "Khorezm-minded", Tolstov may occasionally have overrated the role played and the influence exercised by ancient Khorezm (Bibl. Uzb. Obelchenko 1961).

There is nevertheless much to be said in favour of some of his theses. In his opinion, changes in the conditions of water supply, especially increasing aridity, which reduce fertile countries to deserts, are in great part due not to physical factors beyond human power, but to man himself. Bad or weak administration, social or political factors, as well as warfare, may result in the ruin of irrigation systems essential for the country. On the other hand, conditions under which the irrigation system is restored and well kept up will favour national development (Tolstov 1962a). But even Tolstov occasionally admits the influence of major climatic changes, such as he considers occurred in Europe in the middle of the 3rd millennium B.C., when the climate changed because of moisture carried by northern winds. (See also Ch. VII, Turkmenistan, end of Section II).

Ceylon, not mentioned by Tolstov, may be taken as another good example. Here civilizations came and went over many centuries, and there was, in fact, a dramatic parallelism between changes in national structure and irrigation. Whereas in Central Asia ancient cities were buried in sand, in Ceylon they disappeared in the jungle. Thus towns and

agricultural land tilled by man were replaced by marshes swarming with mosquitoes.

Tolstov's philosophy is encouraging: people undid what they had done before and they must now re-do it once more in an atmosphere of peaceful coexistence which will foster the development of a world civilization well above the level of any civilization of the past or the present.

## CHAPTER SIX

### UZBEKISTAN, PART II

(excluding Khorezm)

#### I. GENERAL

Uzbekistan lies in an immense area of desert, semi-desert, or dry steppe with occasional stretches of land watered by rivers or canals (map 17, Uzbekistan). Its total area, including the Uzbek parts of Khorezm and the Kara-Kalpak ASSR, is about 416,000 square km (160,000 square miles). Khorezm and the Kara-Kalpak ASSR have, however, been dealt with separately in the preceding chapter. (See also Mukhamed-zhanov 1967). Its unevenly distributed population amounts to over nine millions, of whom over 60 per cent are Uzbeks. The language in this region was formerly largely Iranian, but gave place in the course of the centuries to a Turkic tongue, the present Uzbek language (AN SSSR 1962).

The main historical periods described in the preceding chapters largely apply to Uzbekistan as well; from an archaeological point of view its most momentous phases are: (1) the Palaeolithic, (2) the Kushan, and (3) the post-Kushan Ephthalite and Turkic periods. The wonderful Islamic civilization which began towards the 9th century A.D. and reached its greatest development in the 14th century under Timur Lenk and his successors, continued for centuries up to the threshold of modern times.

#### II. THE STONE AGE

With the exception of the Neolithic Kelteminar civilization in Khorezm, referred to in the preceding chapter, the Stone Age in Uzbekistan is represented, as a rule, by the early Palaeolithic, especially in the southern part of the country. Prior to the recent discoveries in Uzbekistan, the oldest palaeolithic finds, late Chellean, had been made in Armenia (especially Satani-Dar), in Georgia, in the Crimea (the

Neanderthal find at Kiik-Koba), and in many other places throughout the USSR.

In 1938 Okladnikov discovered a cave of the Mousterian age, Teshik-Tash, situated at a height of 1,500 metres, north of the town of Baysun (Okladnikov 1966); it contained, among a mass of tools and other objects, the skeleton of a young boy with a well-preserved skull of the "Neanderthal type", surrounded by six pairs of horns of mountain goats (Mukhamedzhanov 1967; *Bibl. ONE Okladnikov & Ranov 1963*).

Mousterian sites were also discovered a little to the west of Teshik-Tash at Amir-Temir, at Aman-Kutan (Lev 1955; Okladnikov 1966) (45 km south of Samarkand), and in many other places near Samarkand (AN Uzb. 1959). Shaim-Kupruk (near Tashkent), Shuralisay (SW of Tashkent)—which contained many stone tools—, several caves on the upper Chirchik (Ranov 1965; Okladnikov 1963, 1966), and a number of other recently discovered sites (Shishkin 1961-63), suggest that in Uzbekistan, apart from Khorezm, palaeolithic remains may have been commoner than neolithic.

At some of the palaeolithic sites numerous rock engravings have been found; in this connexion we may mention the region of the upper Chirchik, and Zaraut-Kamar in south Uzbekistan (in the Zaraut-Say ravine of the Kugitang Mts.) (fig. 25). (Formozov 1966; Okladnikov 1966). Formozov's attempt to study them in relation with similar finds made not only in the USSR but also in Western Europe, as well as his critical analysis of the assertions made by some other scholars, appear to represent a new and still unusual approach for a Soviet scholar.<sup>1</sup>

### III. KUSHAN AND POST-KUSHAN PERIOD; SURVEY BY REGIONS<sup>2</sup>

The reader may wish to consult the Historical Excursus relating to the Kushan Empire which was given in Ch. III on pages 49-53.

As the historical background of this period in Uzbekistan was, on the whole, largely the same as that of Tadzhikistan and Khorezm, we hope

<sup>1</sup> Although Bashkiriya, a region situated north of Kazakhstan, is outside the scope of the present survey, it seems appropriate to refer in this connexion to O. BADER's recent discoveries in the palaeolithic Kapovaya cave. They are embodied in a short but excellent publication with comments and reproductions (BADER 1965).

<sup>2</sup> With regard to Kuva lying in Uzbek Fergana, see Ch. II Kirgiziya and the Fergana valley, page 44.

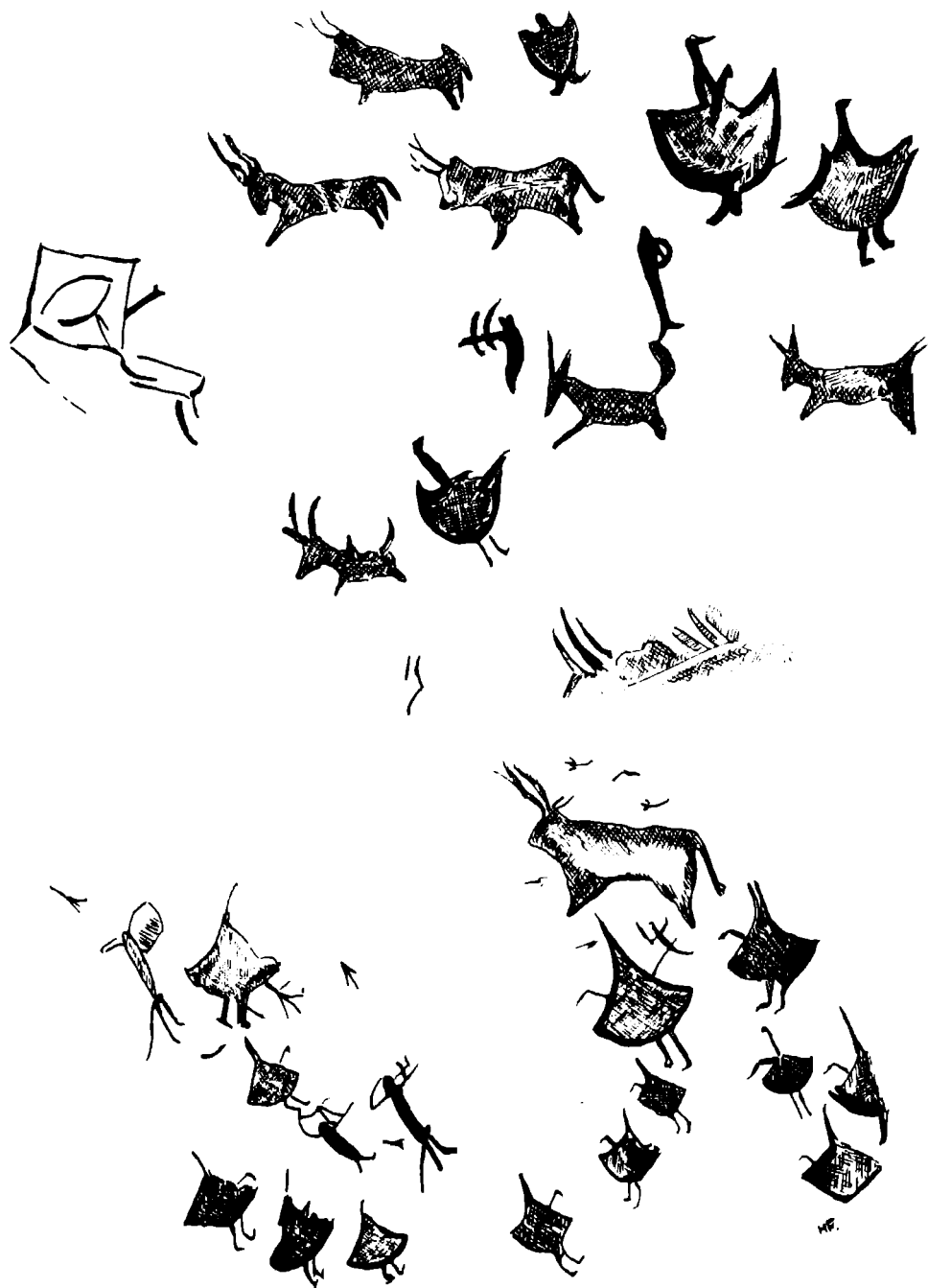


Fig. 25. Zaraut-Say. Rock engravings

it will suffice if we limit this section to a survey of the discoveries actually made in Uzbekistan, which for the greater part belong to the Kushan period.

### A. *Surkhan-Darya region*

#### (i) Termez, Airtam, Kara-tepe

Archaeological surveys published for the Termez region begin as a rule with the early Kushan period. A recent discovery made by Albaum at Kuchuk-tepe, north of Termez, pushes back the usual starting point of Bactrian history by many centuries. Here ruins of a walled building were found to contain ancient pottery similar to that of the Margian Yaz-depe (see Ch. VII, Turkmenistan, page 140). In addition to iron objects there were bronze arrow-heads and knives. Pending a detailed report, the preliminary information available seems to indicate that Kuchuk-tepe could be a prototype of buildings in an ancient, largely unknown Bactria, the culture of which seems to be linked to that of the late Bronze Age (Masson 1966a,b; Bibl. Tadjh. Litvinskiy 1967c).

Ancient Termez on the Amu-Darya (roughly 10 km from the present Termez) which existed as early as the 3rd or 2nd century B.C., is believed to have been one of the towns called Demetria after the Bactrian ruler Demetrios (189-167 B.C.). A recent discovery of coins at Airtam suggests, however, that the town existed already prior to Demetrios (Pugachenkova 1967b). Situated on the road from Balkh to Samarkand, it was an important halting place on the caravan route from India and Afghanistan to Eastern Turkestan and China. Its exploration which was begun in 1927 by B. P. Denike and continued by M. Masson (senior), led to the discovery of a huge castle. The views as to the later existence of this renowned centre are rather conflicting, but the Chinese pilgrim Hiuan-Tsang who visited it in the 7th century A.D. records many Buddhist buildings and monuments. The town succumbed in 1220 to the onslaught of the Mongols led by Chinghis Khan (Yakubovskiy 1955; Staviskiy 1966).

Termez is usually associated with the famous "*haut-relief*" sculpture in limestone of Airtam (18 km east of Termez), dating from the early Kushan period (M. Masson 1941, 1945; Vyazmitina 1945), and possibly of the 1st century A.D. (Staviskiy 1966). Explored by Masson senior in 1933, it shows, among acanthus leaves, young men and women, garlanded

musicians performing on Central Asian instruments. The relief is related to Gandhara art and reflects Hellenistic as well as regional features. Although it is supposed to have belonged to a Buddhist shrine, there were until recently no convincing arguments in favour of such a view. (See, however, Pugachenkova 1967a).

A remarkable discovery was the huge Buddhist monastery of Kara-tepe in the north-western corner of ancient Termez; it is said to have been founded about the beginning of the 2nd century A.D. and to have been abandoned in the 4th century. It was first explored in 1937 by Mrs. E. Pchelina, but her valuable material remained unpublished; the exploration was resumed in 1961 by Staviskiy. This work, undertaken on behalf of the Hermitage Museum and sponsored by the Uzbek Academy of Sciences has continued in collaboration with the Moscow Museum of Arts of the Peoples of the East (Staviskiy 1964-69).

The distinctive feature of this short-lived building complex of the Kushan era is that it is mostly hewn out of rock, an Indian characteristic quite exceptional north of the Hindu Kush. It is the only site of its kind discovered so far in Soviet Central Asia. (On the Afghan side of the border there is the Buddhist rock temple and monastery of Haibak, of a somewhat later period).

In addition to Kushan coins and badly preserved wall-paintings, plaster reliefs and remains of huge images reminiscent of Gandhara and North Afghanistan were found (pl. XLII). As pointed out by Staviskiy, one of the reliefs of Kara-tepe presents striking analogies with a capital from Surkh Kotal described by Schlumberger (Schl. 1961), and with a find made near Baghlan (N. Afghanistan) at Sham-Kala (Dagens 1964) of an "Indo-Corinthian" capital, now in the Kabul Museum: a human head among acanthus leaves and above it a scene representing the front of a beast (lion, tiger?) between two bulls (zebus) which it attacks <sup>1</sup> (fig. 26).

Among the other discoveries at Kara-tepe there was thin pottery of the finest grade bearing numerous inscriptions of linguistic interest (Staviskiy 1966, 1967b, 1969). These inscriptions, which were mostly written in ancient Brahmi or in Kharoshti script, have been studied by Miss Grek

<sup>1</sup> DAGENS analyses the largely Gandhara capital of Sham-Kala (Cham-Qala) in his interesting contribution to the MDFAFA, vol. XIX, 1964. This comparatively well preserved relief served, by the way, for a drawn reconstruction of the Kara-tepe capital by the Soviet artist. (See fig. 26).

of the Hermitage Museum (Grek etc. 1964). More recent finds of the years 1962-64 were, however, in the "Kushan" (or "Bactrian") language,

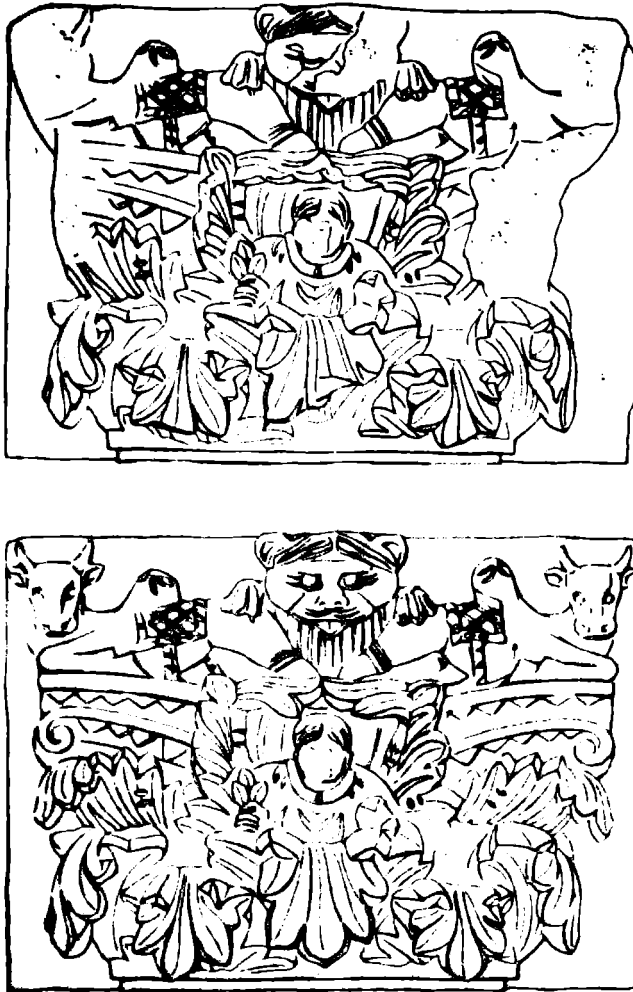
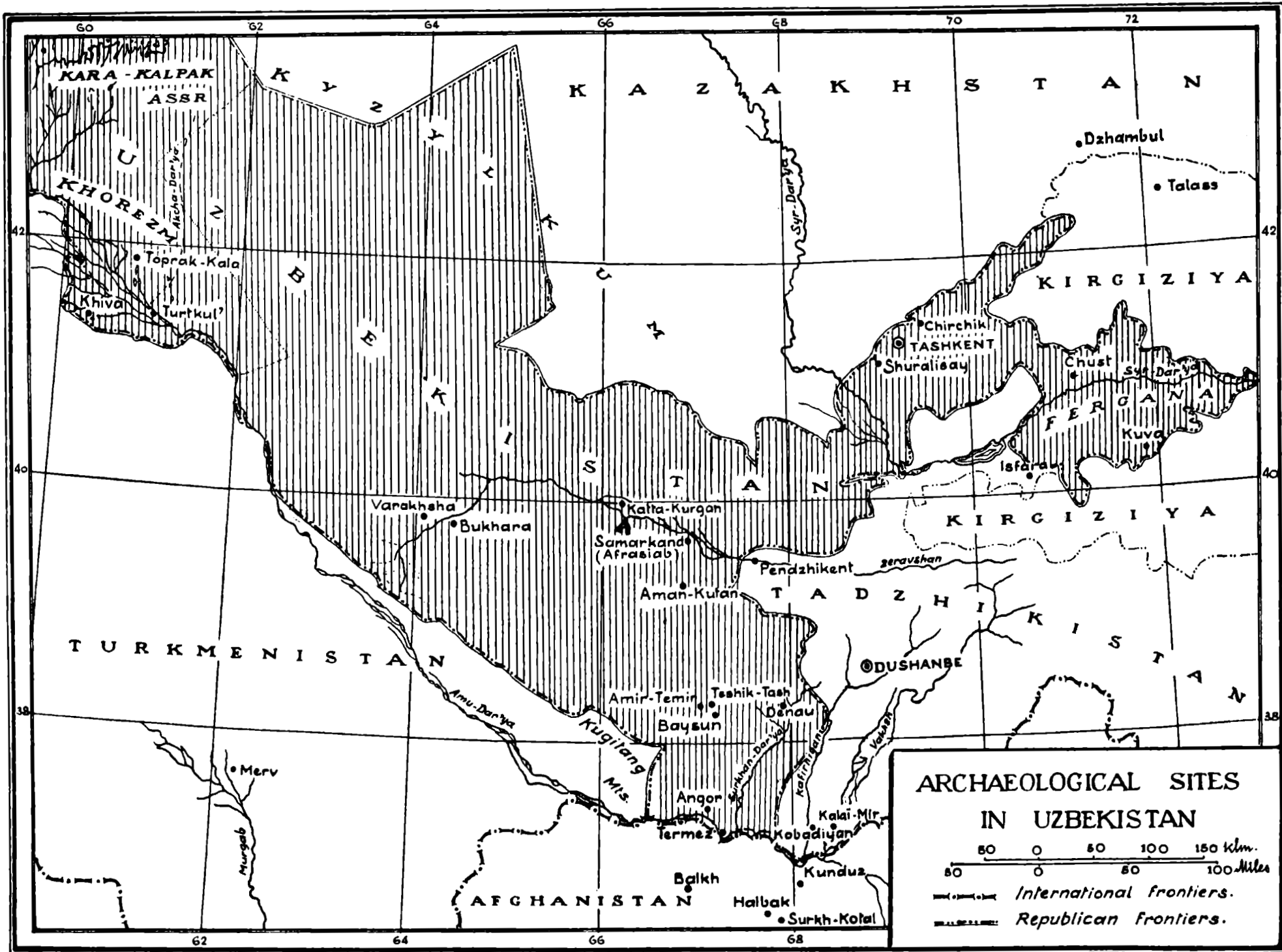


Fig. 26. Kara-tepe. Capital with human head, beast and bulls.  
Above—damaged original. Below—drawn reconstruction.

in Greek script (Livshitz 1964). Some more inscriptions were discovered in 1966 (Staviskiy 1967b). Similar inscriptions had already been found at Balkh in Afghanistan (Bibl. ONE Gardin 1957) and later on, in the now famous Surkh Kotal (Schlumberger 1959, 1961).





As Kara-tepe, Balkh, Surkh Kotal and the recently discovered Khalchayan are all situated in the same region, the similarity of script and artistic activity is not really surprising. The finds made in these and in some other places throw new light on the Kushan civilization in Bactria, where a form of Buddhism which had absorbed many influences was widespread.

(ii) Khalchayan, Balalyk-tepe, etc.

Exploration which started in 1959 under the auspices of the Institute of Art of the Uzbek AN recently led to the discovery by Mrs. G. Pugachenkova at Khalchayan (upper Surkhan-Darya, in the Denau region) of an ancient town, the lowest layers of which are said to date from the 4th century B.C. and, above all, of a huge castle belonging to the second half of the 1st century B.C. (Pugachenkova 1966). The town appears to have declined from the 3rd century A.D.; the castle is said to have been devastated and probably destroyed in the 4th century A.D., when the Kushan Empire collapsed. Although the above chronology may have to be tested by further finds and analyses, it can be reasonably assumed that most of the finds date from the 1st and 2nd century A.D., as do those of Begram, the famous Afghan winter residence of the Kushan emperor Kanishka.

Like many other Soviet scholars, the explorer of Khalchayan was obviously attracted by the problems of ancient Bactria—in her case especially by its architecture. She took a particular interest in this major Bactrian group of buildings of a little known period prior to the Graeco-Bactrian kingdom.

The Khalchayan finds mainly consist of coins, figurines, ossuaries, pottery, wall-paintings and, above all, of sculptures (Pugachenkova 1962, 1965, 1966). The numerous coins date from the pre-Kushan, Kushan, the Sogdian-Turkic period, and later. The figurines in clay and the more recent ones in terracotta, range from the 5th century B.C. to the 6th century A.D. (Pugachenkova 1965, 1968). They actually deserve more than a passing remark such as this.

In this connexion reference should be made to a small medallion in clay (8.5 cm) of rough execution found among the rubble of pottery, sculptures, and wall-paintings, for it shows a personage, possibly a

regional ruler, seated on a high throne between two lions (Pugachenkova 1962). This representation is similar to that of the Kushan Emperor in the Mathura Museum (No. 215) and is also reminiscent of those found in Surkh Kotal, Shotorak, Pendzhikent, and several other sites (Belenitzkiy 1962, 1964a, b). The dress of the Khalchayan personage resembles that of Surkh Kotal and Mathura; the head is covered by a pointed cap of the early Kushan type, similar to that of an Afrasiab figurine in the Samarkand museum, to terracottas from Taxila, to paintings of Bamiyan, and (although the cap is not Indian) to a sculpture found in Mathura (Staviskiy 1964b). The main personage is accompanied by two similarly clad men; above him is a flying Niké. Mrs. Pugachenkova suggests that the Khalchayan medallion may have been a replica of some large sculpture; whether or not it is prior to the Kushana period at Mathura, as she believes, it fits in any case admirably into the artistic activity of the Kushan Empire.

The wall-paintings of the Khalchayan castle are extant, alas, in a few fragments only, mere remnants of its ancient splendour. Some of them are purely decorative—flowers, vine, fruits, etc.—, others come from huge human figures, some of which are painted in a “Western style” (pl. XLIII). (Pugachenkova 1966).

A rapid glance at the heads of the Khalchayan statues is sufficient for even an inexperienced scholar to realize the remarkable nature of this attractive art (pls. XLIV, XLV, XLVI). These heads which are of almost natural size and usually painted, were moulded in loess-coated clay on a reed framework. They are of a coarse and virile aspect, have the appearance of most realistic portraits and depict persons from the various rungs of the social ladder. With the exception of a few statues inspired by Hellenistic court art, all the Khalchayan sculptures are evidently secular. They contain, as pointed out by Mrs. Pugachenkova, Greek, Roman, Parthian and Indian motifs and some of the heads present analogies with the Hellenistic borders of Parthian rhytons (see Ch. VII, Turkmenistan). These heads appear, however, to be neither Hellenistic, nor Indian, nor genuinely Parthian. In spite of some Iranian elements, they completely lack the conventional rigidity of Parthian art. They do not rivet their eyes upon the onlooker, but appeal to him with the intense and pervading expression of their faces. If these modern looking sculptures

are neither Greek, nor Roman, nor Indian, nor Parthian, then what are they?

It is hardly surprising that Mrs. Pugachenkova should have seen in the art of Khalchayan a particular aspect of a native civilization, a new aspect of Bactria's artistic creation. She would therefore possibly agree with the definition of Gandhara art as "Graeco-Bactrian" art, provided the affix "Graeco" were dropped. She thus thinks in terms of an original Bactrian art. This actually appears to involve a new suggestive postulate, increasingly endorsed by Soviet scholars (Pugachenkova 1966, 1968; Masson 1966a). Bactrian art would thus represent neither a provincial branch of the so-called classical art, nor an after-glow of the Graeco-Roman civilization on the periphery of an ancient "oikumene", but an organic creation of a specific civilization which developed for almost 1000 years on Bactrian soil in the very heart of the Asiatic continent, at the junction of the ancient cultures of the Hellenistic East and Scythian Asia.

The Khalchayan sculptures may thus possibly turn out to have been connected with the foundations of the sculpture of Gandhara and Hadda, but the uncertainty as to the Kushan chronology does not permit of any definite statement on this point. As the exploration of Khalchayan and the neighbouring regions is far from completed, further facts and a rigorous chronology may throw some additional light on this still disputed problem.

Among the excavations made in 1967 in the same region are those of Dalverzin-tepe. They comprise tombs, pottery and figurines, mostly of the 1st century B.C. to the 1st century A.D. A Buddhist shrine contained remarkable sculptures in plaster and clay of the early Kushan period. In addition to a huge Buddha image in Gandhara style, surrounded by Bodhisattvas, there were also secular sculptures of a "Khalchayan style", probably representing the ruler and his family (Pugachenkova 1968a, b).

The systematic exploration of the lower Surkhan-Darya region (and in particular of the Angor district) was resumed under Albaum in 1950 and continued for several years. Among the sites explored mention should be made of Zar-tepe, Zang-tepe (or Kulagly-tepe), and more especially Balalyk-tepe (Albaum 1955-64).

Zar-tepe was a fortified Kushan town (Masson 1966a), situated 4 km south of Angor and 26 km NW of Termez. Its ruins were found to contain coins ranging from the period of the Graeco-Bactrians to that of the

Ephthalites, in addition to a great quantity of pottery dating from the 3rd or 2nd century B.C. to the 5th or 6th century A.D. There were also many fragments of terracotta figurines some of which put one in mind of Niké, the moon-goddess Selena, or Anahita. A few of the numerous human and animal representations betray Buddhist influences. One figurine of crude workmanship shows a surprising analogy with the famous Laocoon group in the Vatican Museum (Albaum 1955, 1960a).

Zang-tepe, situated 30 km north of Termez, was a fortified site with a castle (Albaum 1955). Founded towards the end of the pre-Christian period, it was rebuilt at the end of the 5th century, i.e. after the great post-Kushan crisis was over and the country had fallen under Ephthalite control (Albaum 1963). In 1962 Albaum came across some unusually interesting material: below a layer of pottery belonging to the 10th-11th century, he found among glassware and huge quantities of pottery of the 7th-8th century, numerous ancient documents, Buddhist texts written on brittle birch bark one millimetre thick, in a Central-Asian Brahmi script (Albaum 1963, 1964). This remarkable material is being deciphered by Mrs. Vorobyeva-Desyatovskaya (Vorobyeva 1964).

The Balalyk-tepe castle, situated 4 km SE of Angor, like several other sites in this region belongs to a limited but well-defined period, viz. from the end of the 5th century A.D. to the beginning of the 7th century (Albaum 1960a).

This site is famous mainly for its fascinating but short-lived wall-paintings which were in large part destroyed in the second half of the 6th century. With the exception, however, of a few panels badly damaged by termites, the remains could be restored to some semblance of their original state (Albaum 1960a).

In contrast with the narrative character of the wall-paintings of Pendzhikent, with their diverse scenes (Ch. IV), and those of Afrasiab and Varakhsha (see below), the Balalyk-tepe paintings are devoted to the single theme of feasting. There is a series of panels depicting a banquet, showing beardless men and women with rounded faces, in splendid costumes, wearing jewellery and holding cups, goblets, mirrors and knives (figs. 27 and 28). The dresses, which embody numerous Iranian elements, show affinities with those of Afrasiab, Varakhsha, Pendzhikent and several sites in northern Afghanistan, as well as in Chinese Turkestan

(Albaum 1960a, b). Albaum points out, moreover, the similarity between certain persons in these paintings and some of the "balbals" outside Uzbekistan (Albaum 1960b).



Fig. 27. Balalyk-tepe. Fragment from a vast painting on the western wall (redrawn)

The Balalyk paintings are in all probability characteristic of the standard of life of the ruling Ephthalite classes during the first half of the 6th century, before they were supplanted by the Turks. As can be seen in fig. 28 the magnificent garments present an unrivalled array of fashions and designs. Some specimens of the latter are shown in fig. 29 (i) and (ii) (Bentovich 1964, Shishkin 1960).

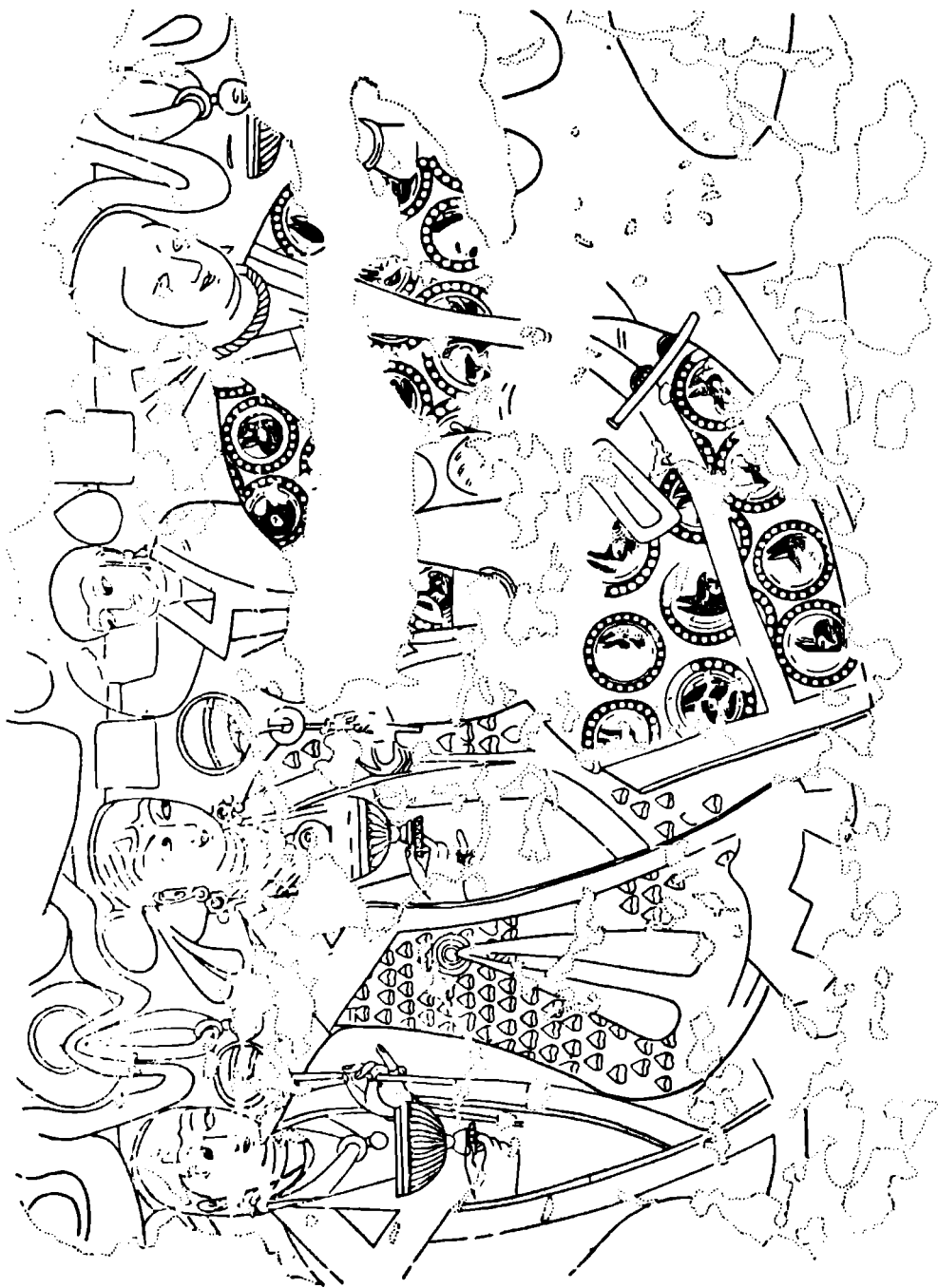


Fig. 28. Balalyk-tepe. Richly clad personages on the same panel as fig. 27

In spite of some Buddhist elements, neither the wall-paintings nor the objects found in Balalyk-tepe seem to be connected with Buddhism.

Buried among pottery was a small medallion of greenish glass, mounted in silver with a ring at the top, so that it could be worn on a thin chain. In spite of its damaged condition it clearly shows a woman suckling a

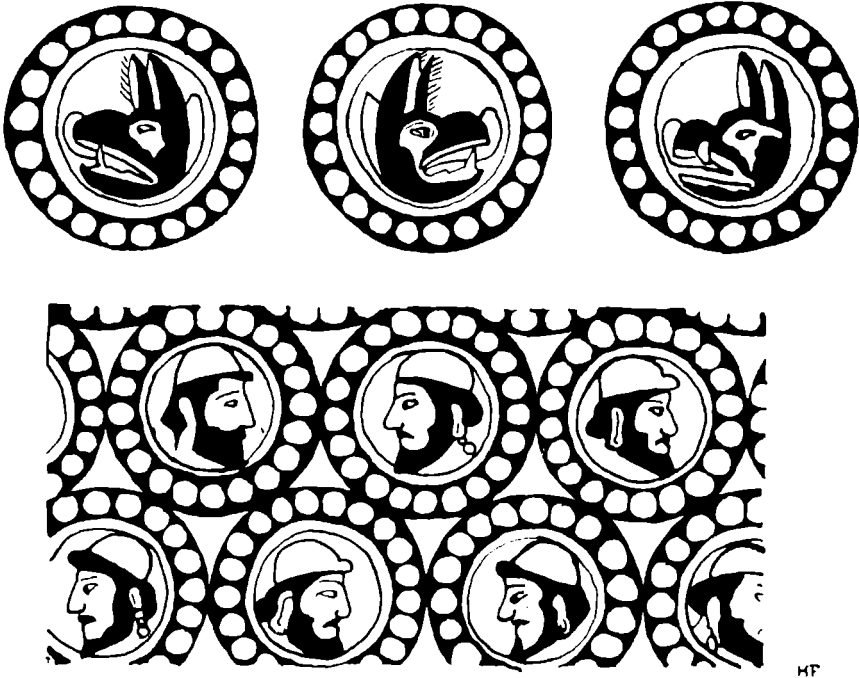


Fig. 29. (i) Balalyk-tepe. Textile designs (continued overleaf)

child. This is a well-known representation of an ancient religious theme (Albaum 1960a). (For a reference to the "Khorezmian Madonna" of Koy-Krylgan-Kala see page 96). Glass objects have been found in several other places in Uzbekistan, including Zang-tepe, Varakhsha and the nearby Liyavandak (Amindzhanova 1961, 1962).

### B. *The Bukhara oasis and Varakhsha*

The Bukhara oasis and particularly the adjoining, formerly irrigated, western region are, with the possible exception of Varakhsha, still little explored and their chronology is uncertain.



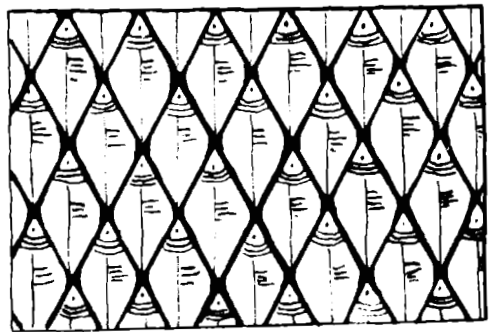
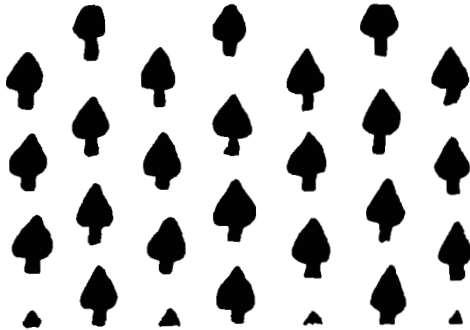
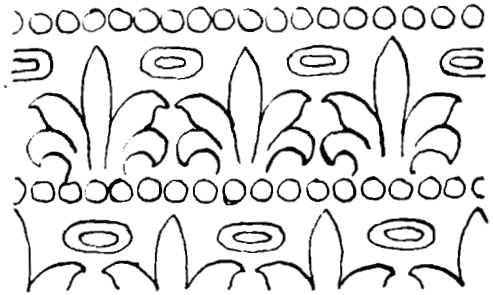
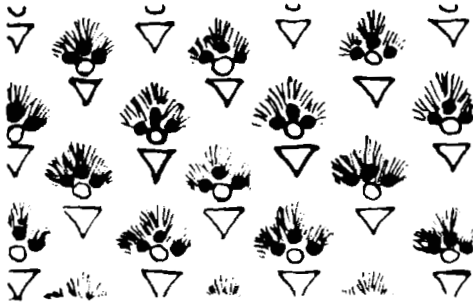
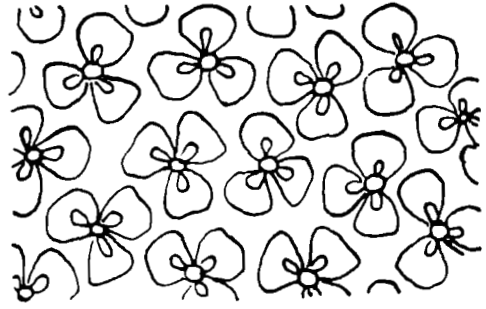
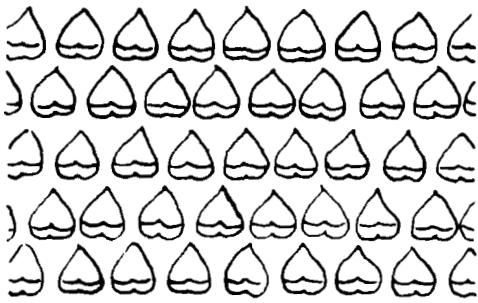


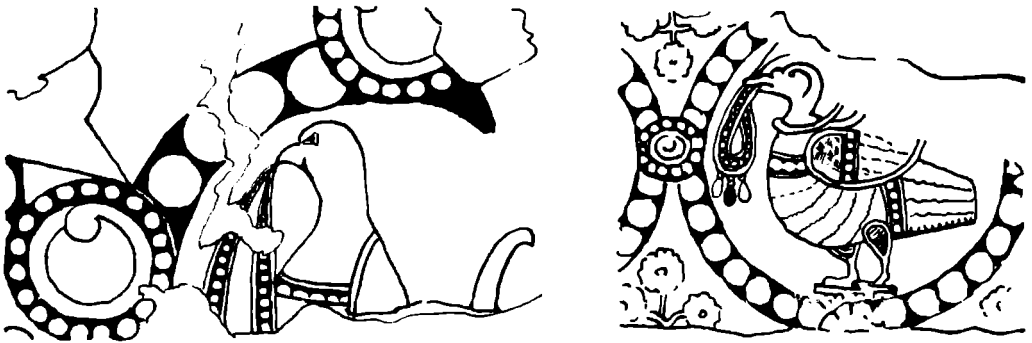
Fig. 20. (ii) Balalyk-tepe. Textile designs (concluded)

East of Bukhara: tombs of the 2nd or 1st century B.C. explored by Obelchenko near Kuyu-Mazar (NE of Bukhara) and at Liyavandak (17 km SE of Kuyu-Mazar) (Obelchenko 1956, 1959, 1961) contained quantities of pottery, jewelry with Hellenistic features, glass beads, and a small golden plaque (possibly 2nd century B.C.) with a head, probably that of Artemis, on it. Obelchenko's conclusions represent an important but controversial contribution to the study of tombs and funeral rites throughout Soviet Central Asia and of the movements of the tribes connected with the fall of Graeco-Bactria. In his opinion the dolichocephalic skulls, the shape of the tombs and the pottery they contained, show Sarmatian features. Consequently he believes that the usual theory with regard to the movement from the remote East of the Yue-chi tribes responsible for the fall of Graeco-Bactria may have to be reconsidered in favour of Scythians and Sarmatians, originating from a territory lying between the Altay and the Ural, thus including the north-east of Kazakhstan (Obelchenko 1961).

West of Bukhara: in addition to Varakhsha, famous for its wall-paintings and stucco work (Shishkin 1963), mention must be made of the regions of Makhan-Darya and Zaman-Baba explored by Gulyamov (G. 1956), and of Bash-tepe and Ayak-tepe explored by Shishkin and Zhukov (Zh. 1956). The finds at Ayak-tepe included, besides remains of the Bronze Age, strange female figurines in terracotta of the early Kushan period (Shishkin 1963). These clumsy and disproportionate figurines, moulded from matrices, suggest mass-production of symbolic representations.

The ruins of Varakhsha, explored by V. Shishkin, mainly after the first world war, consist of a huge castle, a fortress with adjoining dwellings, and the city (Shishkin 1963). Varakhsha existed much longer than Balalyk-tepe and as a result of repeated reconstructions and the ensuing existence of various layers, the chronology of this late Kushan place is complex and occasionally conjectural. In any case it would appear that the castle and the fortress were built not earlier than the 5th century A.D., and stood until the 10th or 11th century. The lower layers of the city, were however, more ancient and dated from the Kushan period. They contained numerous fragments of pottery, among which were strange terracotta figurines, probably of Anahita, goddess of fertility, as well as many others representing men, women and animals.

According to Shishkin the wall-paintings of the castle can hardly have been executed before its reconstruction, which took place in the 6th century. They appear, however, to have existed till after the Arab invasion. They are not only remarkable from an artistic point of view, but afford, like those of Balalyk-tepe and Afrasiab, invaluable material for the study of the ancient history and civilization of this region in the late pre-Islamic period. The colours have remained remarkably fresh, but most of the paintings have apparently been damaged deliberately: a systematic iconoclasm during the 8th century aimed at the destruction of the human faces (Shishkin 1963).



Varakhsha

Kizyl

Fig. 30. Varakhsha and Kizyl. Analogy between textile designs

The theme of the Varakhsha paintings is rather different from those in Balalyk-tepe: a series not of banquets but one consisting largely of representations complete in themselves, of hunting scenes and of monsters attacking mounted elephants. The fragments of another badly damaged painting show what was probably a scene of worship: several persons seated next to a large and richly decorated censer tended by a priest.

Some of the designs on the textiles depicted in the paintings clearly show similarities with those found in other regions, such as Pendzhikent. This is illustrated in fig. 30, where a fragment from one of the panels of Varakhsha is reproduced side by side with a strikingly similar design from Chinese Turkestan (Kizyl, Russian Turkestan expedition 1909-10).

As at Pendzhikent, Balalyk-tepe and Afrasiab, the Varakhsha paintings, at least those which have survived, do not seem to belong to one

particular creed. Although reminiscent of India, Buddhist elements appear to be absent and with one exception the paintings may be considered as secular.

The stucco work, which largely belongs to the Islamic period, is a characteristic feature of the artistic activity of Varakhsha. Though it is mostly ornamental, it also includes, at least in the early part of the Islamic period, animal and some human heads (Shishkin 1963).

### C. *The Samarkand region: Afrasiab, Tali-Barzu, Biya-Naiman*

Situated on the Zeravshan, Samarkand is generally believed to be the same as the ancient Greek Marakanda, a view which was recently contested by M. Pachos (P. 1967). One of his arguments is that the site has produced no Graeco-Bactrian coins and, in general, no coins prior to the 4th-5th century A.D. For the time being the question remains undecided.

Afrasiab, the oldest part of Samarkand, is supposed to have been founded in the 6th or 5th century B.C. (Shishkin 1966). It was severely damaged in 329 B.C. by Alexander's armies. At the beginning of our era it was a well-known centre of trade with Iran, India, the Central Asian steppes and even China. After the fall of the Kushan Empire, it suffered serious havoc, but it recovered to reach a remarkable level of development, especially in the 5th to 7th A.D. centuries under the Ephthalites and subsequently under the rule of Turkic invaders. The famous Chinese monk Hiuan-Tsang, whom we have come across of in several previous chapters, and who visited the place in the 7th century, has left a vivid record of the high civilization of this splendid city. After various ups and downs it was in the 10th and 11th centuries a famous Islamic centre of arts and sciences.

Afrasiab was once more destroyed in 1220 by the Mongol hordes under Chinghis Khan, the irrigation system was wrecked and the population was enslaved. Since then it has remained a vast area of ruins, encompassed by the growing Samarkand, especially the magnificent town built by Timur Lenk and his successors from the 14th century onwards.

Archaeological explorations which started as far back as the 1880's, have since 1958 been conducted by Shishkin (Sh. 1961-63, 1969). With the exception of some wall-paintings discovered in 1913 which rapidly disintegrated, the discoveries were until recently confined to large

quantities of pottery and of terracotta figurines, mostly female, representing local and Hellenistic deities. They thus afford a striking example of the coexistence of different cults (Yakubovskiy 1955; see also V. Masson 1966a, Trever 1934, 1955, Meshkeris 1962, Zaslavskaya 1959).

Among the ruins of an ancient dwelling house in the centre of Afrasiab, Shishkin made a startling discovery in the spring of 1965: some of the walls were entirely covered with paintings, of which only the lower part, some two metres high, had survived (Shishkin 1966a, b). But even this fragmentary find represents a valuable addition to the artistic treasury formed by Balalyk-tepe, Varakhsha, Khalchayan, Pendzhikent and others. The bewildering Afrasiab paintings belong to the 7th century A.D., when the cultural activity of the city had reached its peak. There is, among others, a colourful and resplendent procession, a suite of magnificently clad men and women, preceded by a richly adorned elephant. This pageant is accompanied by numerous horses, camels, and huge white birds.

On these paintings Sogdian inscriptions, which were deciphered by Livshitz (Livshitz 1965) helped to interpret the scenes, and proved to be of outstanding interest: they appear to represent the bridal procession of a princess, seated under a baldachin on a white elephant (pl. XLVII) and coming from the Chaganiyan region (Surkhan-Darya) to Samarkand in order to be married to a Samarkand ruler. The followers are maids of honour on horseback, two envoys on camels, holding sceptres denoting their mission (pls. XLVIII and XLIX), attendants, soldiers, and envoys carrying gifts (pl. L). This fully accounts for the fascinating splendour of the dresses and ornaments.

The subjects of the Afrasiab paintings are secular, as in the case of Varakhsha, Balalyk-tepe, Pendzhikent, etc. The designs of the garments are similarly reminiscent of those represented in these places (figs. 27-30).

The explorations are not yet finished, but owing to Shishkin's sudden death no detailed account of these finds is available so far. Some information is, however, provided in a short pamphlet and a few articles (Shishkin 1966; Varkhotova & Shishkina 1966). It is, however, possible to state at this early stage, that the paintings are of exceptional interest and invaluable for further investigation of the pre-Islamic Sogdian civilization which was very little known until recently.

According to advance information published by M. Pachos, two Zoroastrian ossuaries discovered in 1967 at the ancient necropolis of Afrasiab (roughly 5th-8th century A.D.), show the Christian symbol of a cross (Pachos 1968).

The typical Sogdian town of Tali-Barzu with its castle, situated 6 km south of Samarkand, was explored from 1936 to 1940 by Grigoryev (Gr. 1946). Contrary to a much earlier date once suggested by him, it is now usually believed that the site was founded towards the 2nd or 3rd century A.D. (Staviskiy 1966, 1967a).

In the 6th-7th c. A.D. Tali-Barzu, like several other Sogdian places, fell under the rule of the Turks, followed by that of the Chinese (Grigoryev 1946). The well-irrigated region had a highly developed civilization, but was politically decentralized with a number of feudal castles. Buddhism was on the decline and Mazdaism appears to have been wide-spread. The site was destroyed by the Arabs in the first half of the 8th century.

The finds in Tali-Barzu largely consist of clay figurines that reflect not only the variety of forms of worship, but also their changes (Grigoryev 1946): starting with Mazdaism, the figurines which at first represented Anahita, were in the 3rd-2nd century B.C. increasingly connected with the Greek pantheon and even dynastic worship. Some are of the early Kushan period, while many others, which also include animals (camels, monkeys, etc.), are believed to be no older than the 5th or 6th century A.D. (Meshkeris 1962).

The hundreds of very elaborate terracotta fragments belonging to ossuaries found at Biya-Naïman (on the Zeravshan, near Katta-Kurgan) are strange and attractive; they were discovered by B. Kastalskiy as far back as 1908 (Staviskiy 1961). These reliefs which are in an excellent state of preservation represent human figures and are adorned with architectural and floral motifs (fig. 31). They are attributed very roughly to the 6th century A.D. Though they were probably intended for religious purposes, the question as to whether they belong to Zoroastrianism, Mithraism or some local cult, remains open. As the few publications on this site are neither explicit nor readily available, Staviskiy's article on this collection in the Hermitage Museum is all the more valuable. As a result of the recent progress in archaeological exploration it may perhaps be possible to revert to these finds, the iconographical value of which is unmistakable.

## IV. CONCLUDING REMARKS

While the chapter on Khorezm dealt mainly with the sequence of periods from the Neolithic Age to that of Kushan rule, in the present chapter the accent lies for ancient times on the Palaeolithic Age; the archaeology of later, pre-Islamic Uzbekistan is mostly concerned with the Kushan and post-Kushan periods.

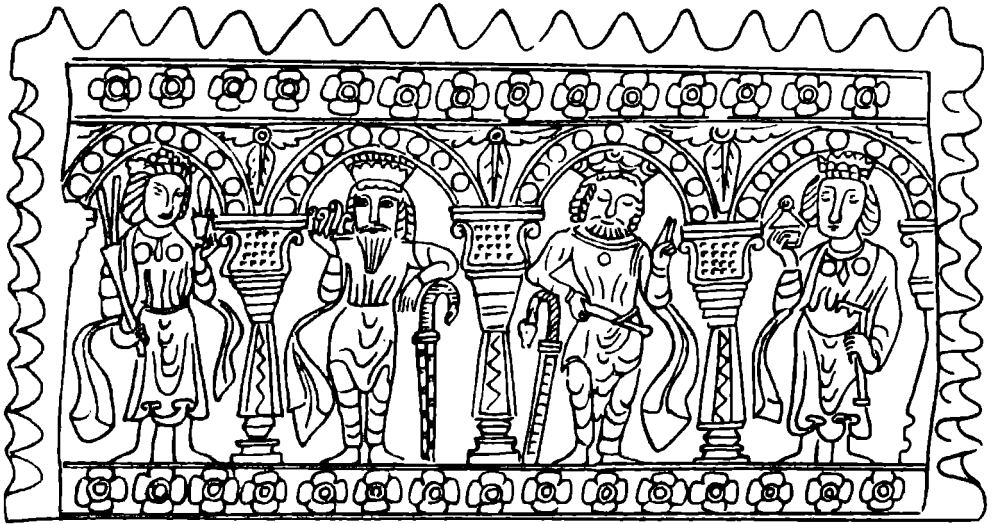


Fig. 31. Biya-Naiman ossuary. Reconstruction from fragments

Until recently Balalyk-tepe, Varakhsha and Pendzhikent (the latter in Tadzhikistan) formed a wonderful and unexpected triptych of wall-paintings belonging to very much the same period and region. A fourth panel has now to be added to it, viz. the recently discovered Afrasiab paintings. There are, moreover, Khalchayan and Kara-tepe, but only a few fragments of their paintings have survived. It is unfortunately not possible to give a satisfactory analysis of these artistic finds here and of their relationships with each other and with the art of other countries. It is most gratifying, however, that the Soviet archaeologists responsible for the excavations took such pains over their descriptions and over their study both of the paintings themselves as well as of their place in the civilization of Asia.

The inscriptions in various languages and scripts found in Kara-tepe, Varakhsha, Zang-tepe, and lately in Afrasiab, represent most valuable archaeological material additional to that dealt with in the previous chapters (for instance Mount Mugh and Khorezm). They are being studied in conjunction with corresponding inscriptions from Surkh Kotal and many other places, including Chinese Turkestan.

The clay figurines discovered at numerous sites throughout the region, such as Zar-tepe, Balalyk-tepe, Khairabad-tepe, Varakhsha, Afrasiab, Tali-Barzu, Termez, Khalchayan, Ayak-tepe, as well as in Khorezm, must not be disregarded either. (Many figurines were also found in Turkmenistan, which will be dealt with in the next chapter). From an artistic point of view they cannot compare with other achievements in this field, but they are invaluable as modest but perennial tokens of the history, the mythology, the popular art and the changing beliefs of the common people. Thus they represent a cross-section of the variegated pattern of civilizations more faithfully than the works of art of a more official character.



## CHAPTER SEVEN

# TURKMENISTAN

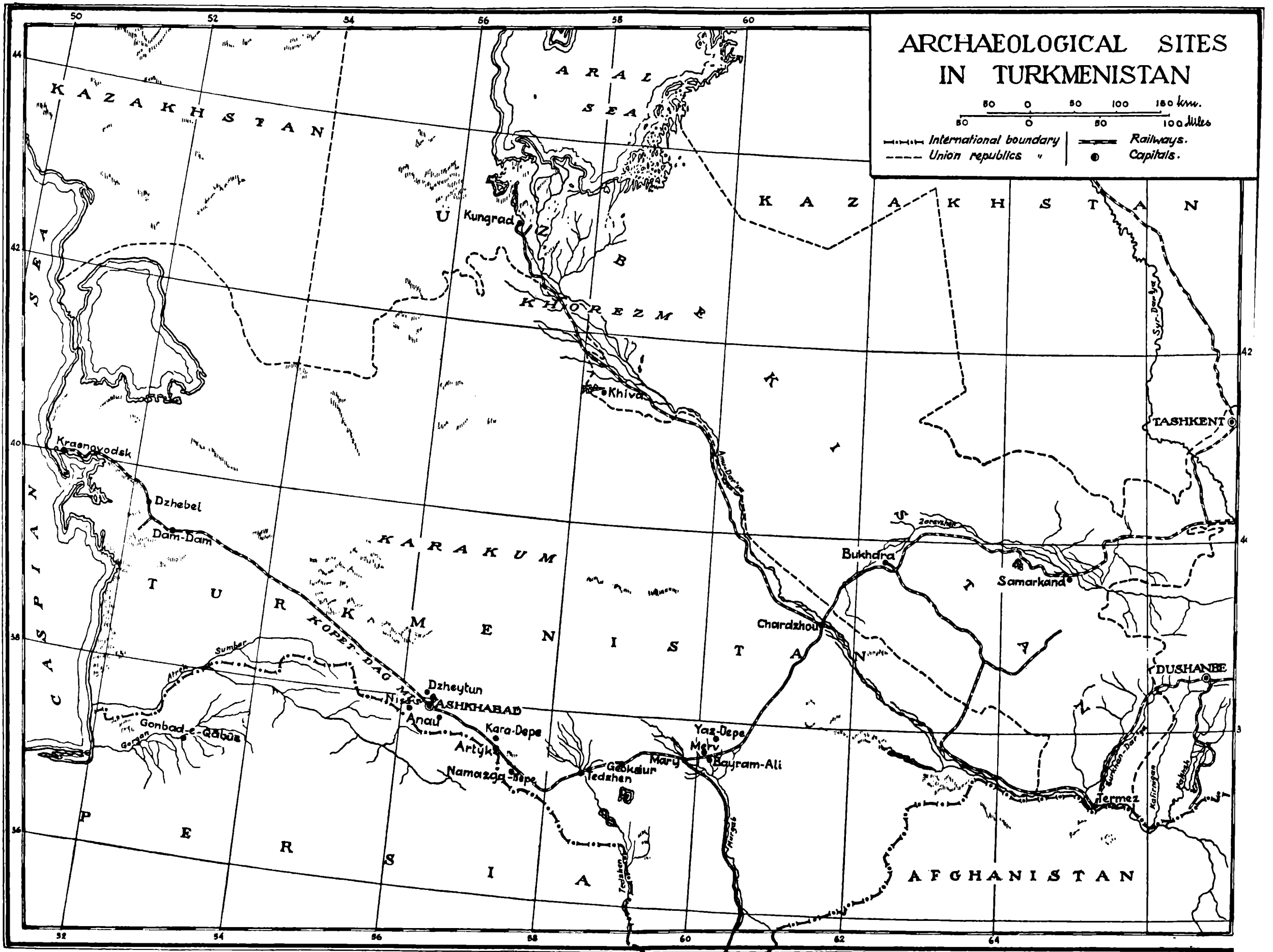
### I. GENERAL

Turkmenistan, or Turkmenia, the southernmost Soviet Republic in Asia, is also the most barren: only about one per cent of its 488,000 km<sup>2</sup> (188,000 square miles) is irrigated and cultivated. The Karakum desert alone covers 70 per cent of its area. Its population of 1.8 million lives as a rule in oases; the language is mostly Turkic.

The capital, Ashkhabad, which has some 200,000 inhabitants, lies on the railway line running from Bukhara via Mary, along the Kopet-Dag mountain range to Krasnovodsk on the Caspian Sea. The strip of irrigated land between the Kopet-Dag and the Karakum desert is usually not more than 10-12 km wide; this corridor is a remarkable archaeological area covering a period of well over 5000 years (maps 18 Turkmenistan and 19 Kopet-Dag).

On account of the desert conditions of the country and its most unfavourable climate, practically no archaeological work can be undertaken except by properly organized expeditions. In addition to the archaeological work done by the Turkmen IIAE (Berdyiev 1967), explorations on a vast scale were made from 1946 by M. E. Masson and, more recently, by V. Masson Jr, assisted by a large staff. The fourteen huge and elaborate volumes of the YUTAKE expedition represent a stupendous scholarly record of exploration and interpretation; they are, however, not readily available and in any case not easy to use. As for the "Izvestiya" of the Turkmen Academy of Sciences, or its "Trudy", which also contain important contributions, they do not appear to have a wide circulation, even within the USSR. The numerous writings published in recent years by V. Masson are, therefore, invaluable, and synopses like that by Khlopin and Sarianidi help the scholar to get his bearings.

From the archaeological point of view the most remarkable periods are, in the case of Turkmenia: 1) the Stone and Bronze Ages, including the



initial stages of settled farming culture (from the Caspian Sea to and along the Kopet-Dag range) and 2) the more recent Parthian period dating from about the beginning of our era. In the case of the first group, a new world is now emerging from the sands, but in spite of its interest and importance, no more than a synopsis can be given in the present book. These 7000-year-old civilizations, now dormant under thick layers of shifting sands, were by no means as dormant in the past as one might suppose.

It is not a little amazing to find in this narrow stretch of land such an extraordinary concatenation of diverse cultures and people. To a modern scholar the history and proto-history of this region appear, in retrospect, to have been in continuous flow, even if major events were separated from each other by many centuries. The explorations are, moreover, in full swing and the hitherto blank maps are being filled up rapidly.

The more elaborate section on Parthia and the relevant bibliography may be of particular interest to the Western reader, especially in view of the scarcity of existing material and the still disputed history of the Parthian Empire.

## II. STONE, COPPER AND BRONZE AGES

The most ancient finds of the Stone Age in Turkmenia are those made by A. Okladnikov in the waterless region of Krasnovodsk on the eastern shore of the Caspian Sea (Okladnikov 1953, 1956, 1966). The Dam-Dam Chesme cave and Dzhebel (SE of Krasnovodsk) belong mostly to the Mesolithic and the Neolithic Ages (Markov 1966). The radio-carbon test for Dzhebel gave  $6030 \pm 240$  (Bibl. ONE Ranov 1968b).

Before these explorations, the archaeology of Turkmenia was known in the West only from the American expedition of 1904 in the Anau region under R. Pumpelly (P. 1908). As the result of recent Soviet investigations, especially since 1947 (YUTAKE expedition), it became obvious, however, that Anau was merely a minor site compared with some other sites in the same region (V. Masson 1959b). From the very outset, V. Bartold, an outstanding Russian scholar, passed severe judgment on the work of the Pumpelly mission; it was likewise strongly criticised by numerous Soviet scholars, some of whom may not have been quite free from prejudice.

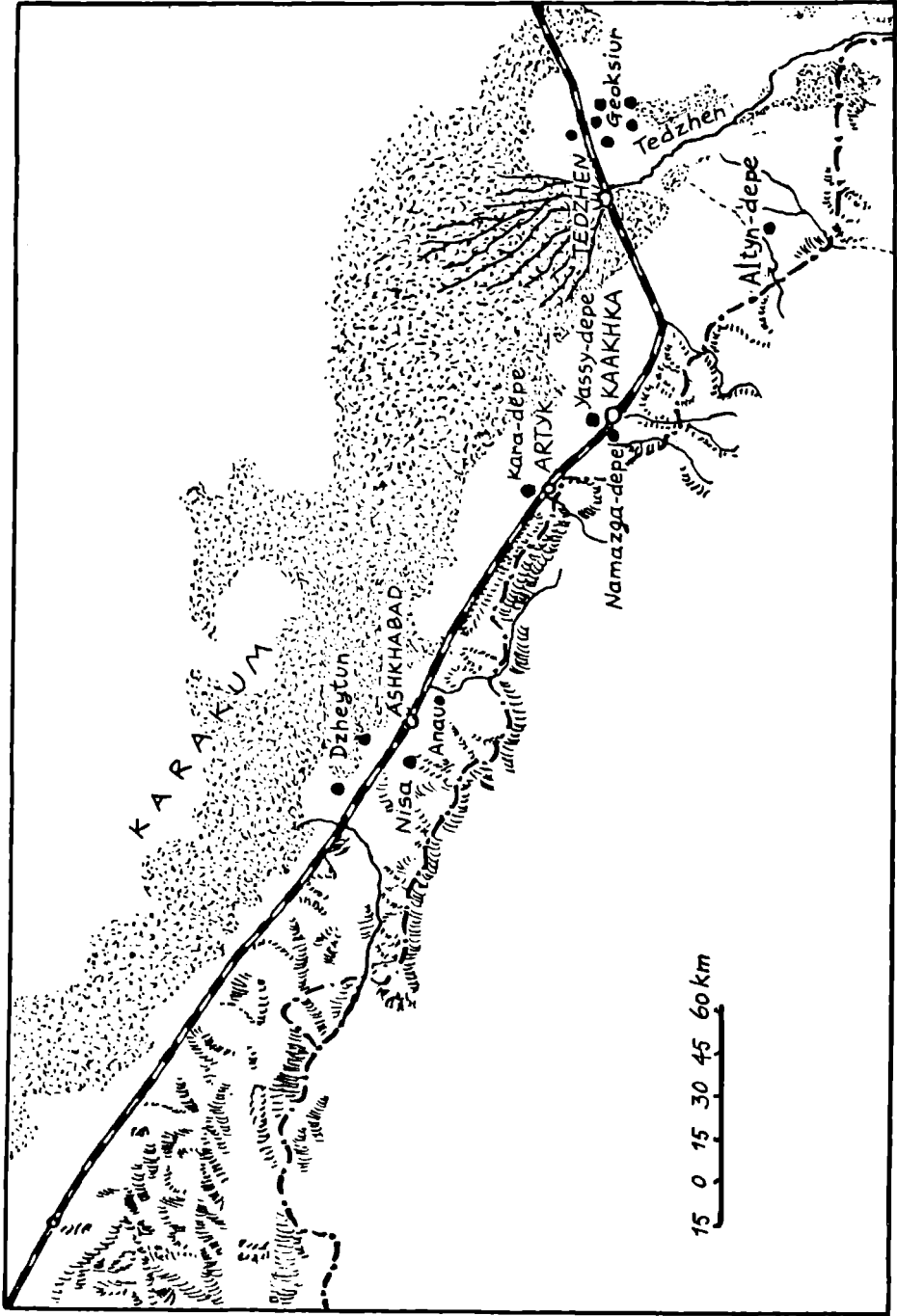
Pumpelly's work—carried out 60 years ago—is in any case at present largely obsolete; it may have been deficient and below modern standards, but it remains nevertheless a remarkable pioneering achievement which paved the road for further explorations.

Increasing attention is being paid by Soviet scholars to the absolute and the relative chronologies, and Pumpelly's initial Anau classification of four layers was replaced in 1952 by Kuftin's "Namazga classification" of six layers and applied to other sites as well (V. Masson 1956, 1960).

In spite of the recently introduced radio-carbon tests the chronology of the ancient sites of Turkmenia still presents problems. Generally speaking it may be said that the "Namazga period" probably extended from the end of the 5th well into the 2nd millennium B.C.

The neolithic site of Dzheyton, situated 30 km NNW of Ashkhabad, on the edge of the Karakum desert (V. Masson 1960, 1962d), is the earliest "crop-raising" settlement in South Turkmenistan explored by Soviet scholars, at first by the regional archaeologist A. Marushchenko, and since 1952 by Kuftin, who had joined the YUTAKE. This site, which became settled towards 5000 B.C., if not before, due to the establishment there of the more ancient pre-Caspian tribes (Sarianidi 1966b), is moreover said to represent not only the most ancient "crop-raising" culture of Soviet Central Asia, but to rank among the earliest farming settlements anywhere (V. Masson 1959b, 1962e). The absence of the indispensable elements made, however, a radio-carbon analysis in this case impossible. The characteristic finds of this neolithic site consist of crude, hand-made, unpainted pottery and primitive clay figurines, which, it seems, present analogies with similar finds in northern Mesopotamia, north-east Iran and Afghanistan (V. Masson 1964a,b, 1966b).

About the 5th millennium the descendants of the Dzheyton farmers and hunters moved in their turn southwards along the Kopet-Dag corridor, settled in the foothills of the Kopet-Dag and turned to agriculture and cattle breeding. The 4th millennium witnessed the introduction of copper objects coexisting with flint tools; this was the Chalcolithic (or Aeneolithic) period, a transitional phase between the Neolithic and the Bronze Age (V. Masson 1959b). In view of the intermingling of peoples and cultures which took place in the region under review, it is difficult,



Map 19. Turkmenistan. Kopet-Dag

in a short summary like this, to deal with the various sites in a logical order (map 19).

Reference may be made, at this point, to a recently published synopsis on the "metal industry" of Soviet Central Asia—practically South Turkmenistan—during the Chalcolithic period and the Bronze Age (Kuzmina 1966). The chronological features of this wide synopsis which ignores existing administrative or political boundaries, are given below in a condensed form.

Period I: *end of the 5th to the middle of the 3rd millennium*

- A. End of the 5th-4th millennium: it comprises particularly Dzheyntun, Anau IA, Namazga-depe<sup>1</sup> I and II, Monzhukly-depe, Kara-depe, Dashlydzhi-depe, Yalangach, Geoksiur, etc. This period which includes the Kopet-Dag culture of farming and cattle raising, is characterized by the first ornaments in gold, copper and bronze; it is said to correspond roughly to the Iranian Sialk I-III.
- B. End of the 4th to the middle of the 3rd millennium: it comprises mainly Namazga III, Kara-depe and Geoksiur. Although Iran remains the centre of gravity, there are also analogies with other parts of Western Asia.

Period II: *mid-3rd millennium to mid-2nd millennium*

Metal production was spreading to the whole of Soviet Central Asia. Copper foundries in Turkmenia. Main sites and cultures, among which Anau, Altyn-depe, Khapuz-depe, Namazga III, IV, etc. Relations with north-east Iran and western Asia, Mesopotamia, Mundigak, Harappa.

Period III: *second half of the 2nd millennium to the 1st quarter of the 1st millennium*

- A. Early Bronze Age: roughly 15th-13th century B.C.  
 B. Late Bronze Age: roughly 12th-8th century B.C.

This period was characterized by bronze foundries throughout South Turkmenia and in many other regions of the present Soviet Central Asia. Its culture was mainly Namazga VI, the end of which witnessed the advance of steppe tribes and the so-called barbarian occupation.

<sup>1</sup> The Turkic spelling "depe" stands for "tepe" used in the other chapters.

The above synopsis may be usefully complemented by more detailed comments on the important sites, some of which are still largely unexplored (Sarianidi 1967b).

If Anau (12 km SE of Ashkhabad) is enumerated here first, it is merely because it was the previously alleged centre of the "Anau culture". Discovered as the result of Pumpelly's explorations, it existed roughly during the 4th millennium B.C. (V. Masson 1956, 1959b, 1962c). Its abundant hand-made pottery shows brown-black geometric designs on red or greenish ground, which were replaced in the 2nd half of the 4th millennium by bichrome designs on a reddish-yellow ground. More recent layers—Anau II—showed more refined wheel-made pottery.

The vast Namazga-depe, which dethroned Anau as "archaeological capital", is situated 6 km SW of Kaakhka, south of Artyk (V. Masson 1959b). Discovered in 1917, it was first explored in 1930 by Marushchenko, then by Kuftin (K. 1956), and more recently by V. Masson (V.M. 1966a). It was probably settled in the 4th millennium—the Chalcolithic period (V. Masson 1959b)—and became a vast cultural centre during the Bronze Age. The six layers named by Kuftin Namazga I-VI, which were 34 metres thick, represent a remarkable sequence of cultures (Ganjalın 1956; Masson & Masson 1959; V. Masson 1956, 1962c).<sup>1</sup>

The rich Namazga pottery exhibits many animal motifs; the more recent and better explored layers, which presumably date from the second half of the 3rd millennium, also contained many terracotta figurines (fig. 32). The hand-made pottery of the 3rd millennium, which still showed painted geometric patterns (Shchetenko 1964), was almost entirely replaced in the 2nd millennium by undecorated pottery made on the wheel (V. Masson 1959b).

Some sites of Namazga V ceased to exist in the second half of the 2nd millennium, possibly owing to shortage of water (V. Masson 1956i).

The exploration of Kara-depe (near Namazga-depe and next to the Artyk station) was begun in 1952 by Kuftin (K. 1956) and was continued by V. Masson. This chalcolithic site was occupied from the beginning of

<sup>1</sup> Rough and tentative Namazga chronology (V. MASSON 1956):

I-II 4th millennium  
 III-IV 3rd millennium  
 V 1st half of 2nd millennium  
 VI 2nd half of 2nd millennium

the 4th millennium and may have been among the settlements founded by Dzheytun peoples moving further through the Kopet-Dag corridor towards the east (Sarianidi 1966b). Like Namazga-depe, it comprises several layers, Namazga I, II and III. According to a radio-carbon test made in 1956 the age of the last layer was 2750 B.C.  $\pm$  220 (Masson & Masson 1959; V. Masson 1959b, 1962c, d).

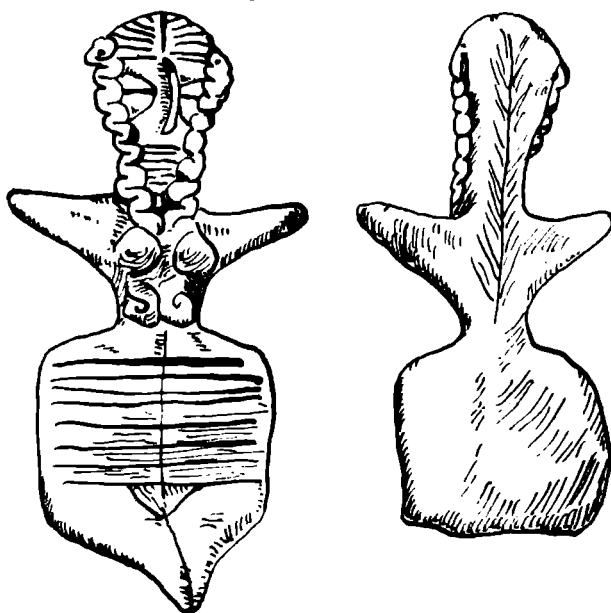


Fig. 32. Namazga-depe. Female figurine, front and back

The Kara-depe site contained numerous funeral objects, figurines—mostly female—and masses of hand-made, painted pottery, differing in character according to the respective layers. The geometric designs of the early period were gradually replaced by human, and above all by animal representations, which were a feature of Namazga III (Kuftin 1956; V. Masson 1960, 1962d; fig. 33; pls. LI, LII). The types of pottery are said to present analogies with objects from North Iran (Kuftin, V. Masson; fig. 34). Similarly, changes in burial rites and anthropological characteristics—the latter are possibly not entirely convincing—suggest an influx from Northern Iran. Kara-depe was abandoned towards the middle of the 3rd millennium (Sarianidi 1966b).



Further to the east, 18 km beyond the Tedzhen river—the lower course of the Afghan Hari-rud—there is, in the Geoksiur oasis, a group of nine mounds separated from each other by 5-8 km. These chalcolithic sites of the 4th millennium—mostly Namazga I and early Namazga II—

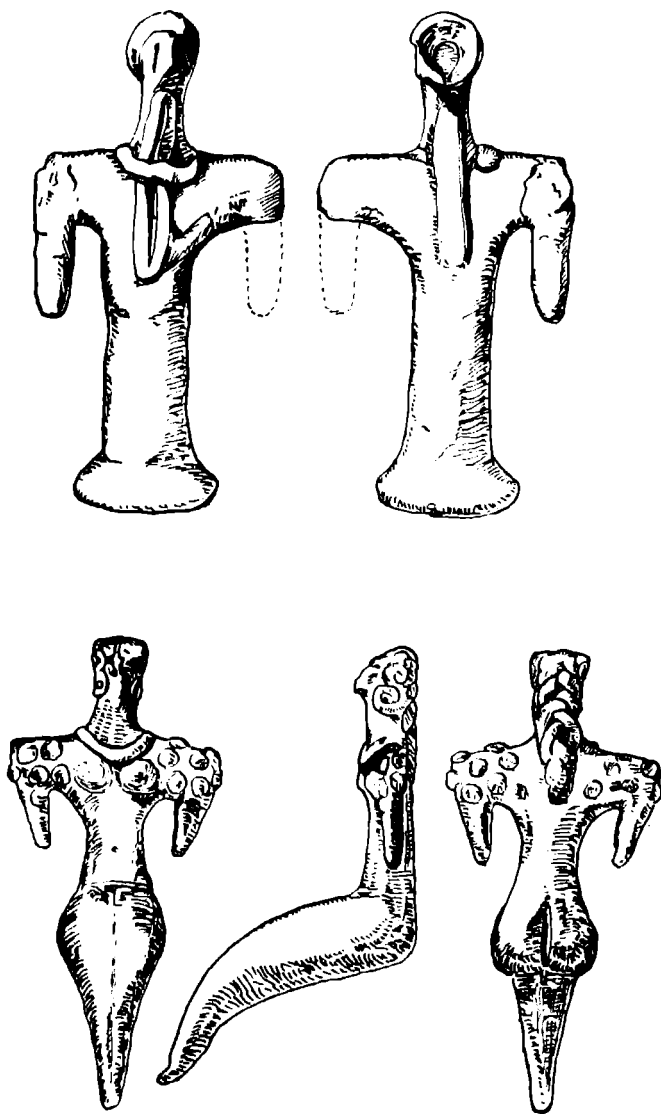


Fig. 33. Kara-depe figurines

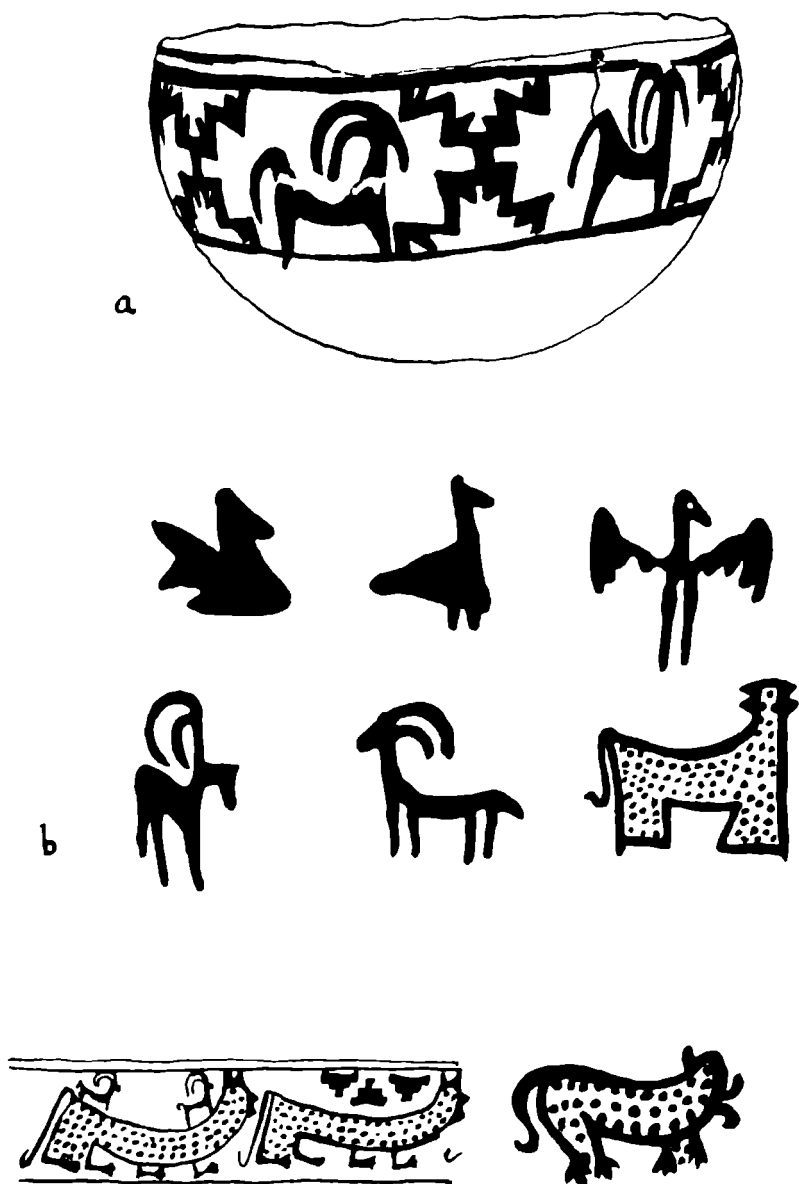


Fig. 34. Kara-depe pottery (roughly 3000 B.C.)

a) earthenware vessel; b) designs on pottery: mountain goats, birds, panthers

met their end when the Tedzhen river changed its course to the west, causing the sites to be abandoned (Sarianidi 1961, 1966b; Khlopin 1960, 1969; see also V. Masson 1956, 1959b, 1960; Lisitzyna 1963-65). (The problem

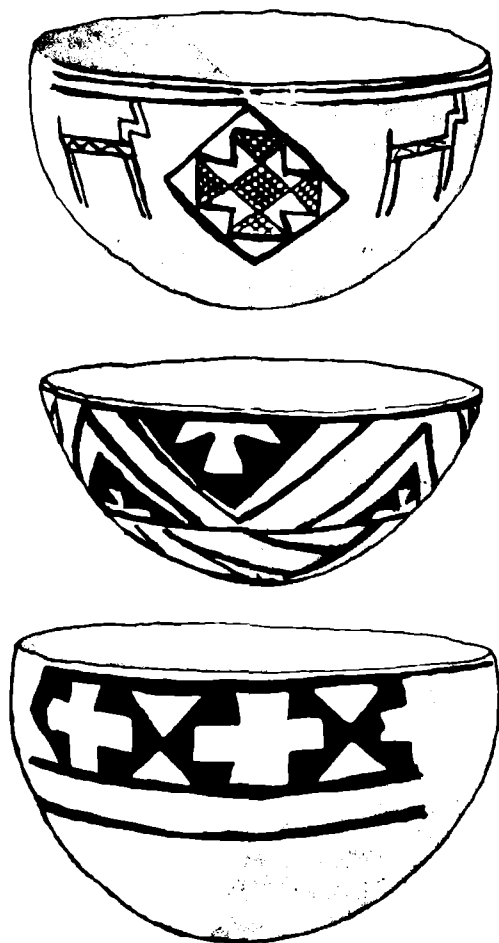


Fig. 35. Geoksiur pottery (end of the 4th millennium)

of the desiccation of the whole region is treated more fully at the end of this section).

Numerous female figurines symbolizing fertility were found at this site; the abundant pottery found in Geoksiur ranges from the earlier undecorated to a subsequent richly painted ware (fig. 35; Sarianidi 1966b).

While the Anau tombs were, as a rule, individual structures placed under the floors of the dwellings, the Geoksiur burial chambers were destined for more than one corpse (V. Masson 1959b, 1964c; Khlopin 1960; Sarianidi 1960, 1965, 1966a,b,c, 1967b).

In 1965 many more collective graves of the Chalcolithic period were found in Geoksiur with, next to them, small shrines and altars (Sarianidi 1966c, 1967b). (pls. LIII, LIV, LV). The numerous skulls are likely to facilitate further work by anthropologists, who are inclined to believe in an immigration from Iran to South Turkmenia (Trofimova & Ginzburg 1961). V. Masson who bases his opinion on the discoveries made by Sarianidi since 1957 at Kara-depe, favours the view that the collective graves represent a new feature, possibly family tombs, due to the influx of Iranian tribes in the first half of the 3rd millennium, an event which is also suggested by finds in Baluchistan and Mundigak in Afghanistan (V. Masson 1964c; Bibl. ONE Casal 1961).

Similar, and in part more recent burial chambers were found in 1965 at Altyn-depe, west of the Tedzhen river (late 3rd millennium down to the Bronze Age) (V. Masson 1966a,c, 1967a,b; Sarianidi 1966c, 1967; Ganialin 1967). Though this site, which is likely to be of paramount importance, is separated from Dzheyntun both in time and distance—2000 years if not more and some 300 km (Sarianidi 1966b)—it nevertheless presents obvious Dzheyntun features. Its most ancient pottery which varies from layer to layer is generally decorated with geometric designs, but more recent work of the Namazga V period shows representations of animals (V. Masson 1966c, 1967).

Some of the Altyn-depe figurines are very much the same as those shown in fig. 32 from Namazga-depe (Ganialin 1959; pls. LVI, LVII); in several cases they display elements of what may be a pictographic script. Among other objects found there are necklaces and stone vessels (pls. LVIII-LIX).

While the finds of the Chalcolithic period as a rule point to contacts with Iran and Mesopotamia, the Altyn-depe figurines and pottery appear to display features which may also be connected with India and occasionally even more precisely with Harappa (V. Masson 1966c; Shchetenko 1968).

More recent explorations by V. Masson at Altyn-depe led to an important discovery: in the layers of the beginning of the 2nd millennium

B.C. he found seals in bronze, silver and clay, with animal designs, among which three-headed animals (pl. LX). He suggests that in this case the finds are different from those of Harappa and should rather be related to those of Sumer and Elam (Masson 1967a,b; Sarianidi 1967b). According to advance information available, Masson also discovered in 1967 a huge building, apparently part of an aggregate of shrines and other buildings. These finds which appear to belong likewise to the Bronze Age (Namazga V, beginning of the 2nd millennium B.C.), may be connected with similar "ensembles" found in Mesopotamia and Mundigak. The results of these explorations may thus augur well for further excavations at Altyn-depe.

Two small neolithic sites next to Altyn-depe, Chagyly-depe and Monzhukly-depe, decidedly remind one of Dzheyntun with their type of pottery and its designs (Sarianidi 1966b; V. Masson 1966b; Berdyiev 1966, 1967). The C-14 data give for Chagyly the year 5036 B.C.  $\pm 110$  (V. Masson 1966b), but another test gave 7000 B.C.  $\pm 110$  (Bibl. ONE Ranov 1968b).

It would be tempting to try to ascertain the general evolution—if any—in the style of the figurines produced in the various sites at different periods. In view of the variety of types and the intermingling of cultures, broad conclusions should, however, be based on a thorough and wide analysis, not necessarily confined to Turkmenistan. It may be tentatively stated that while the oldest figurines tend to be realistic, the more recent ones, usually goddesses in terracotta or stone, show a gradual change from steatopygeous types, evidently connected with a fertility cult (Masson & Masson 1959), to seated females with a narrow waist and outstretched legs and, in later periods, to increasingly conventional, unrealistic symbols of women with broad hips and emphasized sexual attributes (Masson & Masson 1959; see also Khlopin 1960; Sarianidi 1960, 1967b; V. Masson 1959b, 1960 (iii)). There was, however, a prolonged hiatus in ancient Turkmenia between the figurines of the Bronze Age and those produced many centuries later. Their disappearance during the 1st millennium B.C. and their subsequent reappearance, may have been due to the introduction of new forms of worship, such as Zoroastrianism (V. Masson 1959a; Sarianidi 1967b).

Vast deserts separated the Kopet-Dag foothills and the Geoksiur oases from the Murgab valley (Margiana), where a belated civilization

developed in the form of a particular variant of the Namazga VI culture (late Bronze Age) (V. Masson 1959a). The most important archaeological site of this region was the fortified Yaz-depe (NE of Merv), the chronology of which has been thoroughly studied by Masson (roughly 8th-4th century B.C.). The continuity of its cultures as witnessed by clear-cut layers helped him in his attempt to compare the chronology of Margiana with those of Harappa, Iran, Afghanistan, Khorezm, Bactria, Sogdiana etc. (V. Masson 1959a, 1966a; Bibl. ONE Masson & Romodin 1964). Yaz-depe was probably abandoned due to shortage of water.

It was in the Merv region that the late Bronze Age and the subsequent early Parthian civilization converged.

Before passing on to the next, widely different section, attention may be drawn to the causes and the nature of the apparently progressive desiccation of the country in which civilizations disappeared 6000 to 7000 years ago under a shroud of sands.

This serious problem has already been referred to in previous chapters, especially in that dealing with Khorezm. In this last case, as well as in Margiana, the periods involved were, however, several millennia more recent than in the Kopet-Dag region of Turkmenia and adequate irrigation systems were in many cases sufficient to keep off the sands.

In contrast with the widespread theory of a progressive desiccation due to an increasing dryness of the climate ("saharification", as the French call it), several Soviet scholars believe that there is no evidence for such climatic changes in the territories under review (Lisitzyna, Masson, Sarianidi). They share the view expressed previously by Bartold, viz. that the desiccation of Turkmenia was due, on the whole, not to changes of climate, but to changes in the hydrographic conditions of the rivers. (It should be remembered that, in the case of the "rivers" which have their source in the Kopet-Dag, the deltas are the fan-shaped areas where these capricious and meandering streams disappear in the sands).

Lisitzyna is to be credited with the study of the palaeobotany of the 5th-3rd millennium B.C. in a vast region around Geoksiur, as well as in the Kopet-Dag corridor (Lisitzyna 1963-1965, 1969). Microscopic analyses covering *inter alia*, carbonized elements of vegetation, suggest that there existed, 7000 years ago, reeds, aquatic plants and poplars,

very similar to the present flora of oases. This vegetation disappeared whenever the supply of water ceased.

It is obvious that in a scorching climate, even a localized diminishing of the water supply may be disastrous. While some sites were being abandoned, others were settled in the neighbourhood, so that there was a fairly constant succession of sites and people.

As to Geoksiur itself, Lisitzyna discovered with the help of aerial photographs canals—6 to 7000 years old!—which suggests that efforts were made to improve the water supply at least for some time. It also became evident that after the Tedzhen river had changed its course to the west, Geoksiur, which no longer bordered on the river, was abandoned and another site—Khapuz-depe—was occupied more to the south-west.

Towards the middle of the 2nd millennium B.C. similar changes took place in many regions of Asia such as Turkmenia, northern Iran, the Indus valley, etc., and many sites were deserted (Sarianidi 1966b). It is not surprising that in this connexion some scholars think of the end of the Harappa culture and of the important shifts of population which took place at that time.

### III. THE PARTHIAN EMPIRE

#### A. *History*

The Parthian Empire was born roughly 2200 years ago in the territory of the present Soviet Turkmenistan; it lasted from the middle of the 3rd century B.C. for almost 500 years, but its eventful history is still inadequately known. The Empire rapidly expanded both towards the west and the east and became a vast mosaic of peoples, languages, cultures and creeds, with numerous touches of Hellenism. It has become increasingly evident that since the problem of the Parthian Empire is not related to the diffusion of Greek civilization only, it is inadequate to focus our attention mainly on Hellenism, the heritage of Alexander the Great. The "Parthian" cities such as Hatra, Dura-Europos and, culturally at least, Palmyra, were moreover accretions in the west, not necessarily representative of the original eastern Parthia (M. Masson 1950, 1955<sup>1</sup>; Koshelenko 1966b).

<sup>1</sup> The reference to M. E. MASSON's Tr. YUTAKE vol. V (1955), also applies to some other paragraphs of this section.

The earliest Parthian history was until recently based mostly on the writings of Western or "Westernized" authors; the explorations by Soviet scholars which are now in full swing, began on a large scale only some 30 years ago. The resulting archaeological finds have immensely enriched our knowledge of the Parthian Empire and may obviously call for a revision of some previously accepted views.

It is usually believed that the Parni, a Scythian tribe from Central Asia, advanced in the 3rd century B.C. from the Syr-Darya westward, conquered the Seleucid satrapy Parthyene and founded there, about 248 B.C., a small kingdom with Nisa as its centre and with their chief as the first ruler of the new Arsacid dynasty. The secession from the Seleucid Empire of the adjacent Bactria occurred almost simultaneously (Vorobyeva 1963).

Whether this Scythian tribe originated south-east of the Caspian Sea or, as is occasionally believed, much further to the east (Lozinski 1959), it anyhow appears to have emerged from the Central Asian steppes; its kinfolk were the teaming masses of mounted nomads who formed an almost endless reservoir of fighters. Its eventual homeland was in the vast Syrian and Iranian deserts with their populous Greek caravan cities. This may have been the cause of the duality of their political behaviour, which, as shown below, oscillated in different directions.

The continual westward shift of the Parthians caused successive transfers of their capital, which moved from the Nisa region to Hecatompylos (near the Caspian Sea), to Ecbatana (Hamadan), and, towards 90 B.C., to Ctesiphon on the Euphrates (M. Masson 1950; V. Masson 1966a).

The territorial accretions, mostly in the 2nd c.B.C., consisted of regions west of the Caspian Sea, including Media and Armenia, as well as Mesopotamia with its largely Greek cities. Graeco-Bactria, which was thus cut off from its western hinterland but at the same time protected against Rome, sought compensation in an expansion towards India. When it collapsed in 130 B.C. under the onslaught of nomad tribes, the Parthians had to fight hard to repel this tremendous flood from their frontiers; Margiana, a western march of Bactria, fell under Parthian control in 115 B.C. (M. Masson 1955; Koshelenko 1966b; Bibl. ONE Masson & Romodin 1964).



During the greater part of its existence, the Parthian Empire was fighting: in the rear against the ever-pressing nomads, to the front against the Seleucids who were trying to recapture their lost territories and, from 65 B.C., against the mighty Romans (Staviskiy 1963). This startling chapter of military history runs contrary to logical expectation. The self-confident but prejudiced and contemptuous Romans were apparently less adapted to Asian warfare than the native Parthian troops and the numerous successes of the Romans eventually turned into disaster. Their defeat in 53 B.C. at Carrhae (north-western Mesopotamia) meant a decisive blow with lasting consequences: the Roman army was destroyed and some 10,000 prisoners were captured by the Parthians and resettled in remote Margiana (Koshelenko 1966d). As Toynbee notes, it was beyond Rome's strength to eject the Parthians from Babylonia, and beyond Parthia's to eject the Romans from Syria. This precarious equilibrium of power lasted for some 300 years, but was far from peaceful. For the Parthians, however, it was an invaluable counter-balance to the Kushan menace on their eastern flank. The decentralization which began towards the middle of the 1st century A.D. resulted in certain regions becoming autonomous (M. Masson 1950). Both the Parthian and the Kushan Empires finally succumbed to the Sassanians towards the 4th century A.D.

Most of the Parthian cities within the present Turkmenistan ceased to exist between the 3rd and the 6th century. In 454 an earthquake caused serious havoc in Nisa and some other places. From 651 the country was gradually conquered by the Arabs and was in subsequent centuries under the successive control of the Samanids, Karakhanids, Ghaznavids and Khorezmians.

The territorial expansion of the Parthian Empire was presumably due to military occupation of Hellenistic cities rather than to any liberation movement, such as an uprising of settled local populations against existing authorities, as is readily assumed by some Soviet authors. The initial move of the invaders was apparently to strike root in the new soil and to live up to Greek standards. They declared themselves "Philhellenes", favoured Greek culture and adopted the Greek language and art. (A similar course was taken by the Kushans after the conquest of Bactria). With the growing political consolidation, the increasing

absorption of rural territories in the west and the ensuing growth of national consciousness, a striking change took place from the 1st century A.D., when the Parthian rulers abandoned philhellenism and adopted a Parthian (i.e. Iranian) nationalism (M. Masson 1950). This new policy meant elimination of the Greek language and art in favour of the Persian or Aramaic and a tendency to substitute previous religious beliefs by Mazdaism or, in a more general way, by the traditional worship of Ahuramazda, Mithra and Anahita. Thus, after a short-lived philhellenism, the former Central Asian nomads discarded their Greek attire and reverted to Asia. (This subject is dealt with more fully in the Concluding Remarks).

Considerable development in crafts and trade took place in the nationalist "Parthian" period: fortified towns were growing and numerous caravans began to connect the Empire with Rome, India, Egypt and other distant countries (Bibl. ONE Masson & Romodin 1964). The famous silk-road traversed the country. On the other hand the territorial expansion was achieved at the expense of the initial homogeneity and the inhabitants were no longer "Parthians", but rather citizens of a vast and cosmopolitan empire which differed considerably from province to province (Pugachenkova 1958). Jews and Christians were the more welcome as they shared a common enemy with the Parthians, namely the Romans.

Until recently it was believed that there was hardly any Buddhism in the country, in contrast with the Kushan Empire. A view that can no longer be held as is shown in the next section.

## B. *General Archaeology*

### (i) Kopet-Dag foothills

Nisa (the Greek Parthanisa) situated near Ashkhabad, is the archaeological centre of this region and consists of the two ancient sites, Staraya Nisa (Old Nisa) and Novaya Nisa (New Nisa). While the former was a kind of restricted imperial city of the "philhellenic" period, comprising fortified castles, and shrines, as well as the imperial necropolis, Novaya Nisa was a huge, walled and densely populated town with a vast necropolis (Pugachenkova 1958; V. Masson 1966a; Koshelenko 1966b). The Nisa complex, which originated probably in the 3rd or 2nd century B.C.,

was abandoned in the middle of the 3rd century A.D., when the Arsacid regime collapsed.

Subsequent to the preliminary excavations of 1930-36 by Marushchenko (Atagarryiev 1967), systematic exploration began under M. Masson in 1946. The ruins were, however, in such a desolate state that the work proved to be a severe test of the scientific competence and ingenuity of the archaeologists (Pugachenkova 1958, 1967; V. Masson 1966a).

A huge building with many columns was discovered in the northern sector of Staraya (Old) Nisa (V. Masson 1966a). Its "Square Hall", the oldest part of which dated roughly from the 2nd century B.C. (Pugachenkova 1953), was reconstructed in the 1st or 2nd century A.D. and apparently served as a religious shrine, possibly for dynastic worship (like the Khorezmian Toprak-Kala and the Afghan Surkh Kotal) (Pugachenkova 1958; Koshelenko 1966b). Its numerous columns present some analogies with Doric, Corinthian and Iranian types. Among the remarkable finds were several small marble images of 50-60 cm high, possibly made by Hellenistic artists, a silver figure of a helmeted Athena with a Gorgon's head on her bosom, glassware, some forged coins, and last but not least, splendid ivory carvings, especially rhytons derived from primitive drinking horns (Masson & Pugachenkova 1959. See also (iii) below).

Only fragments of the numerous clay figurines remained, one of which, now in the Ashkhabad Museum, is said to have been reconstructed from 1800 such pieces. Other fragments belong to clay statues of men and women in genuine Parthian dress.

The decoration and the columns of the peculiar "Round Hall"—probably a shrine—were similar to those of the "Square Hall", but its clay images, not yet entirely excavated, appear to be in the Hellenistic style of the philhellenic period, mixed with elements from the east (Krashennnikova 1964).

Among the most remarkable discoveries, made mainly in Staraya Nisa in 1948 and subsequent years, were some 2800 shards of wine jars. These shards—ostraca—carried inscriptions dealing with wine growing, vintage, storage, taxation, etc., and covering almost a century (Masson & Pugachenkova 1959). Some authors including J. de Menasce, believe the language to be Parthian of the 2nd or 1st century B.C., written in Aramaic script

(Dyakonov & Livshitz 1953, 1957; M. Masson 1951) but a few others such as Altheim consider the language to be Aramaic (Vinnikov 1954). These inscriptions are therefore probably the oldest documents in the Parthian language to be discovered so far anywhere, and they belong to a period hitherto known only indirectly from Greek, Roman, Armenian and Chinese sources.

Novaya Nisa, which included a fortress, was built at the beginning of the 1st century B.C. on a site already inhabited in preceding centuries; there was also a necropolis of the nobility, with various buildings from the 3rd and 2nd century B.C. As in the case of Staraya Nisa, the ruins were in a bad state of preservation. There were in the so-called "Red Hall", remnants of a shrine, columns with capitals carved in painted terracotta plates and said to be of pre-Hellenic, Asian origin (Pugachenkova 1958, 1967).

## (ii) Margiana

As we saw above, Margiana, which was initially under Bactrian control, fell under Parthian sway in 115 B.C. Whereas Nisa was leaning to the western provinces of the Parthian Empire with its Hellenizing "upper classes", Margiana obviously had greater affinity with the adjacent territories in the east.

Its capital, Merv, inhabited since the middle of the 1st millennium B.C., was a huge city under the Arsacids. It did not collapse with their fall—as Nisa did—but existed throughout and after the Sassanian period.

The archaeological Merv, a well-nigh cyclopean complex of several cities, lies 30 km east from the modern Mary (6 km from the Bayram-Ali railway station). Its area (not including suburbs) originally amounted to some 380 ha (or 940 acres), i.e. roughly 20 times that of Nisa. In the centre of the densely populated Giaur-Kala borough—the ancient Antiochia Margiana—was the huge and powerful fortress Erk-Kala, probably built about the 2nd century B.C. and reconstructed later, possibly by the Roman prisoners exiled to Margiana after the battle of Carrhae in 53 B.C. (Pugachenkova 1958).

A stucco capital of Corinthian inspiration which was found at Giaur-Kala, represents a female head among acanthus leaves and is reminiscent

of Termez. The use of such Hellenistic motifs was referred to in previous chapters of this volume, e.g. at Munchak-tepe (Ch. IV, Tadzhikistan, Kafirnigan valley), Angka-Kala (Ch. V, Khorezm), Airtam and Kara-tepe (both in Ch. VI, Uzbekistan), as well as in Surkh Kotal (Afghanistan). Similar finds were made in western Parthia, Iran, etc. (Koshelenko 1966b).



Fig. 36. Merv vessel. Feasting people

An unexpected discovery made in 1962 was a Buddhist shrine of the 2nd century A.D., excavated by Prof. M. Masson's team in Giaur-Kala. It consisted of a huge red-coloured stupa and a gigantic Buddha. Its fairly well-preserved head, made of clay mixed with straw, measured 75 cm and was carefully walled in when the image collapsed in the 5th or 6th century. The Kushan coins which were found in this place dated from the 2nd century A.D. (Koshelenko 1966b, Pugachenkova 1967).

The discoverers of the shrine brought to light a remarkable clay vessel (46 cm high), of the 4th or 5th century A.D., covered all over

with curious colourful paintings unconnected with Buddhism (Koshelenko 1966a, d; figs. 36-38). Several Buddhist manuscripts, practically destroyed by termites, were hidden inside this vase. Although the paintings are badly preserved, fig. 36 clearly shows a feasting couple. Fig. 37 represents a hunting scene, the hunter on horseback being the same person as that of the preceding picture. His death and the scene of mourning



Fig. 37. Merv vessel. Hunting scene

(fig. 38) are shown between the other two scenes. (A more detailed description and interpretation will be found in Koshelenko 1966a).

The reproductions of this unique vessel remind the reader of various wall-paintings, especially those of Balalyk-tepe (Uzbekistan), and Pendzhikent (Tadzhikistan), as well as the strange Tok-Kala drawings on ossuaries (Khorezm). These similarities are to be seen not only in the subject matter, but also in the iconographic details.

These discoveries afford new evidence for the diffusion of Buddhism in a region where Zoroastrianism was prevalent and which was

hitherto believed not to have been touched by the advance of Buddhism (Koshelenko 1966b; Bibl. ONE Frumkin 1968a).

Judging from the archaeological explorations made so far, Parthian Margiana had apparently no monuments comparable with those of Nisa or the western part of the Empire, nor any major object of out-



Fig. 38. Merv vessel. Scene of mourning

standing artistic value. But there were, in addition to huge quantities of pottery, masses of small terracotta figurines of deities, human beings and animals. No such figurines were found in the Nisa region (Margian pottery: see Pugachenkova 1962, 1967; Rutkovskaya 1962).

### (iii) Rhytons, seals, gems, figurines

These objects, which all belong to the original Parthian regions, are a most valuable complement to any study of Parthian civilization and its evolution. Rhytons from Nisa, figurines from Merv, as well

as gems from both Nisa and Merv, actually afford strikingly similar features and show clear evidence of the intermingling of different civilizations.

*Rhytons*: whereas terracotta rhytons were known in ancient Iran from the beginning of the 1st millennium B.C., a treasure, first traced in Nisa in the thirties by Marushchenko and excavated in recent years, contained a marvellous collection of artistically carved and engraved rhytons in ivory. As these would decompose and turn into dust at the slightest touch, the fragments—sometimes several hundreds per rhyton—had first to be consolidated before being assembled. This reconstruction, which took years and required exceptional skill and endless patience, is in itself a remarkable achievement. Almost 60 rhytons have been reconstructed so far; an almost miraculous resurrection (Masson & Pugachenkova 1956b, 1959; V. Masson 1966a; Koshelenko 1966b).

The plates LXI to LXVII reproduced from the "Album of Rhytons" (Masson & Pugachenkova 1957) give some idea of the masterly workmanship of these objects, which terminate in a deer's head, a winged gryphon, a women's torso, etc. There is usually an ornamental rim in relief on the upper part, e.g. a sequence of heads, and below it, in a wider border, a circular parade of exquisite, tiny figures, generally 5-6 centimetres high. The subjects of these friezes are mostly Greek: the gods of Olympos and other mythological representations, bacchic scenes, fantastic animals, etc.

Plate LXI (plate I of the Album, N. 22 of the inventory) and plates LXII to LXIV show a rhyton and some of the figures on it, all representing Olympian gods. Similar scenes are reproduced on plates LXV and LXVI (rhytons 9 and 30). A whole ritual scene is shown on plate LXVII a-b (rhyton 8), viz, an altar, priests, animals to be sacrificed, etc. The altar can be seen near the right-hand margin of pl. a) and the continuation of the border is shown in pl. b).

In connexion with the disputed problem of Parthian art it is interesting to note that although the representations on the Nisa rhytons are mostly expressive and typically Greek, they occasionally appear to exhibit the rigid and hieratic Parthian style (Pugachenkova 1967).

*Seals and gems*: the numerous discoveries of seals in Staraya Nisa, and even more in Merv, are frequently due to vaults having been walled



up and sealed (Marushchenko 1954; Dyakonov 1954; Masson & Pugachenkova 1954). Engraved gems, and not their impressions only, "bullae", were also found, especially in Merv. They were made of chalcedony, agate, cornelian, quartz, and other semi-precious stones (Pugachenkova 1963).



Fig. 39. Nisa. Engraved gems

The subjects of the engravings, which usually belong to a period ranging from the 1st century B.C. to the 2nd or 3rd century A.D., are frequently Greek: deities, centaurs, sphinxes, hunting scenes, etc. The heads are mostly in profile and inscriptions are not in Greek, but apparently in Parthian (fig. 39). In Merv they exhibit, in addition to Hellenistic subjects, Manichaean and Zoroastrian features also (Pugachenkova 1963). In the 4th century A.D. this city was a seat of the Nestorian episcopate; gems engraved with fish may therefore possibly be connected with Christianity.

Interesting seal-gems of a somewhat later period (attributed to the 5th-7th century A.D.) were found in an ossuary discovered by Yershov at Bayram-Ali (situated a few miles west of Merv). They are said to represent plants and animals characteristic of Zoroastrian worship (Yershov 1959). (See also the section on ossuaries at Tok-Kala, page 99ff.).

*Figurines*: reference was made in Ch. VI, Uzbekistan, to the terracotta figurines found also in other regions of Soviet Central Asia, such as Kazakhstan, Kirgiziya, Tadzhikistan and Khorezm (Pugachenkova 1962). Those of the pre-Parthian period were referred to in section II

above. Just as rhytons are peculiar to Staraya (Old) Nisa, terracotta figurines are characteristic of Merv, where they were a common feature in practically all houses (V. Masson 1966a; Koshelenko 1966b). As evidenced by Rempel and subsequently by Pugachenkova, they show a great variety of subjects and are for the most part connected with worship. In addition to the Greek pantheon, there are regional deities such as Anahita and related goddesses whom Pugachenkova refers to as "the Great Margian goddess" (Pugachenkova 1959, 1962; V. Masson 1966a).

The early Merv figurines are usually naturalistic and occasionally represent naked females. The dress—if any—shows increasing Hellenistic features. More recent figurines of roughly the 1st or 2nd c.A.D. differ considerably from the preceding ones, inasmuch as their features and clothing reflect the change from the initial "philhellenism" to a national "Parthian" style and to more decorated, regional dresses. They also tend to become rigid—the well-known Parthian hieratic type. This evolution appears to reflect the replacement of Hellenism by local elements and the growing decentralisation of the empire when some provinces, especially Margiana, became increasingly autonomous (Pugachenkova 1962, 1967).

#### IV. CONCLUDING REMARKS

It may be inferred from the above outline that a proper knowledge of the intricate history of the Parthian Empire is indispensable for the understanding of the role played by the Parthians in politics and civilization. Parthian art, as known at present, was "discovered" for the Western world only some 30 years ago by M. Rostovtzev, a Russian scholar working in the USA (Rostovtzev 1938). Numerous problems have worried historians, archaeologists and students of civilization, such as the apparently erratic policy of the Parthians fighting their kinsmen from the steppes, the drastic change from philhellenism to anti-hellenism, the martially "peaceful coexistence" with Rome, the concurrence of an expressive, individual art and the unexpressive, rigid "Parthian" art, and in general the much disputed problem of Parthian versus Greek, Iranian and Bactrian art.

The lack of agreement between Western scholars was the more inevitable as their fragmentary research was confined to the western regions of the Parthian Empire, especially the ancient Hellenistic cities of Dura-Europos, Hatra and the neighbouring Palmyra, whilst the eastern provinces, at present Soviet Turkmenistan, were largely unknown. There is no evidence of any higher cultural development among the rough, mounted warriors from the Central Asian steppes, and adequate records are sadly lacking, particularly in the case of the eastern provinces. This is no reason, however, for thinking of Parthia in terms of its western provinces only, as is frequently done by Western scholars, or, what is still worse, in terms of some Hellenistic cities. Dura-Europos, Hatra and Palmyra, were situated in regions widely different from each other and were actually separated from Nisa and Merv by thousands of kilometres. The Soviet explorations of the last twenty years have meant a decisive change in the initial approach, but largely owing to the language barrier there is still a hiatus between Western and Soviet research.

The above statement as to the Parthian Empire calls for a closer analysis and some interpretation. The Empire appears to have been double-tracked: an eastern part adjacent to Bactria and naturally turned to the east, and a western part, largely Semitic or Iranian and, in the cities, Greek. This contiguity of different civilizations accounts for their blending for better or for worse, but also for the everlasting conflicts between them. The Greek influence was more readily accepted by the ruling Parthian classes of the eastern provinces, where the Greek contribution was of a high-class artistic nature and constituted a cultural rear-guard of an isolated branch of genuine Hellenism (M. Masson 1950). In the west, on the contrary, the Parthians were up against a rather hostile and compact foreign body, an urban vanguard of the Graeco-Roman society with a distinctly political background. The abandonment by the Parthians of their initial philhellenism and the reinforcement of the Parthian (Iranian) element may have been a logical necessity, an adaptation to widely different and changed conditions, and not merely a deliberate and opportunistic "volte-face." The situation was after all, very dissimilar from what it had been four centuries before, during Alexander's "Grand Siècle". The power of the Hellenistic, pro-Roman "upper classes" which were surrounded by Semitic and Iranian masses

was declining; the architecture of these "Greek" cities was undergoing changes from a Hellenistic type of dwelling to an eastern type; the Greek pantheon was giving way to Semitic and Iranian worship which, in spite of the variety of deities, was, according to Koshelenko, conducive to unification. Monotheism was in the air. The readjustment of the political attitude of the Parthian rulers who were increasingly faced with the "Graeco-Roman" adversary, appears largely conditioned by the circumstances.

Parthian art was as a rule characterized by "frontality", i.e. figures presented full face, in a conventional, rigid attitude without proper perspective. Western views as to this aspect of Parthian art differ greatly; it is variously attributed to a Greek, Iranian, Syrian or Mesopotamian origin, or again to some composite source. Without setting out here all these theories, reference may be made to the remarkable analysis by Schlumberger of Parthian art and other schools related to it. (Schlumberger 1960). His views of a Hellenistic substratum are derived from those of some Western scholars, especially E. Will, but they are contested by others (e.g. Ghirshman, Avi-Yonah). The present author refrains on purpose from going deeper into this controversial matter, but the reader will find additional information in the bibliography to this chapter. As to the Soviet approach, Koshelenko has been particularly engaged in an analysis of Parthian history and civilization and his views, presented in a series of writings and summarized in his "Kultura Parfi" (1966b), should have their proper place in any discussion on this issue. Although he must not be held responsible for all the statements made here, his views underlie to a large extent these concluding remarks.

Koshelenko's main contribution is his analysis of the various characteristics of all the component parts of the Parthian Empire, thus including the multiplicity of the western regions, which cannot be reduced to a common denominator.

As to the problem of frontality, he believes that the weak point of all Western theories is that they deal with the ethnical relations from a geographical point of view, but ignore the history of the society in relation to social and economic factors and hence to the resulting ideology. To know that frontality was characteristic of a certain region, that it may have been taken over from one particular region or passed on to

another, matters less than to ascertain the underlying ideological changes. Ancient society was based on the supremacy of the ruling upper classes over the enslaved masses. Christianity then got the upper hand in the Roman Empire and Zoroastrianism in the Sassanian territories and the various other existing religions converged in these two main faiths. The social ideology of the hitherto enslaved masses underwent an evolution: they were no longer slaves of a particular master, but all were uniformly servants of God. This new view of life (*Weltanschauung*) was largely independent of the form of worship. The occasional deification of emperors (Dynastic cult) fitted well into this scheme. Art became truly religious and spiritual; what mattered was no longer the physical features of a deity, but the religious spirit. Human beings were watched by the vigilant divine eye. Permeated with spiritual conceptions, frontality was thus a logical consequence of the new outlook. This probably also accounts for the fact that the representations of animals remained in profile.

There may be on this point some similarity of opinion between Koshelenko and Schlumberger, but the problem of frontality nevertheless appears to remain open.

In view of the rich material representing the multiple aspects of Parthian civilization which is now available, it would not be fair to consider the Parthian period sweepingly as one of decadence, and since it was not Greek, it must not be judged exclusively by Greek standards. In the whirlpool of a diversified Asia mixed with a versatile Hellenism, these people of an East-Iranian stock were responsible for a national awakening: they paved the way for the Sassanians who carried on and developed this renaissance.

## EPILOGUE

The reader who has followed the author throughout the present book may have felt upset by an apparently excessive enumeration of secondary explorations; the analysis by individual Soviet Republics, rather than by subjects or periods, may have made it, moreover, difficult for him to ascertain the general lines of historical development in the area under review. (On these, as on some other points, he may wish to refer to the Introduction.)

It may be pointed out, however, that as regards Soviet archaeology the primary need of the Western scholar is precise knowledge of the actual research done in the various parts of Central Asia: who, where, what, when and how? General conclusions and wide syntheses are likely to be of little use to him unless he has sufficient knowledge of the underlying facts.

The period of coercive rules applied to Soviet scholars in a "petitio principii" spirit, appears to belong to the past. In the course of the years masses of facts of an artistic, cultural, economic and social nature have been accumulated and are being increasingly interpreted in a more independent spirit. (This does not imply, however, that this approach is necessarily in line with the Western way of thinking.)

As it is impossible to quote in this connexion all the eminent Soviet scholars who have followed this trend towards comparative surveys and wider conclusions, we confine ourselves to only a few examples:

(1) Hundreds of tombs have been explored, one by one, by Litvinskiy in the high mountain valleys of the eastern Pamirs, which reach an altitude of some 4000 metres, and by Mandelshtam in south Tadzhikistan; the results of these excavations are likely to be of great value in connexion with the still disputed problems of the Aryans and the Indus valley civilization, or of the end of Graeco-Bactria.

(2) The work done by Tolstov, Gudkova and others in the scorching sands of the Amu-Darya delta, has shed new light on the much disputed chronology of the Kushans. Similarly the explorations carried out by Masson Sr in the deserts of South Turkmenistan are most significant

for our knowledge of ancient cultures and their ramifications across Asia.

(3) Thanks to the remarkable linguist Livshitz, new results have been achieved in the decipherment of hitherto unknown languages and scripts.

Many more examples could be added, but in order to avoid repetition, it may suffice to draw the reader's attention to some collective entries in the Index (pages 209-217), e.g. Burials, Analogies, Contacts and Cultural Relations, Linguistic Problems (including documents and manuscripts), etc. Time spent on a thorough scrutiny of the Index may be found worth while.

Soviet archaeologists may not always be able to speak or to write in foreign languages, but since they are, as a rule, well acquainted with Western research, they seem to have a good reading knowledge of modern languages. The custom of team-work may also be helpful in this connexion: collective explorations and publications, as well as scientific discussion groups, necessarily make them acquainted with one another's activities in a mutually critical spirit.

Some Soviet scholars may be considered, however, to overrate the importance of Soviet Central Asia, as if this region had always been outside the pole of the Iranian world. In spite of occasional routine side-cuts directed against their Western colleagues, they nevertheless appear to assess Western archaeology in an increasingly positive spirit.

Until recently Western explorations in Asia were largely conditioned by the prevailing political structure and covered mostly the outer stretches, which were either conquered by some foreign power, or, were in a state of dependency. This approach started from the strongholds in the West and encompassed Asia from the Mediterranean to territories accessible via the Indian Ocean. It was not surprising therefore, that stress was laid in an Europocentric spirit on the diffusion of Hellenism, Alexander's conquests, the ensuing expansion of Hellenism and its regional surviving outcrops. With regard to Eurasia, especially the present Soviet territories, this rather biased approach was largely peripheral: it covered the eastern basin of the Mediterranean, Mesopotamia, Iran, Afghanistan, India and Chinese Turkestan. (In the former North-West territories of India, which are at present part of Pakistan, the recent activities of Italian archaeologists have been, by the way, most successful.)

Conditions are no longer what they were. With a few exceptions,

Western scholars found themselves up against a political and linguistic barrier, which proved to be far more of an obstacle than vast deserts or gigantic mountain ranges.

The present survey may possibly help the Western reader in assessing the scope and nature of the work done by Soviet scholars and in ascertaining whether or not there is an "ivory tower" on either side. There has been in recent years some encouraging exchange in scientific research, including archaeology, and there is all reason to believe that the language barrier will be overcome in one way or another, to the mutual benefit of Eastern as well as Western scholars. The results of the International Conference on the History, Archaeology and Culture of Central Asia which took place in September-October 1968 at Dushanbe were in this respect most auspicious.



## ANNOTATED BIBLIOGRAPHY

As stated on page ~~xx~~<sup>xviii</sup> the bibliographical list below consists of two parts:

**PART ONE:** general publications or those which are not specifically limited to one of the chapters (e.g. Central Asia, Bactria, animal style, languages, cultural history, religion, the Bronze Age, etc.).

**PART TWO:** bibliographies to the individual chapters and to each of the Central Asian Soviet Republics.

The Synoptic Table of authors quoted (pages 199-207) is arranged in alphabetical order and indicates the references to them in the various chapters and the relevant bibliographies. Authors are not on the other hand listed in the index.

The following presentation has been adopted in the bibliographical lists:

- a) Books: the original title, usually with an English translation. Unless otherwise stated, books in Russian are published in Moscow or Leningrad.
- b) Articles or chapters in books: author and reference to publication concerned.

In many cases the references are accompanied by explanatory comments (e.g. main author, the subject covered, main characteristics of the publication concerned etc.). The additional references (A) (B) (P) (L) (R) give a rough idea as to whether the publication deals largely, or in part, with Anthropology, Burial rites, Pottery, Linguistic and Philological problems, or Rock carvings.

Much use has been made in the Bibliography of the abbreviations in the following list.

## LIST OF ABBREVIATIONS

(See lists of abbreviations to the bibliographies in Part Two also).

AE	Arkheologicheskaya Ekspeditziya
AN	Akademiya Nauk (Academy of Sciences (also of various Republics)) (see also DAN, VAN)
AN Uzb. ON	AN Uzb. SSR <i>Obshchestvennyye Nauki</i> (AN Uzb. SSR Department of Humanities)
Arkh. Otkr.	<i>Arkheologicheskiye Otkrytiya</i> (Archaeological discoveries)
Arkh. Rassk.	<i>Arkheologi Rasskazyvayut</i> (Archaeologists reporting) , Dushanbe
A. Sb. Erm.	<i>Arkheologicheskiy Sbornik Ermitazha</i> (Hermitage Archaeological Compendium)
Ch.	Chapter
Conference	International Conference on the History, Archaeology and Culture of Central Asia in the Kushan Period. Dushanbe (Tadzhikistan) Sept. 25—October 4, 1968

Congress	International Congress of Orientalists
COWA	Council for Old World Archaeology (Cambridge, Mass.)
DAN	<i>Doklady Akademii Nauk</i> (Reports of the AN)
Erm.	Gosudarstvennyi Ermitazh (National Hermitage Museum) (see also A. Sb. Erm., S. Erm., Tr. Erm., Tezisy)
H.O.	<i>Handbuch der Orientalistik</i> , Leiden
IA	Institut Arkheologii (AN SSSR)
I. Dr.	<i>Indiya v Drevnosti</i> (Ancient India). See Bibl. ONE AN Inst. Narodov Azii 1964
IIA	Institut Istorii i Arkheologii
IIAE	Institut Istorii, Arkheologii i Etnografii
IIMK	Institut Istorii Materialnoy Kultury of the AN (superseded by IA)
IMK	<i>Istoriya Materialnoy Kultury Uzbekistana</i>
ISMEO	Istituto Italiano per il Medio ed Estremo Oriente, Roma; issues the review <i>East &amp; West</i>
Ist. Arkh.	<i>Istoriya, Arkheologiya i Etnografiya Sredney Azii</i> (AN SSR)
ITN	<i>Istoriya Tadzhikskogo Naroda</i> (History of the Tadzhik People). See Bibl. ONE AN Tadzh. SSR
I. Uzb.	<i>Istoriya Uzbekskoy SSR</i> (History of the Uzbek SSR)
Izv	<i>Izvestiya</i> (Information, Reports (of the various Republics))
KS	<i>Kratkiye Soobshcheniya Instituta Arkheologii</i> (Brief News of the Institute of Archaeology)
KSE	<i>Kratkiye Soobshcheniya Instituta Etnografii</i> (Brief News of the Ethnographical Institute)
MDAFA	<i>Mémoires de la Délégation Archéologique française en Afghanistan</i>
M	Materialy (Basic Material)
MIA	<i>Materialy i Issledovaniya po Arkheologii SSSR</i> (Materials of and Research into the Archaeology of the USSR) See Bibl. ONE AN SSSR <i>Materialy</i>
Ocherki	<i>Ocherki Istorii SSSR</i> (A Study of the History of the USSR) See Bibl. ONE AN 1956.
Po Sledam	<i>Po Sledam Drevnikh Kultur</i> (On the Track of Ancient Civilizations). See Bibl. ONE <i>Po Sledam</i> 1951, 1954
Problemy	<i>Problemy Arkheologii</i> (Leningrad branch of IA)
SA	<i>Sovetskaya Arkheologiya</i>
SE	<i>Sovetskaya Etnografiya</i>
S. Erm.	<i>Soobshcheniya Ermitazha</i> (News from the Hermitage)
Svod	<i>Arkheologiya SSSR: Svod Arkheologicheskikh Istochnikov</i> (Corpus of archaeological material) See Bibl. ONE AN SSSR <i>Arkheologiya</i>
Tezisy	<i>Tezisy Dokladov</i> (Annual abstracts of reports to the Hermitage Museum).
Tr	Trudy (Reports or Studies (of various Republics also))
Tr. Erm.	<i>Trudy Ermitazha</i> (Studies published by the Hermitage Museum)
Tr. Kh. E.	<i>Trudy Khoresmskoy Arkheologo-Etnograficheskoy Ekspeditsii</i>
VAN	<i>Viestnik</i> (Journal published by the Akademiya Nauk SSSR) (See bibliography to Chapter I also.)
VDI	<i>Viestnik Drevney Istorii</i> (Review of Ancient History)
YUTAKE	Yuzhno-Turkmenskaya Arkheologicheskaya Kompleksnaya Ekspeditsiya (Southern Turkmenistan Joint Archaeological Expedition)

The abbreviations "B.C." and "A.D." given in the text stand for "Before Christ" and "Anno Domini".

# BIBLIOGRAPHY

## PART ONE: GENERAL BIBLIOGRAPHY

Akademiya Nauk SSSR

- Materialy i Issledovaniya po Arkheologii SSSR*  
(Materials of and Research into the Archaeology of the USSR; a major collection of volumes of a high scholarly standard, issued at irregular intervals)
- Arkheologiya SSSR: Svod Arkheologicheskikh Istochnikov*  
(Corpus of Archaeological Material; to appear in over 300 issues in the course of 20 years; issued at short but irregular intervals. Authors: Abramova, Chernetzov, Khlopin, V. Masson, Meliukova, Rudenko, and many others)
- 1955/ *Voprosy Skifsko-Sarmatskoy Arkheologii*  
(Problems of Scythian and Sarmatian Archaeology; by various authors; IIMK Conference of 1952)
- ~~1955b~~ *Ocherki Istorii SSSR*  
(A Study of the History of the USSR; an elaborate collective compendium)
- 1956 —, Vol. I.  
(Stone Age, early Iron Age; by Belenitzkiy, Efimenko, Griaznov, Mandelshtam, V. Masson, Okladnikov, Piotrovskiy, Ravdonikas, etc.)
- 1958 —, Vol. II.  
(3rd-8th century A.D.; Belenitzkiy, Bernshtam, M. Dyakonov, Griaznov, Kisselev, Mandelshtam, V. Masson, Okladnikov, Piotrovskiy, Ravdonikas, Yakubovskiy, Zadneprovskiy, etc.)
- 1962a *Narody Sredney Azii i Kazakhstana I*  
(Peoples of the Soviet Central Asia; a collective work by Baskakov, Ginzburg, Guliamov, Livshitz, Tolstov, etc.)
- 1962b *Arkheologicheskiye Ekspeditsii, 1919-1956*  
(List of expeditions; not fully representative)
- 1962c *Mongolskiy Arkheologicheskiy Sbornik*  
(Compendium of Archaeology of Mongolia)
- 1962d MIA 115: *Pamiatniki Skifo-Sarmatskoy Kultury* (Scythian and Sarmatian Civilization)  
(Various authors: Abramova, Chlenova, Grakov, Meliukova, etc.)
- 1963 *Novyye Metody v Arkheologicheskikh Issledovaniyakh*  
(New Methods in Archaeological Research; collective work edited by S. I. Rudenko. Authors: Artemiyev, Bezborodov, Butomo, etc.; C-14 method, chemical and spectroscopic methods. English summary by H. Field, *Radio Carbon* 7, 1965)
- 1964a *Pamiatniki Kamiennogo i Bronzovogo Vyeokov Evrazii* (Stone and Bronze Age of Eurasia)  
(see Kuzmina)
- 1964b *Sredniaya Aziya i Drevniy Vostok*  
(“Middle” Asia and the Ancient East; see V. Masson)
- 1966a *Arkheologicheskiye Otkrytiya*  
(Archaeological Discoveries in 1965; an up to date synopsis, to appear annually)

- 1966b *Sredniaya Aziya v Epokhu Kamnia i Bronzy*  
(The Stone Age and the Bronze Age; of a high academic and technical standard; edited by V. Masson; chapters by Griaznov, Khlopin, Mandelshtam, V. Masson, Okladnikov, Zadneprovskiy. An unusually abundant bibliography)
- 1966c *Arkheologiya Starogo i Novogo Svieta*  
(Archaeology of the Old and the New World; various authors; see Shchetenko)
- 1967 *Vozniknoveniye i Razvitiye Zemledeliya*  
(Origin and Development of Agriculture; several authors. See also V. M. Masson 1967)
- 1968a *Problemy Arkheologii Sredney Azii*  
(Short summaries of reports)
- 1968b *Istoriya, Arkheologiya i Etnografiya Sredney Azii* (Contributions by many authors)
- AN Inst. Narodov Azii 1964 *Indiya v Drevnosti*  
(AN Inst. of the Peoples of Asia)  
(Ancient India; collective work edited by V. V. Struve and G. M. Bongard-Levin; preface also in English. Contributions by Albaum, Litvinskiy, Staviskiy, Tolstov, Vorobyeva-Desyatovskaya, etc.; detailed review in English by G. Glaesser in *East & West*, ISMEO 1966, 1-2)
- AN Tadz. SSR  
*Istoriya Tadzhikskogo Naroda*  
(History of the Tadzhik People; a collective work edited by B. Gafurov and B. Litvinskiy; especially useful since it covers many regions of Soviet Central Asia)
- 1963 —, Vol. I  
(Litvinskiy, Livshitz, Nerazik, Okladnikov and Ranov, Oranskiy, Staviskiy, Vorobyeva, etc.)
- 1964 —, Vol. II  
(Belenitzkiy, Davidovich, Mandelshtam, Negmatov, etc.)
- AN Uzb.SSR 1955-56 *Istoriya Usbekskoy SSR*  
(History of the Uzbek SSR; a collective work largely concerned with Soviet Central Asia; mostly Guliamov, Tolstov, Trever Yakubovskiy, with the use of material gathered by other authors)
- Z. A. Abramova 1962 *Svod A4-3: Paleoliticheskoye Iskusstvo na Territorii SSSR*  
(Palaeolithic Art in USSR)
- E. I. Ageyeva & T. N. Zadneprovskaya 1959 Tr. Kaz. 7  
(Bibliography on Syr-Darya and Semirechiye, 1821-1956)
- N. M. Akramov 1963 *Vydayushchiysia Russkiy Vostokovied V. V. Bartold*, Dushanbe  
(On a leading Russian Orientalist)
- Fr. Altheim 1959-65 *Geschichte der Hunnen*, I-V, Berlin  
(A stupendous but discursive work, largely dealing with Soviet Central Asia. See also Ch. V Khorezm)
- M. I. Artamonov 1968 *Les Trésors d'Art des Scythes*, Praga (Hermitage Collection. A remarkable, beautifully produced volume)
- V. V. Artemiyev & S. V. Butomo, etc. 1961 SA 2  
(Radio-carbon C-14 method; see also Butomo, Rudenko 1963)
- V. V. Bartold 1945 *Histoire des Turcs d'Asie Centrale*, Paris
- (Barthold) 1956-62 *Four Studies on the History of Central Asia*, Leiden
- 1963-66 *Sochineniya I-VI*  
(The complete works of this matchless Russian Orientalist; other volumes to follow. See Akramov)
- N. A. Baskakov 1962 Ch. in *Narody Sredney Azii I* on Turkic Languages (L) (See AN SSSR 1962a)

- A. M. Belenitzkiy 1956 Ch. in *Ocherki I* on the Kushan Empire (See AN SSSR 1956)  
 1964a Ch. in I. Dr. on cultural relations between Ancient India and "Central" Asia  
 1964b KS 98 (as above)  
 1968 *Asie Centrale*, Genève ("Archaeologia Mundi"). A most useful general synopsis largely based on the Hermitage collections; fine reproductions; valuable chronological tables)
- A. M. Belenitzkiy & I. B. Bentovich 1961 SA 2  
 (Central Asian silk textiles in Western Europe)  
 I. B. Bentovich 1964 SA 4  
 (Sogdian textiles, 7th-8th century A.D.; see also Shishkin 1960)
- N. A. Beregovaya 1960 MIA 81  
*Paleoliticheskiye Miestonakhoshdieniya SSSR*  
 (Palaeolithic Sites)
- A. N. Bernshtam 1951 *Ocherki po Istorii Gunnov*  
 (History of the Huns; the author emphasizes the positive features of the "Hun" culture; book much criticized)  
 1952 MIA 26: *Istoriko-Arkheologicheskkiye Ocherki Tsentralnogo Tyan-Shana i Pamiro-Alaya*  
 (An interregional survey on Tadzhikistan, Kirgiziya, Fergana, Kazakhstan, etc.)  
 1957 KSE XXVI  
 (An elaborate survey of the history of nomad tribes in Soviet Central Asia; Andronovo tribes; influx of Aryans)
- K. Besembiyev & M. Satbayev 1965 *Velikiye Uchenyie Sredniey Azii i Kazakhstana*, Alma-Ata  
 (Great Central-Asian scholars) (8th-19th century)
- N. Ya. Bichurin 1950-53 *O Narodakh Obitaushikh v Sredniey Azii*  
 (Peoples of ancient "Central" Asia; a remarkable synopsis mostly from ancient Chinese chronicles)  
 (Rev. Father Jakinf)
- A. D. H. Bivar 1966 Chapters 1-3 in *Zentralasien*  
 (Fischer Weltgeschichte, Band 16, Frankfurt a/M. A critical study on nomads, Buddhism, "Huns", Kushan and post-Kushan periods, Islam)
- M. Bussagli 1963 *Painting of Central Asia*, Geneva,  
 (A fine scholarly work with remarkable colour reproductions mostly on Pendzhikent; Soviet Central Asia otherwise rather scanty)
- S. V. Butomo 1963 Ch. in *Novyie Metody* (S. I. Rudenko) on C-14 method  
 (see Rudenko, Artemiyev). English abstract in *Radio-Carbon*, vol. 7, 1965
- J. M. Casal 1961 MDAFA XVII, Paris: *Mundigak*  
 N. L. Chlenova 1966 VII Congrès des Sciences Préhistoriques  
 (Relations between South Siberia and "Central" Asia under the Scythians; evidenced also by rock engravings; see also AN SSSR 1962d, MIA 115; Griaznov 1969)
- Conference Dushanbe 1968 (See Lunin 1968; as well as Bibl. III Kushan Empire, addendum pages 176-177)
- O. M. Dalton 1964 *The Treasure of the Oxus*, London  
 (A reprint of the 1926 edition)
- D. V. Deopik & N. Ya. Merpert 1957 SA 4  
 (End of Harappa; gradual decline rather than a sudden disaster)
- M. M. Dyakonov 1954 Ch. in *Po Sledam III* on Bactria; useful general survey
- M. Dyakonov & A. M. Mandelshtam 1958 Ch. in *Ocherki II* on Soviet Central Asia, 3rd-5th century A.D.; Kushans, Ephthalites, etc.

- N. V. Dyakonova 1961 Tr. Erm. vol. V, 6  
(Pre-Islamic religious iconography; four-armed deities, astral emblems, etc. See also Voronina; Bibl. Uzb. II, Dagens 1964)
- N. V. Dyakonova & O. I. Smirnova 1967 SA 1  
(Worship of Nana-Anahita in Sogdiana; four-armed deities, astral emblems)
- S. Fajans 1957 *Ars Orientalis* II  
(A valuable survey of Russian literature on "Sassanian" and early Islamic metal work)
- A. A. Formozov 1959 SA 2  
(Microlithic tools in Soviet "Central" Asia)
- 1966 SA 4  
(General survey on rock engravings) (R)
- B. A. Frolov 1966 SA 1  
(Palaeolithic art; vast survey of foreign literature) (R)
- G. Frumkin 1962 *Bibliotheca Orientalis* XIX 3/4, Leiden  
(Ancient Wall-Paintings in Soviet Central Asia)
- 1968a *Bibliotheca Orientalis* XXV 3/4, Leiden  
(Expansion of Buddhism in Soviet Central Asia)
- 1968b On Soviet Archaeological Finds relating to the Kushan period  
(Report to the Dushanbe Conference)
- Yu. V. Gankovskiy 1964 *Narody Pakistana*  
(Pakistan's People from ancient times; excellent Russian, Indian and Western bibliography, including ancient India and its borderlands; the Indus valley civilization and its end) (L)
- J. C. Gardin 1957 MDAFA XV: *Céramiques de Bactres* (P)
- R. Ghirshman (see also 1946 MDAFA XII *Begram. Recherches archéologiques et historiques sur les Kushans* Le Caire.  
Bibl. Kushan empire) 1948 MDAFA XIII *Les Chionites-Hephtalites*, Le Caire.  
1957 *Cahiers d'Histoire Mondiale*, III, UNESCO, Paris, on Kushan chronology
- V. V. Ginzburg 1960 XXV Congress, vol. III  
(A vast survey of the anthropology of Soviet Central Asia) (A)
- 1962 Ch. in *Narody Sredney Azii* on the anthropology of Soviet Central Asia (A) (See AN SSSR 1962a)
- 1968 *Problemy*  
(Main racial types in Soviet Central Asia) (A)
- M. P. Griaznov 1958 *Drevniye Iskusstvo Altaya*  
(Ancient Altay Art; publication of the Hermitage Museum; text in Russian and French; remarkable photographs by A. Bulgakov)
- 1966 KS 108  
(Black glazed pottery in Soviet Asia: Caucasus, Kazakhstan, Khorezm, Siberia) (P)
- 1969 Sibérie du sud, Genève (*Archaeologia Mundi*)
- Ya. G. Guliamov 1968 Ch. in AN Uzb.ON on history and irrigation of the Kushan Empire
- M. Hallade 1960-64 *Encyclopedia of World Art*, II, VII, IX  
(Bactrian art, Indo-Iranian art, etc.)
- N.I. Igonin 1968 Ch. in *Ist. Arkh.* on aerial photography in archaeology (See also S. P. Tolstov, 1962)
- ISMEO: see Tucci,  
Faccenna, Gullini  
K. Jettmar 1964 (Review articles on Soviet Archaeology—mostly by G. Glaeser—are frequently published in *East and West* issued by ISMEO)  
*Die frühen Steppenvölker*, Baden-Baden  
(Eurasian Animal Style; good Russian bibliography; many plates)

- 1966 Ch. in *Geschichte Mittelasiens*, H.O. I, V, 5, Leiden  
(*Mittelasiens und Sibirien in vortürkischer Zeit*. A scholarly survey;  
extensive bibliography. See also Spuler)
- 1967 *East and West*, Roma, Vol. 17, Nos 1-2:  
"The Middle Asiatic Heritage of Dardistan" (A penetrating  
attempt to link up the results of explorations in Soviet Central  
Asia with present forms of burial and other customs existing in  
the extreme north of Pakistan between Chitral and Gilgit) (P) (B)
- S. V. Kisselev 1965 Ch. in MIA 130 on the Bronze Age in the USSR (Synoptic  
chronological table; the Andronovo tribes were North-Iranians;  
Indus valley civilization)
- V. I. Kozenkova 1961 SA 3  
(A useful survey of ossuaries and burial rites) (B)
- E. E. Kuzmina 1964 Ch. in *Pamiatniki* (AN SSSR) on the southern limits of the Steppe  
cultures of the Bronze Age. See also Latynin.  
1966 *Svod V 4-9: Metallicheskiye Izdeliya Eneolitia i Bronzovogo Vyeka*  
(Metal products of the Chalcolithic and Bronze Age; a remarkable  
and vast survey irrespective of boundaries; international  
approach)
- V. E. Larichev 1958 *A. P. Okladnikov*, Irkutsk,  
(A German translation of a booklet on this remarkable scholar  
and his research activity throughout Soviet Asia. A full biblio-  
graphy from 1926 to 1965)
- B. A. Latynin 1958 SA 3  
(The southern limits of the Steppe cultures in the Bronze Age;  
see also Kuzmina 1964)
- Leningrad. Gos. 1961 *Issledovaniya po Arkheologii SSSR*  
Universitet (Archaeological Studies; by Abramova, Khlopın, Latynin,  
Okladnikov, etc.)
- B. A. Litvinskiy 1967 V.D.I. 4  
(An outstanding article on the archaeological finds in Tadzhi-  
kistan and their relations with other regions and countries.  
Aryans, ancient Bactria, Gandhara, Swat, tombs in the Pamirs  
and the valleys of Vakhsh, Kizyl-su and Kafirnigan) (P) (B) (A) (L)  
1968a *Outline History of Buddhism in Central Asia* (See Ch. III page 177)  
1968b Ch. in *Isl. Arkh.* on the diffusion of Buddhism (Based on written  
documents and linguistic data) (L)
- V. P. Liubin 1965 Ch. in MIA 131 on the Lower Palaeolithic  
(An extensive analysis of the various types of tools and their  
characteristics)
- V. A. Livshitz 1962 Ch. in *Narody Sredney Azii* on Iranian languages of Soviet  
Central Asia (L) (See AN SSSR 1962a)
- J. E. van Lohuizen- 1949 *The Scythian Period*, Leiden  
de Leeuw (North India, 1st century B.C.—3rd century A.D.) (L)  
1960 *De Protohistorische Culturen van Voor-Indië en hun Datering*, Leiden
- B.V. Lunin 1968 AN Uzb. ON: *Bibliography on the History and Archaeology in  
Soviet Literature of the Kushan Period* (A most useful synopsis  
prepared for the Dushanbe Conference)
- A. M. Mandelshtam 1958 Ch. in *Ocherki* II on Soviet Central Asia, 6th-7th century A.D.  
1964 Ch. in ITN II on Soviet Central Asia, 6th-7th century A.D.,  
on Ephthalites, Turks, etc. (See also Nerazik).  
1966 Ch. in *Sredniaya Aziya* on the Bronze Age at the steppe peri-  
phery: Khorezm, Tadjikistan, Turkmenistan (B) (P) (See AN  
SSSB 1966b)

- A. Kh. Margulan (Ed.) 1965 *Vielikiye Uchenyie Sredniy Azii i Kazakhstana*, Alma-Ata (Great scholars of Soviet Central Asia: Muh. Khorezmi, Ibn Sina, al-Biruni, etc.)
- V. M. Masson 1963 KS 93 ("Middle" Asia and Iran, 3rd millennium. A short but interesting and substantial survey) (P) (B) (A)
- 1964 *Sredniaya Aziya i Drevniy Vostok* (Soviet Central Asia and the Ancient East; a valuable scholarly book on the early agricultural cultures and those of painted pottery; Iran, Afghanistan, Mesopotamia, Palestine, Syria, India, etc. Review in English by G. Glaesser in *East & West*, vol. 15, 3-4, 1965)
- 1966a *Strana Tysiachy Gorodov* (The Land of 1000 Cities; a valuable, readable booklet on Bactria, Sogdiana, Khorezm, Uzbekistan, South Turkmenistan, etc.)
- 1966b *Sredniaya Aziya v Epokhu Kamnia i Bronzy* (Edited by V. Masson; see AN SSSR 1966b)
- 1966c *Accademia Nazionale dei Lincei*, 76, Roma  
I monumenti archeologici dell'Asia Centrale, influenze e religioni Greco-Romane. (A vivid and interesting survey; well illustrated)
- 1966d Ch. in *Sredniaya Aziya*—see 1966b) above—on the Neolithic
- 1966e Ch. in MIA 126 on the Mesolithic of the Middle East (A vast survey from Asia Minor and Mesopotamia to Turkmenistan)
- 1967 Ch. in *Vosniknovieniye* (AN 1967) on ancient agriculture in Egypt, Mesopotamia, the Indus valley, Soviet Central Asia, etc.
- 1969 *Priroda* (Nature) No. 3 (Article in this monthly on the origin of civilizations and their nature; vast survey on the civilization of Asia and America; maps; illustrations)
- V. M. Masson & V. A. Romodin 1964 *Istoriya Afganistana I* (Ancient history, Bactriana, Parthia, Yue-chi, Ephthalites, etc. A noteworthy and versatile survey; an unusually wide bibliography) (P) (L)
- A. I. Meliukova 1955 SA XXII (Scythian civilization in Europe; critical analysis of views and writings; see also AN SSSR 1962 MIA 115)
- 1964 *Svod D 1-4: Voorusheniye Skifov* (Scythian armament)
- N. Ya. Merpert 1960 SA 1 (The 7 years' plan of the Institute of Archaeology of the AN SSSR)
- A. L. Mongait 1955 *Arkhheologiya v SSSR* (A well-known useful handbook. Abridged English edition: Moscow 1959; another in 1961: Pelican Book A 495. In Italian: 1964, etc.)
- E. E. Nerazik 1963 Ch. in ITN vol. I on the history of Soviet Central Asia, 4th-5th century A.D.; see also Mandelstam 1964
- A. P. Okladnikov (Ed.) 1966a Ch. in *Sredniaya Aziya*—see Masson 1966b above—on the Palaeolithic and Neolithic in various parts of Soviet Central Asia; see also Larichev
- 1966b Ch. in MIA 126 on the Mesolithic in Asiatic SSSR
- A. P. Okladnikov & V. A. Ranov 1963 Ch. in ITN vol. I on the Stone Age



- I. M. Oranskiy 1963 Ch. in ITN vol. I on ancient documents in Iranian languages (L)  
 E. D. Phillips 1957 *American Journal of Archaeology*, July  
 (On ancient history of the Eurasian steppe)  
 1965 *The Royal Hordes, Nomad Peoples of the Steppes*, London  
 (A scholarly account with many plates)
- Po Sledam Drevnikh Kultur*
- 1951 —, vol. I.  
 S. I. Rudenko (Pazyryk), P. N. Schultz (Scythians), S. P. Tolstov (Khorezm), A. Yu. Yakubovskiy (Penzhikent), etc.  
 1954 —, vol. III.  
 A. N. Bernshtam (Pamirs, Tyan-Shan), M. M. Dyakonov (Bactria), etc.
- G. A. Pugachenkova 1951 VDI 4  
 (Architecture of ancient Soviet Central Asia; Khorezmian, Parthian, Sogdian and Tokharian architectures are said not to be extensions of Iranian art)
- V. A. Ranov 1968a Ch. in *Problemy on the Palaeolithic in Soviet Central Asia*  
 1968b Ch. in MKT 1 on the Stone Age in Soviet Central Asia (A systematic and detailed survey by individual Republics; excellent bibliography)
- Yu. A. Rapoport 1960 XXVth Congress: The Evolution of Zoroastrian Funeral Rites; primarily based on the explorations in Khorezm (B)
- T. T. Rice 1965 *Ancient Arts of Central Asia*, London  
 (Notable for its fine illustrations)
- S. I. Rudenko 1953 *Kultura Naseleniya Gornogo Altaya v Skifskoye Vremia*  
 (The Civilization of the Upper Altay Tribes in the Scythian Period; a remarkable survey, beautifully produced) (B)  
 1960 *Kultura Naseleniya Tsentralnogo Altaya v Skifskoye Vremia*  
 (Dealing with the Central Altay; similar to the above) (B)  
 1961 *Iskusstvo Altaya i Piereдниey Azii*  
 (A condensed, well-illustrated survey of Pazyryk art; relationship with Assyrian and Iranian art, the Siberian collection, the Treasure of the Oxus, etc.)  
 1962a *Svod D 3-9: Sibirskaya Kollektiya Pietra I*  
 (The Siberian Collection; now in the Hermitage Museum. Many rather mediocre plates. Also a German edition, Wuppertal-Barmen, with better plates)  
 1962b *Kultura Khunnov i Noinulinskiye Kurgany*  
 (Huns, Noin-Ula kurgans; animal art, international relationships) (B) (P)  
 1963 *Novyie Metody*  
 (C-14 method) (see AN SSSR 1963)
- A. Ya. Shchetenko 1966a Ch. in *Arkheologiya*, AN SSSR 1966c  
 (On an absolute chronology of the Harappa culture; vast survey, radio-carbon data; Western and Indian bibliography)  
 1966b VII Congrès des Sciences Préhistoriques  
 (Indo-Iranian relations in the post-Harappa time; criticizes theories of Indian scholars, especially Sankalia, on the alleged move of Aryans from Iran to India)
- V. A. Shishkin 1960 KS 80  
 (Textiles 5th to 8th century A.D., as shown by ancient wall-paintings. See also Bentovich)

- V. M. Shtein 1960 *Uchenyie Zapiski Instituta Vostokovedeniya XXV*  
(Contribution of the East to World Civilization)
- O. I. Smirnova 1958 Ch. in MIA 66 on Pendzhikent coins, Sogdian history, rulers, etc.
- B. Spuler 1966 Ch. in *Geschichte Mittelasiens* (H.O. Vol. I, V, 5, Leiden): *Geschichte Mittelasiens seit dem Auftreten der Türken*  
(Scholarly survey with an extensive bibliography. See also Jettmar)
- B. Ya. Staviskiy 1963 Chapters in ITN I on various periods of history of ancient "Central" Asia
- 1964 Ch. in I. Dr. on "Central" Asia, India and Rome; excellent bibliography
- 1966 *Meshtu Pamirom i Kaspiem*  
(Between the Pamirs and the Caspian Sea; popular, but most useful) (P) (B) (L)
- V. V. Struve &  
G. M. Bongard-Levin 1964 See AN Institut Narodov Azii
- S. P. Tolstov 1949 KSIIMK XVIII  
(Chronological classification by cultural periods. See also Yakubovskiy 1949)
- 1962 SA 1  
(Aerial photography in archaeology, used on a vast scale by Soviet explorers)
- K. V. Trever 1940 *Pamiatniki Greko-Baktriyskogo Iskusstva*  
(A major work on Bactrian art in a rather wide sense)
- 1954 SA XXI  
(Kushans, Chionites, Ephthalites according to Armenian sources, 4th-7th century A.D.)
- 1955 Chapters in I. Uzb. on Sogdiana, Bactria, Kangha, Kushans, Ephthalites, etc. (See also Yakubovskiy)
- T. A. Trofimova 1962 KSE XXXVI  
(Racial types of Soviet Central Asia and pottery in the Bronze Age) (P) (A)
- 1968 *Ist. Arkh.* on deformation of skulls in ancient Central Asia (A)
- G. Tucci (ISMEO) 1960 *Attività Archeologica Italiana in Asia*, Roma
- 1961 *L'Afghanistan dalla Preistoria all'Islam*, Roma
- 1963 Ch. by G. Gullini on pre-Islamic Afghan archaeology and art  
*Scavi Italiani nel Medio ed Estremo Oriente*, Roma
- UNESCO 1965 See Sir Leonard Wooley
- M. G. Vorobyeva 1963 Ch. in ITN I on the history of Bactria and the Parthian Empire
- V. L. Voronina 1960 SA 2  
(Pre-Islamic religious iconography in Soviet Central Asia; coexistence of cults. See also Dyakonova)
- Sir Leonard Wooley 1965 *The Beginnings of Civilization*  
(UNESCO's History of Mankind, vol. I part 2. Vast survey, in fact a synopsis, of the Bronze Age; very little on Soviet Central Asia) (B) (P) (L)
- A. Yu. Yakubovskiy 1949 KSIIMK XVIII  
(Chronological classification by cultural periods. See also Tolstov 1949)
- 1955 Ch. in I. Uzb. on Graeco-Bactria, Kangha, Kushans, Ephthalites, Arabs, etc. (See also Trever 1955)
- Yu. A. Zadneprovskiy 1966 Ch. in *Sredniaya Aziya* AN SSSR 1964 b on Andronovo culture  
(B) (P)

# BIBLIOGRAPHY

## PART TWO: BIBLIOGRAPHY BY CHAPTERS

### I. KAZAKHSTAN

(Some abbreviations relate to regional publications: Tr. = Trudy Instituta Arkheologii i Etnografii  
Izv. = Izvestiya AN Kaz. SSR VAN = Viestnik AN Kaz. SSR)

- AN Kaz. SSR 1956 *Bibliografiya Isdaniy AN Kaz. SSR 1951-1955*, Alma-Ata  
1960a *Nauka Sovetskogo Kazakhstana*, Alma-Ata  
(Kazakhstan Sciences; Ed. K. S. Satpayev)  
1960b *Arkheologicheskaya Karta Kazakhstana*, Alma-Ata  
(A historical and archaeological Handbook with Atlas; large  
bibliography; see Akishev 1967a)
- E. I. Ageyeva 1960a KS 80  
(Semirechiye 1956; Wu-sun tombs 3rd century B.C. to 3rd  
century A.D. Map) (B)  
1961 Tr. 12  
(Alma-Ata region, ancient burial rites) (B)
- E. I. Ageyeva & 1959 Tr. 7  
A. G. Maksimova (Pavlodar Expedition 1955; synopsis of Bronze Age in North  
Kazakhstan; Nomads) (B)
- E. I. Ageyeva & 1958 Tr. 5  
G. I. Patzevich (Detailed history of urban settlements in South Kazakhstan;  
Scythians, Saka) (P)
- E. I. Ageyeva & 1959 Tr. 7  
T. N. Zadneprovskaya (*Bibliografiya po Arkheologii i Drevniy Istorii Syr-Darii i  
Semirechiya, 1821-1956*)
- K. A. Akishev 1956 Tr. 1  
(South Kaz.: Ili basin, hydroelectric power stations, Wu-sun  
tombs, rock engravings Chulak-Tau) (B) (R)  
1958 Izv. 3  
(General survey, 1957: Stone and Bronze Ages, Nomads)  
1959a Tr. 7  
(Exp. 1954-6, North Kazakhstan, mostly Bronze Age) (B) (P)  
1959b Tr. 7  
(South Kazakhstan: Ili basin, gigantic Saka kurgans, Bes-  
Shatyr) (B)  
1961 Izv. 2  
(General survey, 1960. Similar surveys published also for other  
years) (B) (P)  
1962 KS 91  
(Bes-Shatyr) (B)  
1966 Chapters in Margulan's *Drevniaya Kultura*  
1) Chronology of cultural periods; funeral rites (B) (P)  
2) Andronovo cultures in Central Kazakhstan (B) (P)  
1967a SA 4  
(Detailed and comprehensive survey of Kazakhstan archaeology  
since 1918)

- 1967b Ch. in *Arkh. Otkr.* on discoveries in 1966 (B) (R)
- K. A. Akishev & G. A. Kushayev 1963 *Drevniaya Kultura Sakov i Usuney Doliny Reki Ili*, Alma-Ata (Ancient Saka and Wu-sun culture in the Ili valley; Bronze Age, chronology of bronze arrow-heads. Good bibliography)
- P. Alampiev 1958 *La Kazakhie Soviétique* (A French edition of a useful but popular book on geography, population, economy, etc.)
- V. P. Aleksieyev 1967 SA 1 (Anthropology of the Andronovo tribes) (A)
- Kh. A. Alpysbayev 1956 Tr. 1 (Bostandy, rock engravings) (R)
- 1959 Tr. 7 (Palaeolithic in South Kazakhstan)
- 1961 Tr. 12 (Palaeolithic in South Kazakhstan; Arystandy river) SA 1 (Palaeolithic in South Kazakhstan)
- 1962 Tr. 14 (Palaeolithic, Karatau)
- K. M. Baypakov 1964 SA 2: *Arkhéologicheskaya Literatura* (Archaeological works issued by AN Kaz. 1946-62. A useful, commented bibliographical survey)
- A. N. Bernshtam 1950 MIA 14: *Chuyskaya dolina* (Semirechiye expedition, Chu valley; important basic report) (B) (P)
- 1957 KSE XXVI (Andronovo tribes; Aryans in India)
- S. S. Chernikov 1947 SA IX (Irtysh, rock engravings) (R)
- 1951 KS XXXVII (East Kaz. Chiliktin valley, Early Nomads)
- 1956 KS 64 (General survey East Kazakhstan; Stone and Bronze Age) (B) (P)
- 1957a KS 69 (Ancient history East Kazakhstan, Irtysh valley; Stone and Bronze Age) (B)
- 1957b KSE XXVI (Detailed analysis of Andronovo culture) (P)
- 1959 KS 73 (Neolithic, Bronze Age of East Kazakhstan, Bukhtarma region flooded)
- 1960a MIA 88: *Vostochnyi Kazakhstan v Epokhu Bronzy* (East Kazakhstan; excellent bibliography, good map of the Andronovo culture) (P) (B)
- 1960b KS 80 (The meaning of Early Nomads, Huns, Scythians, etc.)
- 1964 KS 98 ("Golden" kurgan in Chiliktin valley, origin of Scythian art) (R)
- 1965 *Zagadka Zoloto Kurgana* (The Riddle of the Golden Kurgan; origin of Scythian art) (R)
- V. V. Ginzburg 1956 Tr. 1 (Anthropology of Bronze Age) (A)
- 1959 Tr. 7 (Anthropology of Wu-sun and Turks, Ili region) (A)
- M. P. Grlaznov 1956 KS 61

- (North Kazakhstan: Borovoye, Aktyubinsk, Akmolinsk; Early Nomads, beginning of "Animal Art") (B)
- 1966 KS 108  
(Black glazed pottery in Kazakhstan, Siberia, etc.) (P)
- M. A. Itina 1969 Sibérie du sud, Genève (Archaeologia Mundi)
- 1960 XXV Congress vol. III  
(Steppe tribes; fate of Indus valley civilization)
- M. K. Kadyrbayev 1959 Tr. 7  
(Early Nomads, Central Asia) (B)
- 1962 Izv. 1 (18)  
(Early Nomads, Central Asia) (B)
- 1966 Ch. in Margulan 1966  
(Tasmola culture, funeral rites, early "Animal Style", Scythian problem; map) (B) (P)
- N. I. Kiuner 1960 Tr. 8 *Chinese and Manchu Bibliography* on Kazakh History
- M. N. Klapchuk 1964 SA 3  
(Central Kazakhstan Palaeolithic, 1960-62)
- 1965 SA 3  
(Palaeolithic and Neolithic, Karaganda region, 1962)
- 1967 Ch. in *Ark. Otkr.* on discoveries of the Stone Age in 1966
- M. N. Komarova 1962 A. Sb. Erm. 5  
(Detailed survey of Andronovo civilization: analysis of pottery in the Hermitage) (P) (B)
- E. E. Kuzmina 1961 KS 85  
(Emba region, West Kazakhstan, mostly 6th-8th century A.D.; also Neolithic and Bronze Age. Map) (B) (P)
- 1965 MIA 130  
(Chronology of hoards in Semirechiye during the Bronze Age. Synoptic table by objects and geographical distribution)
- L. R. Kyzlasov 1956 KS 63  
(Andronovo figurines in Soviet Central Asia)
- A. G. Maksimova 1958 VAN 9  
(Tamgaly rock engravings) (R)
- 1959 Tr. 7  
(Bronze Age of East Kazakhstan; comprehensive survey of Chernikov's writings) (B)
- 1962 Tr. 14  
(Tau-tary tombs, Bronze Age) (P) (B)
- A. Kh. Margulan 1960 XXVth Congress: General review of Bronze Age in Kazakhstan
- 1966 Ch. in *Drevniaya Kultura Tsentr. Kazakhstana*, Alma-Ata  
(History of archaeological research in Central Kazakhstan; Bronze Age, menhirs, rock engravings) (B) (R)
- A. Kh. Margulan (ed) 1966 *Drevniaya Kultura Tsentralnogo Kazakhstana*, Alma-Ata  
& K. A. Akishev & M. K. Kadyrbayev & A. M. Orazbayev  
(Mostly Bronze Age; excellent historical survey; analysis of Nomad tribes, funeral rites, origin of "Scythian art"; rich bibliography) (B) (P) (R)
- P. I. Marikovskiy 1950 VAN 6  
(Chulak mountains, South Kazakhstan; rock engravings) (R)
- 1961 Tr. 12  
(Kuldzhabasy, Karatau, rock engravings) (R)
- A. G. Medoyev 1961 Tr. 12  
(Tesiktas, Karaungur, South Kazakhstan; rock engravings) (R)
- A. P. Okladnikov 1966 Ch. 1, 2, 3 in *Sredniaya Aziya* on Stone Age (See Bibl. ONE AN SSSR 1966b)
- A. M. Orazbayev 1958 Tr. 5

- (Detailed survey on Bronze Age and Early Nomads in North Kazakhstan) (P)
- 1959 Tr. 7  
(Bronze Age in Central Kazakhstan; Kanattas, etc.) (P) (B)
- L. I. Rempel 1956 Tr. 1  
(Taraz; Asiani, Apasiaks and other tribes) (P) (B)
- 1957 KS 69  
(Taraz, South Kazakhstan; Zoroastrian ossuaries, figurines) (B)
- T. N. Senigova 1956 Tr. 1  
(Novaya Kazanka, West Kazakhstan, Bronze Age, Sarmatian period, etc.) (B) (P)
- 1960 Izv. 3 (14)  
(Taraz medallion)
- 1962 Tr. 14  
(South Kazakhstan: Karatau, Aktobe, rock engravings, bibliography) (P) (R)
- Ya. A. Sher 1966 Babas in Semirechiye (see Kirgiziya)
- I. V. Sinitzyn 1956 Tr. 1  
(West Kazakhstan: Neolithic, Bronze Age, Scythians, Sarmatians)
- S. S. Sorokin 1963-7 *Texisy*  
(South Altay expedition: Early Nomads, jewelry, rock engravings) (B) (R)
- 1965 S. Erm. XXVI  
(South Altay, Katon-Karagay, rock engravings) (B) (R)
- 1966 A. Sb. Erm. 8  
(N.E. Kazakhstan: Early Nomads in the Bukhtarma region) (B) (P)
- V. S. Sorokin 1958 KS 71  
(1955 exp. North Kazakhstan, Aktyubinsk region. Bronze Age, early Iron Age. Map) (B) (P)
- 1962 MIA 120: *Mogilnik Bronzovoy Epokhi Tasty-Butak I*  
(North Kazakhstan; detailed survey. Map) (P) (B) (A)
- 1966 *Svod "B" 3-2: Andronovskaya Kultura* (B) (P)
- S. P. Tolstov & 1960 SA 1  
M. A. Itina  
(Vast survey of the 2nd millennium B.C.; end of Harappa culture)
- T. A. Trofimova 1962 KSE XXXVI  
(Racial types and pottery) (P) (A)
- A. V. Vinogradov 1959 Tr. 7  
(Neolithic in South Kazakhstan; Aralsk, Saksaul)
- Yu. A. Zadneprovskiy 1966 Ch. in *Sredniaya Aziya* on Andronovo culture (see Bibl. one AN SSSR 1966b)
- S. V. Zotova 1965 Ch. in MIA 130 on types of designs on Andronovo pottery (P)
- Yu. A. Zuyev 1960 Tr. 8  
(Wu-sun; ethnic history, relations with the "Huns", Scythians, etc.)

## II. KIRGIZIYA

- (Some abbreviations relate to regional publications: Tr. = Trudy Instituta Istorii Kir. SSR.  
Izv. = Izvestiya Inst. Istorii Kir. SSR Tr. AE. = Trudy Kirgizskoy  
Arkheol.-Etnogr. Ekspeditzii)
- AN Kirg. SSR *Trudy Kirg. arkh.-etnogr. Ekspeditzii* (Tr. AE)
- 1956 —, vol. I  
(see Debetz, Ginzburg) (A)

- 1959 —, vol. II  
(see Kibirov, Kyzlasov, Miklashevskaya) (A) (B) (P) (R)  
*Trudy Instituta Istorii*, Frunze
- 1956 —, vol. II  
(see Baruzdin, Amitin-Shapiro)
- 1957 —, vol. III  
(see Baruzdin, Ivanov, Zadneprovskiy)
- 1958 —, vol. IV  
(see Ranov, Zima)
- 1962 *Novyie Epigraficheskiye Nakhodki v Kirgizii*, 1961  
(Epigraphical discoveries. Articles by Baruzdin, Kozhemiyako, Vinnik, etc.) (L)
- E. I. Ageyeva & T. N. Zadneprovskaya 1959 Tr. Kaz. 7  
(Bibliography on archaeology of Semirechiye, 1821-1960)
- Z. L. Amitin-Shapiro 1956 Tr. II  
(Soviet archaeological literature, 1918-1954)
- Yu. D. Baruzdin 1956, 7 Tr. II, III  
(Kara-Bulak, tombs B.C.) (A) (B) (P)
- Yu. D. Baruzdin & A. M. Belenitzkiy 1961 KS 86  
(Kara-Bulak, bronze plaque, solar and lunar emblems) (B) (P)
- Yu. D. Baruzdin & G. A. Brykina 1962 *Arkholog. Pamiatniki Batkena i Lyaylyaka*, Frunze  
(Illustrations rather mediocre. See also Gorbunova 1966) (B) (P)
- Yu. D. Baruzdin & A. G. Podolskiy 1961 KS 85  
(Kara-Bulak, Indian style bronze figurine, 2nd-3rd century A.D.)
- A. N. Bernshtam (see also Zadneprovskiy 1960b) 1940 *Kenkolskiy Moginik*  
(Kenkol necropolis; edited by the Hermitage Museum (B); see also Sorokin, 1956)
- 1948 SE 4  
(Aravan horses, Fergana) (R)
- 1949 SA XI  
(Cultural periods in Semirechiye and Tyan-Shan; excellent general survey) (B) (P)
- 1950 MIA 14: *Chuyshaya Dolina*  
(Chu valley: arch. and cultural survey, Sogdian civilization, babas) (P) (B) (R)
- 1951 *Ocherki po Istorii Gunnov*  
(History of Huns)
- 1952a MIA 26: *Ocherki Tsentralnogo Tyan-Shana*  
(Prominent arch. survey; relation with Scythian art; rock engravings) (B) (P) (R)
- 1952b SE 2  
(Saimaly-Tash, Fergana, rock engravings) (R)
- 1954 *Po Sledam Drevnikh Kultur*  
(Ch. on Tyan-Shan and Pamirs; Saimaly-Tash engravings) (R)
- V. A. Bulatova-Levina 1961 SA 3  
(Buddhist shrine at Kuva; a huge Buddha and other images; pottery) (P)
- 1966 IMK (Uzb) 7  
(Kuva)
- G. F. Debetz 1956 Tr. AE I  
(Anthropological origin of the Kirghiz) (A)
- L. A. Evtukhova 1952 MIA 24  
(Babas in Sibiria, Mongolia) (R)

- V. V. Ginsburg 1956 Tr. AE I  
(Anthropology of ancient Fergana) (A)  
1962 MIA 118  
(Bronze Age, Fergana; variety of anthropological types; deformed skulls) (A)
- N. G. Gorbunova 1962 A. Sb. Erm. 5  
(Fergana in early Iron Age; vast survey of pottery, funeral rites, anthropology, economic and social conditions) (B) (P)  
1966 A. Sb. Erm. 8  
(on Baruzdin & Brykina, 1962)
- A. D. Grach 1961 *Drevnetiurkshiye Irvayaniya Tuvy*  
(Tuva balbals; see also Kyzlasov 1964) (R)  
1968 Ch. in *Ist. Arkh.* on early burials with cremation; balbals (Tuva) (B) (R)
- L. N. Gumilev 1960 *Khunnu*  
(Protohistory, history and origin of the "Eastern" Huns)
- P. P. Ivanov 1957 Tr. III  
(Issyk-Kul; general archaeological survey; "Huns", Wu-sun)
- A. K. Kibirov 1959 Tr. AE, II  
(Central Tyan-Shan, Chatkal, Palaeolithic 1953-55; problem of "Huns") (B) (P) (R)
- M. N. Komarova 1962 A. Sb. Erm. 5  
(Andronovo chronology) (B) (P)
- V. I. Kozenkova 1966 SA 1  
(Fergana: ancient burial rites; bibliography) (B) (P)
- P. N. Kozhemiyaiko 1960 Izv. II, 3  
(Tombs of Bronze Age in Kirgiziya) (B)  
1968 *Problemy*  
(Useful short survey) (B) (L) (R)
- P. Kozhemiyaiko & N. F. Vinnik 1962 VAN 7  
(Useful survey of archaeological explorations) (B) (R)
- E. E. Kuzmina 1965 MIA 130  
(see under Kazakhstan)
- L. R. Kyzlasov 1957 KSE XXVI  
(Chu valley expedition 1953-4; excellent general survey. Christian church)  
1959 Tr. AE, II  
(Ak-Beshim Buddhist shrine)  
1964 SA 2  
(The meaning of "babas". Vast survey and bibliography) (R)
- B. A. Latynin 1961 A. Sb. Erm. 3  
(Fergana, 1934 expedition; detailed survey from the Bronze Age and millennium B.C., to the 5th century A.D.) (P)
- M. Kh. Mannay-Ool 1964 *Arkheologicheshkiye Pamiatniki Tuvy*, Kyzyl  
(Tuva archaeology; balbals) (R)
- N. N. Miklashevskaya 1959 Tr. AE, II  
(Palaeoanthropology) (A)
- A. P. Okladnikov 1954 SE 2  
(Stone Age, 1953 exped.; Balasagun Buddhist shrine)  
1966 Ch. in *Sredniaya Aziya* on Stone Age from the Palaeolithic to the Mesolithic (P) (See Bibl. ONE AN SSSR 1966b)
- G. Pomazkina 1969 Arkh. Otkr. 1968.  
(Engravings at Saimaly Tash) (R)



- V. A. Ranov 1958 Tr. IV  
(Palaeolithic, Neolithic in the Alay valley)  
1965 *Kamennyi Vyek Tadzhikistana*  
(Stone Age)
- S. I. Rudenko 1962 *Kultura Khunnov i Noïnulinskiye Kurgany*  
("Hun" culture and kurgans of Noïn-ula, Mongolia) (B)
- Ya. A. Sher 1964 KS 98  
(Central Tyan-Shan, Son-kul lake region; tombs of Early Nomads—6th century B.C. to 4th century A.D.; babas and rock engravings 6th-9th century A.D.) (B) (R)  
1966 *Kamennyye Izvayaniya Semirechiya*  
(Stone babas; mostly Kirgiziya and Kazakhstan. Systematic description, classification, statistical analysis; representation, technique, meaning, dating, iconography. Bibliography). See also Grach, Kyzlasov 1964, Mannay-Ool, Umanskiy, Vinnik (B) (R)
- S. S. Sorokin 1954 SA XX  
(Pottery in Fergana tombs). English version:  
*East & West IX*, Rome, 1959 (P) (B)  
1956 KS 64  
(Kenkol necropolis. Opposes Bernshtam's views as to date and "Hun" origin; bibliography) (B)
- A. P. Umanskiy 1959 *Pamiatniki Kultury Altaya*, Barnaul  
(A popular useful booklet on Altay, Andronovo culture, Nomads, rock engravings, balbals) (P) (R)
- D. F. Vinnik 1961 Izv. III, 3  
(Issyk-kul, historical survey; submarine explorations, balbals) (R)  
1967 SA 4  
(Detailed and comprehensive survey of Kirgizian archaeology)
- B. D. Yamgerchlnov <sup>1</sup> 1960 XXV Congress, vol. III  
(Cultural links of ancient Kirgiziya with other parts of Asia)
- Yu. A. Zadneprovskiy 1957 Tr. III  
(Issyk-kul; survey of previous explorations; good bibliography)  
1960a *Arkheologicheskiye Pamiatniki Yuzhnykh Rayonov Oshskoy Oblasti*, Frunze  
(Archaeology in Osh region) (B)  
1960b KS 80  
(Obituary article in memory of A. N. Bernshtam; detailed list of his works)  
1962 MIA 118: *Drevnesemedielcheskaya Kultura Fergany*  
(Farming culture of Fergana; detailed analysis of the various types of pottery; problem of Aryans, end of Harappa culture; rock engravings. Good bibliography) (B) (P) (A) (R)  
1966a Ch. in *Ark. Otkr.* on explorations in 1965, mainly Alay valley  
1966b Ch. in *Sredniaya Aziya* on Chust culture (P) (B) (See Bibl. ONE AN SSSR 1966b)  
1967 Ch. in *Ark. Otkr.* on Dalverzin region in 1966; painted pottery (P)
- B. M. Zima 1958 Tr. IV  
(Rock engravings. Useful survey) (R)
- Yu. A. Zuyev 1960 Tr. Kaz. 8  
(Wu-sun; history, relationship with the "Huns", viz. Hiung-nu)

<sup>1</sup> Yamgerchlnov, P. Kozhemyako, M. T. Aitbayev, E. Kozhemberdiev, D. F. Vinnik.

- L. P. Zyablin 1957 KS 69  
(Issyk-kul, Wu-sun tombs) (B)  
1961 *Vtoroy Buddiiskiy Khram Ak-Beshimskogo Goroda*, Frunze  
(Second Buddhist shrine at Ak-Beshim; sculpture, paintings;  
illustrations mediocre)

## III. KUSHAN EMPIRE

(See also Bibliography part ONE and addendum hereafter)

- A. M. Belenitzkiy 1956 Ch. XII of *Ocherki Istorii SSSR*, vol. I  
(Zadneprovskiy, Staviskiy, Sorokin; under the supervision of  
Belenitzkiy)  
A. D. H. Bivar 1966 Chapters in *Fischer's Weltgeschichte* Frankfurt am Main  
(Zentralasien; see also Bibl. ONE) 2/4  
G. Frumkin 1968 *Bibliotheca Orientalis*, XXV, 4/6, Leiden  
(Expansion of Buddhism in Soviet Central Asia)  
R. Ghirshman 1957 "Le Problème de la Chronologie des Kouchans"  
(in *Cahiers d'Histoire Mondiale*, vol. III UNESCO, Paris)  
Ya. G. Guliamov 1968 Ch. in AN Uzb. ON: Irrigation in the Kushan Empire  
J. E. van Lohuizen-  
de Leeuw 1949 *The "Scythian" Period*, Leiden  
A. M. Mandelshtam 1968 *Problemy*  
(Early Kushans) (B)  
M. E. Masson 1968 Ch. in AN Uzb. ON: The northern boundaries of the Kushan  
Empire  
V. M. Masson 1966 *Strana Tysiachy Gorodov*  
(The Land of 1000 Cities; Bactria and the Kushan Empire)  
G. A. Pugachenkova 1968 *Problemy*  
(Kushan art)  
B. Ya. Staviskiy 1961 VDI 1  
(Northern boundaries of the Kushan Empire)  
1963 Ch. VIII in ITN vol. I on the Kushans  
1966 *Mezhdú Pamirom i Kaspiyem*  
(Ancient Central Asia)  
K. V. Trever 1954 SA XXI  
(Kushans, Chionites, Ephthalites, according to Armenian  
sources)  
E. A. Yurkevich 1968 *Problemy*  
(Local types of Kushan pottery) (P)

## ADDENDUM

Inserted after the preparation of the present volume was finished

*A selection of papers prepared by Soviet scholars for the International Conference on the History, Archaeology and Culture of Central Asia in the Kushan Period.*

Dushanbe, September-October 1968

- Conference (Dushanbe) 1968 *Abstracts of Papers by Soviet Scholars*  
(Includes thirty-three abstracts covering Kushan history and  
culture, chronology, arts, religion, languages, anthropology,  
frontiers, Nomads, burial rites, etc.)  
*Culture and Art of Central Asia in the Kushan Period*  
Catalogue of Exhibition (Edited by V. G. Lukonin). Compiled  
by E. V. Zeymal. Contributions by L. I. Albaum, B. I. Marshak,

- S. K. Kabanov, V. A. Meshkeris, N. G. Gorbunova, B. I. Vainberg, A. M. Belenitzkiy, B. Ya. Staviskiy, V. A. Bulatova-Levina, T. I. Zeymal  
*Science on Central Asia in the Kushan Period and Methods of studying it*  
 (Russian and English; with bibliography)
- B. G. Gafurov  
*Kushan Civilization and World Culture*  
 (Another most useful and richly illustrated article was published by the same author in the UNESCO Courier of February 1969 under the title *The Great Civilization of the Kushans*)
- B. A. Litvinskiy  
*Historical and cultural Relations of the South Russian and Central Asian tribes*  
 (with a detailed bibliography)  
*Outline History of Buddhism in Central Asia*  
 (A comprehensive major survey in English; extensive bibliography)
- B. Ya. Staviskiy &  
 G. M. Bongard-Levin  
 B. Ya. Staviskiy &  
 B. I. Vainberg &  
 N. G. Gorbunova &  
 E. A. Novogorodova  
 B. I. Vainberg  
 E. V. Zeymal  
*Central Asia in the Kushan Period*  
 (Archaeological Studies by Soviet scholars; bibliography)  
*Soviet Central Asian Archaeology and the Kushan Problem: Annotated Bibliography, part 1 and 2.*  
 (A foremost detailed survey. Russian but with abridged comments in English. See also Bibl. ONE Lunin 1968)  
*Archaeological Material from Khorezm in relation with the Kushan Problem*  
*Kushanskaya Chronologiya*  
 (Review of data bearing on the problem of Kushan chronology; detailed bibliography; English summary; contains a detailed synoptic table. The author suggests as the date for Kanishka the year 278 A.D.)

## IV. TADZHIKISTAN

(Some abbreviations relate to regional publications: Tr. = Trudy Instituta Istorii, Arkheologii i Etnografii Izv. = Izvestiya AN Tad.)

- Ak. Nauk SSSR 1950 MIA 15 *Trudy Sogdiysko-Tadshikskoy Arkh. Eksp. I (1946-7)*  
 (Ed. A. Yakubovskiy) (see Dalskiy, Dyakonov, Ginzburg, Smirnova, Yakubovskiy)  
 (P) (B) (A) (R)
- (Ed. M. Dyakonov) 1952 MIA 26 *Ocherki Tsentralnogo Tyan-Shana*  
 (see Bernshtam) (P) (B)
- (Ed. A. Yakubovskiy) 1953 MIA 37 *Tr. Tadshikskoy Arkh. Eksp. II, 1948-50*  
 (see Belenitzkiy, Bentovich, M. Dyakonov, Ginzburg, Staviskiy & Bolshakov & Monchadskaya, Yakubovskiy, Zabyelina)
- (Ed. A. Yakubovskiy 1954 *Zhivopis Drevnego Pendshikenta, 1948-51*  
 & M. Dyakonov) (Wall-paintings; see Belenitzkiy, Dyakonov, Yakubovskiy)
- (Ed. A. Belenitzkiy) 1958<sup>9</sup> MIA 66 *Tr. Tads. Arkh. Eksp. III, 1951-3*  
 (Sculpture and Paintings; see Belenitzkiy, Bentovich, Ginzburg, Mandelshtam & Pevzner, Okladnikov, Smirnova)
- (Ed. A. Belenitzkiy & 1959 *Skulptura i Zhivopis Drevnego Pendshikenta, 1952-4*  
 B. Plotrovskiy) (see Belenitzkiy, Vorouina)
- (Ed. A. Belenitzkiy) 1964 MIA 124 *Tr. Tads. Arkh. Eksp. IV, 1954-9*  
 (see Bentovich, Ranov)
- 1966 MIA 136 *Tr. Tads. Arkh. Eksp. V*  
 (see Mandelshtam)

- AN Tad. SSR 1959 *Arkheologi Rasskazyuyut*, Stalinabad (Dushanbe)  
(Archaeologists Reporting; popular but substantial chapters by Belenitzkiy & Staviskiy, Davidovich, Negmatov, Zeymal)
- 1966 *Rezba po Derevu v Dolinie Zeraushana*  
(Wood Carving in the Zeravshan Valley; collection of drawings with text by A. Mukhtarov)
- 1968 *Materialnaya Kultura Tadzhikistana* No. 1, Dushanbe (Ed. B. A. Litvinskiy; various authors)
- (Ed. B. Gafurov & B. Litvinskiy) 1963 *Istoriya Tadzhikskogo Naroda*, vol. I  
(A useful team-work; see Litvinskiy, Livshitz, Nerazik, Okladnikov & Ranov, Staviskiy, Vorobyeva)
- (Ed. B. Gafurov & A. M. Belenitzkiy) 1964 *Istoriya Tadzhikskogo Naroda*, vol. II  
(Mandelstam, Belenitzkiy, etc.)
- A. Babayev 1962-64 Tr. XXXIV (VIII) and XLII (IX)  
(Archaeological explorations, West Pamir, 1960-1)
- A. M. Belenitzkiy 1953 Ch. in MIA 37 on Sogdian shrines, 1948-50  
(mostly Pendzhikent)
- (B) (P) 1954a Ch. in *Zhivopis* (See AN 1954)  
(See Ak. Nauk 1954. Sogdian worship)
- 1954b KS 55  
(Pendzhikent 1952, aquatic rites) (P) (B)
- 1956a Tr. II  
(Pendzhikent 1954, wooden sculptures)
- 1956b KS 61  
(The interpretation of Pendzhikent wall-paintings)
- 1958a *Arts Asiatiques* V. 3, Paris  
(Pendzhikent wall-paintings and sculpture; in French)
- 1958b MIA 66  
(Excellent survey of 1951-3; comparison with Surkh Kotal) (L)
- 1959 Ch. in *Skulptura i Zhivopis*  
(See Ak. Nauk 1959. Iconographic essay on paintings and sculpture)
- 1960 XXVth Congress, vol. III  
(Pictorial and plastic arts and the "Shah Nameh")
- 1962 Tr. XXXIV (VIII)  
(Finds in 1960; analogies with other countries; newly discovered paintings and wooden sculptures)
- 1964a Tr. XLII (IX)  
(Finds in 1961; seals, wooden sculptures)
- 1964b KS 98  
(Cultural relations with India. A scholarly analysis of the diffusion and the disappearance of Buddhism; Indian influence; newly discovered paintings and sculpture)
- 1965 *Tezisy*  
(Interpretation of wall-paintings; multiple elements such as "Shah Nameh", local worship, Mithra, etc.)
- 1966 Ch. in *Arkh. Otkr.*  
(1965: new paintings and Sogdian inscriptions) (L)
- 1967 Ch. in *Arkh. Otkr.* on Pendzhikent in 1966  
(New finds of sculpture, paintings and inscriptions) (L)
- A. M. Belenitzkiy & B. Ya. Staviskiy 1959 Ch. in *Arkh. Rassk.*  
(Pendzhikent; a popular, useful synopsis)
- I. B. Bentovich 1953 Ch. in MIA 37 on Pendzhikent pottery (P)
- 1958 Ch. in MIA 66 on Mount Mugh; textiles and other objects in the Hermitage collections

- P. Bernard 1964 Ch. in MIA 124 on late Pendzhikent pottery (P)  
 1965 *Bulletin de Correspondance Hellénique*, Athens (On Ai-Khanum pottery) (P)  
 1966 *Acad. des Inscriptions et Belles-Lettres, Comptes-Rendus*, Paris, I-III (On Ai-Khanum, with comments by D. Schlumberger; continued in C.-R. 1967 IV-VI) (P)
- A. N. Bernshtam 1952 MIA 26 *Ocherki Tsentr. Tyan-Shana i Pamiro-Alaya, 1944-49* (A fundamental report including also Kirgiziya, Fergana, SE Kazakhstan, etc.) (B) (P)
- M. Bogoliubov 1960 XXVth Congress vol. II, p. 338-342 (Sogdian documents from Mount Mugh; see also Orbeli) (L) (See Staviskiy, etc. 1953)
- O. G. Bolshakov 1953 SA 4  
 S. V. Butomo, V. A. 1964 (Osh-Khona Palaeolithic, West Pamirs. Radio-carbon C-14)
- A. N. Dalskiy 1950 MIA 15 (Rock engravings in Zeravshan valley) (R)
- O. M. Dalton 1964 *The Treasure of the Oxus*, London (Reprint of the 1926 edition; see also Zeymal & Zeymal 1962)
- E. A. Davidovich 1959 Ch. in *Arkh. Rassk.* on Sogdian and other coins  
 M. M. Dyakonov 1950 Ch. in MIA 15 on Kafirnigan valley (B) (P)  
 1953 Ch. in MIA 37 on Kafirnigan, Kobadiyan (B) (P)  
 1954a Ch. in *Po Sledam III* on ancient Bactria; vast general survey  
 SA XIX (Social structure of Bactria)  
 1954b Ch. in *Zhivopis* on paintings in Central Asia (See Ak. Nauk. 1954)  
 1954c *U Istokov Drevney Kultury*, Stalinabad (Dushanbe)  
 1956 (Ancient Tadjhik culture; useful popular survey) (B) (L) (P)
- N. V. Dyakonova & 1960 Ch. in *Sbornik v Chest Akademika I. A. Orbeli*; (Volume in honour  
 O. I. Smirnova of the Academician I. A. Orbeli) (On the Pendzhikent paintings)  
 1967 SA 1 (Anahita, Nana worship, astral emblems, silver dishes)
- A. A. Freyman (see 1962 *Opisaniya, Publikatsii i Issledovaniye Dokumentov s Gory Mug I.*  
 also Orbeli, Livshitz (Records from Mount Mugh) (L)  
 1964 *Dokumenty s Gory Mug* (Documents from Mount Mugh) (Foto album) (L)
- B. G. Gafurov & B. A. 1963 *Istoriya Tadzhikskogo Naroda*  
 Litvinskij (Eds.) (History of the Tadjhik People; see AN Tad. SSR 1963)
- J. C. Gardin 1957 MDFA XV: *Céramiques de Bactres*, Paris (Bactrian Pottery) (P)
- R. Ghirshman 1946 MDFA XII: *Begram*, Le Caire  
 V. V. Ginzburg 1950 Ch. in MIA 15 on anthropology of Bactria (A)  
 1953 Ch. in MIA 37 on Bactria and Sogdiana (A)  
 1956 KS 61 (Ancient Bactria) (A)  
 1958 MIA 66 (Ancient Pendzhikent) (A)  
 1960 KS 80 (South Pamirs, Saka) (A)
- K. Jettmar 1961 *Central Asiatic J.*, vol. VI, 4, the Hague (Pendzhikent "Scene of Mourning")
- B. A. Litvinskij 1954 *Arkheologicheskoye Issucheniyeye Tadzhikistana*, Tr. XXVI, Stalinabad (Dushanbe) (Excellent survey for 1917-1954) (P) (B)  
 1956 KS 64 (Khuttal, Kukhna-Kala, Isfara, Vorukh) (B)

- 1959a Tr. CIII (III)  
(Kayrak-Kumy, Isfara) (B)
- 1959b Tr. CIII (V)  
(Leninabad area rock engravings) (P) (R)
- 1960 XXVth Congress vol. III  
(East Pamirs, relations with India)
- 1961 Tr. XXVII (VI)  
(East Pamirs; a scholarly and versatile survey)
- 1963 Ch. in ITN I on Bronze Age in Central Asia; history 3rd century B.C.—3rd century A.D. (P) (B) (L)
- 1964 Ch. in I. Dr.  
(A significant analysis of ancient contacts between Tadzhikistan and India; Adzhina-tepe; first-rate bibliography) (L); review-article by G. Glaesser in *East and West*, vol. 10, 1-2, 1966, Rome
- 1967a SA 3  
(An essential survey on Tadzhik archaeology; detailed map; good bibliography)
- 1967b Ch. in *Arkh. Otkr.* on finds made in 1966: Parkhar region, Adzhina-tepe, upper Zeravshan.
- 1967c VDI 4 (An outstanding general survey)
- 1968a *Problemy*  
(Short general survey) (B)
- 1968b *Outline History of Buddhism in Central Asia* (See page 177 for list of papers prepared for the Dushanbe Conference)
- B. A. Litvinskiy & M. A. Bubnova 1962 Tr. XXXIV (VIII)  
(East Pamirs, 1958; mostly Saka tombs) (B)
- B. A. Litvinskiy & A. P. Okladnikov & V. A. Ranov 1962 *Drevnosti Kayrak-Kumov*, Dushanbe  
(Ancient Kayrak-Kumy)  
—, Part I: Palaeolithic Age by Okladnikov & Ranov  
—, Part II: Bronze and early Iron Age by Litvinskiy (P) (B)
- B. A. Litvinskiy & T. I. Zeymal 1964 Tr. XLII (IX)  
(Adzhina-tepe, Buddhist shrine, 1961; detailed survey)
- V. A. Livshitz 1960 XXVth Congress  
(The Sogdian Letters from Mount Mugh, II. Other articles in *Problemy Vostokovedeniya*) (L)
- 1963 Ch. in ITN I on Avesta in relation to ancient Tadzhik history
- A. M. Mandelshtam 1954 SA XX  
(Origin of Tadzhiks, people, language) (L)
- 1956a Tr. LXIII (III)  
(Kobadiyan, Aruk-Tau tombs) (B)
- 1956b Tr. XLII  
(Rock engravings, Upper Zeravshan) (R)
- 1959a Tr. XCI (IV), CIII (V)  
(Bishkent valley, Aruk-Tau; 2nd century B.C.-3rd century A.D.) (B) (P)
- 1959b KS 76  
(Bishkent, Aruk-Tau, 2nd-1st century B.C.) (B) (P)
- 1963 KS 94  
(North Bactria: post-Kushan tombs) (B)
- 1964a KS 98  
(Bactrian history, analogies, cremation in the Bishkent valley by new tribes) (B)
- 1964b Ch. in ITN II  
(Ephthalite Empire)

- 1965 *Epigrafika Vostoka XVII*  
(Pre-Kushan Bactrian coins found in Tulkhar tombs) (B)
- 1966a MIA 136 *Kochevniki na Puti v Indiu*  
(Nomads on the Way to India; Kurgans of Nomads in the Bishkent valley; Tulkhar cemetery 2nd century B.C. to beginning of A.D. era) (B) (P)
- 1966b Ch. in *Sredniaya Aziya* on burial rites (B) (See Bibl. ONE AN SSSR 1966b)
- 1966c Ch. in VII *Congrès Int. des Sciences préhistoriques* on Bishkent valley, Tulkhar tombs of the late Bronze Age, possibly 13th-9th century B.C. (B)
- 1968a MIA 145 *Pamiatniki Epokhi Bronza v Yuzhnom Tadzhikistanie*  
(Bronze Age in South Tad.: Aruk-Tau, Tulkhar, cremation) (P) (B)
- 1968b *Problemy*  
(Nomads in the Bishkent valley, 2nd century B.C.) (B)
- A. Mandelshtam & S. B. Pevzner 1958 Ch. in MIA 66 on Kafirnigan 1952-3; Kei-Kobad Shah, Munchaktepe; figurines. A thorough survey (P)
- B. I. Marshak 1964 Ch. in MIA 124 on Pendzhikent 1955-1960: stratigraphy, chronology, architecture, figurines. (P)
- V. M. Masson 1958 SA 2  
(Bactria: views on early development, relations with other regions) (P)
- 1966 *Strana Tysiachy Gorodov*  
(The Land of 1000 Cities. See also Bibl. ONE)
- E. A. Monchadskaya 1961 Tr. Erm. V  
(Bactrian and Sogdian rulers, 6th-4th century B.C.)
- N. N. Negmatov 1959-64 Tr. CIII (V), XXVII (VI), XLII (IX)  
(Leninabad, Shahrstan, etc.)
- 1959 Ch. in *Arkh. Rassk.* on ancient Usrushana, Kalai-Bolo, etc.
- E. E. Nerazik 1963 Ch. in ITN I on the ancestors of Tadjik people, 4th-5th century A.D.
- A. P. Okladnikov 1956 Tr. XXXVII (II) and subsequent annual reports  
(Stone and Bronze Age, North Tadzhikistan) (see also Litvinskiy, & Okladnikov & Ranov)
- 1958 Ch. in MIA 66 on Stone Age 1948, 1952-4; a thorough survey for the entire Tadzhikistan
- 1961 Tr. XXVII (VI), XXXI (VII)  
(Stone Age South Tadzhikistan, Kuy-Bulyen, Kulyab)
- 1966 Ch. in *Sredniaya Aziya* on the Stone Age (See Bibl. ONE AN SSSR 1966b)
- A. Okladnikov & V. A. Ranov 1962 Ch. I in Tr. XXXIII: *Drevnosti Kayrak-Kumov*, Dushanbe  
(Palaeolithic)
- 1963 Ch. I in ITN I on the Stone Age
- I. M. Oranskiy 1963 Ch. X in ITN I on Iranian languages of Central Asia, up to 8th century A.D. (L)
- I. A. Orbeli (ed) 1963 *Corpus Inscriptionum Iranicarum*: Dokumenty s Gory Mug  
(Seleucid and Parthian inscriptions; Eastern Iran and Central Asia; text in Russian and English) (L)
- V. A. Ranov 1959a Tr. XCI (IV) and subsequent annual reports  
(Useful surveys on the Stone Age: Pamirs, Vakhsh, etc.)
- 1959b Ch. in *Arkh. Rassk.* on the Stone Age
- 1961 Tr. XXVII (VI)  
(Stone Age, East Pamirs: Osh-Khona, Shakhty) (R)

- 1962 Izv AN Tad. 1(28).  
(Stone Age of Lake Kara-kul, Pamirs)
- 1964 Ch. in MIA 124 on the Stone Age, East Pamirs, 1956-8; rock engravings in Shakhty (R)
- 1965 *Kamiennyi Vyek Tadzhikistana I: Paleolitik*, Dushanbe. (A remarkable synopsis of the different explorations; the first chronology of the Palaeolithic)
- 1967 *Arkheologi na Kryshe Mira*, Dushanbe  
(Archaeologists on the Roof of the World. A popular but stimulating booklet on the finds made in the Eastern Pamirs and relating to the Palaeolithic and the Neolithic periods)
- 1968 See Bibl. ONE
- V. A. Ranov & E. D. Saltovskaya 1961 Tr. XXXI (VII)  
(Palaeolithic caves in Ura-Tyube region; rock engravings) (R)
- D. Schlumberger 1953-55 *Archaeology* 6, no. 4 and 8, no. 2 Cambridge, Mass. U.S.A. (Surkh Kotal)
- 1961 *Proceedings of the British Academy*, XLVII, London (On Surkh Kotal)
- 1964 *Journal Asiatique*, Paris, (On Surkh Kotal)
- 1965 *Acad. des Inscriptions & Belles-Lettres: Comptes-Rendus* (I-VI), Paris (On Ai-Khanum) (See also Bibl. Uzb., Turkm.)
- D. Schlumberger & P. Bernard 1965 *Bull. de Corresp. Hellénique*, LXXXIX on Ai-Khanum, Athens (P)
- 1966 (See P. Bernard)
- O. I. Smirnova 1950 MIA 15  
(Coins from Pendzhikent, 1947)
- 1954 KS 55  
(Coins from Pendzhikent, 1951/2)
- 1955 KS 60  
(Coins from Pendzhikent, 1953)
- 1958 Ch. in MIA 66  
(Coins from Pendzhikent; an excellent and detailed survey; history of Pendzhikent, chronologies, etc.)
- B. Ya. Staviskiy 1959 (see Belenitzkiy & Staviskiy)
- 1963 Ch. in ITN vol. I on the history of Central Asia: Achaemenids, Kushans
- 1966 *Mezhdú Pamírom i Kaspiyem*  
(Between the Pamirs and the Caspian Sea; Ch. VII on Sogdiana, of this attractive and instructive book) (B) (L) (P)
- B. Staviskiy, O. G. Bolshakov, E. A. Monchadskaya 1953 Ch. in MIA 37 on the Pendzhikent necropolis; funeral rites, ossuaries (B)
- M. G. Vorobyeva 1963 Ch. VII in ITN vol. I on the history of Bactria, Parthia
- V. L. Voronina 1959 Ch. in *Skulptura i Zhivopis* on architectural ornament in Pendzhikent; painting and woodcarvings (See Ak. Nauk SSSR 1959)
- A. Y. Yakubovskiy 1950 MIA 15  
(Tadzhik expedition, 1946-7; see Ak. Nauk)
- 1951 Ch. in *Po Sledam* on Pendzhikent; most useful survey (B)
- 1953 Ch. in MIA 37 on 1948-50 expedition; see Ak. Nauk
- 1954 Ch. in *Zhivopis* on wall-paintings of Pendzhikent and Soviet Central Asia (See Ak. Nauk SSSR 1954)
- E. A. Yurkevich 1964 Tr. XLII (IX)  
(“Rescue” exploration in the Nurek flooding area. Exploration in the Yavan region)



- 1965 SA 4  
(Yavan, a Kushan site near the Vakhsh; medallion with a rider on a hippocampus) (P)
- N. N. Zabyelina 1953 Ch. in MIA 37 on Kalai-Mir (P)
- Yu. A. Zadneprovskiy 1966 Ch. in *Sredniaya Aziya* on racial origin, burial rites in South Tadzhikistan (A) (B) (See Bibl. ONE AN SSSR 1966b)
- E. V. Zeymal 1961 Tr. XXVII (VI)  
(Hissar valley, 1958) (P)
- T. I. Zeymal (Mrs) 1959 Ch. in *Ark. Rassk.* on Vakhsh valley, Kukhna-Kala, etc.; a popular, useful survey.
- 1961 Tr. XXXI (VII)  
(Vakhsh valley 1959, Buddhist shrine, Adzhina-tepe)
- 1962 Tr. XXXIV (VIII)  
(Vakhsh valley 1960, Adzhina-tepe, ancient irrigation)
- 1967 *Tezisy*  
(Adzhina-tepe, 1966)
- T. I. & E. V. Zeymal 1962 *Izv. AN. I* (28)  
(Problem of locating the "Treasure of the Oxus")

## V. UZBEKISTAN I: KHOREZM

- AN SSSR 1958 *Ocherki Istorii*, vol. II  
(see Nerazik)
- 1962 *Narody Sredney Azii i Kazakhstana*  
(People of Central Asia; see Livshitz, Tolstov & Zhdanko)
- AN SSSR 1959a *Materialy Khorezmskoy Ekspeditsii* (M. Kh. E.): *Polevyie Issledovaniya* (Field work, ed. Tolstov) (P) (B) (A)
- Inst. Etnografii 1959b —, 1 (see Itina, Nerazik, Tolstov)
- 1960a —, 2 (see Trofimova)
- 1960b —, 3 (see Tolstov 1960a)
- 1961 —, 4 (see Tolstov 1960b)
- 1961 —, 5 (see Itina, Trofimova)
- 1963a —, 6 (see Tolstov & Zhdanko; Gudkova & Yagodin; Itina 1963; Rapoport & Lapirov-Skoblo; Trofimova; Trudnovskaya)
- 1963b —, 7 (see Nerazik)  
*Trudy Khorezmskoy Arkheologo-Etnograficheskoy Ekspeditsii*  
(Tr. Kh. E.; major reports edited by Tolstov and others)
- 1952 —, I (1945-1948 expedition)  
(see Tolstov, Trudnovskaya, Zalkind)
- 1958 —, II (1949-1953)  
(see Tolstov 1958a, Itina, Trofimova)
- 1959 —, IV (Khorezm pottery)  
(see Vorobyeva) (P)
- 1967 —, V *Koy-Krylgan-Kala* (4th century B.C.-4th century A.D.) (Contributions by Tolstov, Lapirov-Skoblo, Rapoport, Trudnovskaya, Vorobyeva, etc.) (B) (P) (L)
- Fr. Altheim & R. Stiehl 1964 *Die Araber in der Alten Welt*, Berlin  
(Controversy over Khorezmian chronology; vol. 1 and vol. 2) (L)
- 1965 *Bibliotheca Orientalis*, XXII 3/4, Leiden: Chwarezmische Inschriften  
(Controversy over Toprak-Kala and Tok-Kala chronologies; see Tolstov & Livshitz 1964) (L)
- M. P. Griaznov 1966a Ch. in *Sredniaya Aziya* on eastern Amu-Darya and delta; Tagisken (B) (P) (See Bibl. ONE AN SSSR 1966b)

- 1966b KS 108  
(Black glazed pottery in Tagiskan) (P)
- A. V. Gudkova 1963 SE 6  
(Tok-Kala necropolis; inscriptions in old Khorezmian) (B) (L)  
1964 *Tok-Kala*, Tashkent  
(See also Staviskiy 1966, Tolstov & Livshitz 1964, Snasarev 1960, Rysnazarov 1965) (B) (L)  
1968 Ch. in *Ist. Arkh.* on recent finds in Tok-Kala (ossuaries, paintings and inscriptions) (B)
- A. V. Gudkova & 1967 *Viestnik Uzb. AN*, Karakalpak branch 1  
V. A. Livshitz (Inscriptions at Tok-Kala, problems of chronology) (L)
- A. V. Gudkova & 1963 M. Kh. E. 6  
V. N. Yagodin (Delta of Amu-Darya, right bank, Tok-Kala, etc.) (P)
- W. B. Henning 1965 *Asia Major*, vol. XI, part 2, Leipzig (On the Khorezmian documents) (L)
- M. A. Itina 1958 Tr. Kh. E. II  
(Upper Uzboy; Neolithic)  
1959a Tr. Kh. E. IV  
(Most ancient Khorezmian pottery; useful, detailed summary) (P) (B)  
1959b M. Kh. E. 1  
(Tazabagyab culture: Akcha-Darya delta, Angka, Kokcha, Kavat, etc.) (P)
- 1960a M. Kh. E. 4  
(Tazabagyab 1957, Kavat, Angka) (P)
- 1960b XXVth Congress vol. III, pp. 15-22  
(Steppe tribes 2nd-1st mill. B.C. In English)
- 1961 M. Kh. E. 5  
(Kokcha cemetery) (B) (P)
- 1963 M. Kh. E. 6  
(Yakke-Parsan, Kavat, 1958-9) (P)
- V. A. Livshitz 1962 Ch. in *Narody Sredniy Asii I* on Khorezmian language (pp. 138-140) (See Bibl. ONZ AN SSSR 1962a)  
(See also Tolstov & Livshitz 1964) (L)
- V. M. Masson (ed) 1964 *Sredniaya Aziya i Drevniy Vostok*  
(Central Asia and Ancient East; includes ancient territories of Khorezm)  
1966a *Strana Tysiachy Gorodov*  
(The Land of 1000 Cities; includes a clear historical and cultural abstract on Khorezm)  
1966b Ch. in *Sredniaya Aziya* on Neolithic, Kelteminar (See Bibl. ONZ AN SSSR 1966b)
- E. E. Nerazik 1958 Ch. in *Ocherki Istorii II* on Khorezmian history, 4th-8th century A.D. (P)  
1959a M. Kh. E. 1  
(Berkut-Kala oasis, 1953-6) (P)  
1959b Tr. Kh. E. IV  
(Detailed survey of post-Kushan Khorezmian pottery; see also Itina, Vorobyeva) (P)
- 1963 M. Kh. E. 7  
(Yakke-Parsan, 1958; inscriptions in old Khorezmian) (P) (L)
- E. E. Nerazik & 1959 M. Kh. E. 1  
M. S. Lapirov-Skoblo (Barak-Tam, 1956; general description) (P)

- E. E. Nerazik & Yu. A. Rapoport 1959 M. Kh. E. 1  
(Kuyuk-Kala, 1956) (B) (P)
- I. M. Oranskiy 1963 Ch. X in ITN, vol. I, on Khorezmian language; Toprak-Kala (L)
- Yu. A. Rapoport 1960 XXVth Congress, vol. III  
(Zoroastrian funeral rites in Khorezm) (B)  
1962 SA 2  
(The Bartym silver plate; its Khorezmian origin)
- Yu. A. Rapoport & M. S. Lapirovo-Skoblo 1963 M. Kh. E. 6  
(Kalaly-Gyr 1958, ossuaries) (B)
- N. Rysnazarov 1965 SE 2  
(Skulls from Tok-Kala) (A)
- G. P. Snesarev 1960 XXVth Congress, vol. III, pp. 134-140  
(Mazdaian burial rites in Khorezm) (B)
- B. Ya. Staviskiy 1966 Ch. in his *Mezhdu Pamirom i Kaspiyem* (Between Pamir and the Caspian) (On Tok-Kala) (See also Gudkova) (B) (L)
- B. Ya. Staviskiy & O. G. Bolshakov & E. A. Monchadskaya 1953 Ch. in MIA 37 on Pendzhikent necropolis; analytical description of ossuaries, funeral rites (B)
- S. P. Tolstov 1948a *Drevniy Khorezm* (Ancient Khorezm)  
(French abstract by R. Ghirshman in *Artibus Asiae*, Ascona, 1953, No. 3, 4. A vast historical and cultural survey) (P)
- 1948b *Po Sledam Drevne-Khorezmiyskoy Tsivilizatsii*  
(On the Tracks of the Ancient Khorezmian Civilization; popular, but instructive. German edition: 14. *Beiheft zur Sovietwissenschaft*, Berlin 1953) (L) (P) (B) (R)
- 1951 Ch. in *Po Sledam*  
(Popular, but useful survey)
- 1952 Tr. Kh. E. I  
(1945-48, mostly Toprak-Kala: paintings, sculpture. Excellent bibliography)
- 1953 SA XVIII  
(1950 expedition: Toprak-Kala, Kalaly-Gyr, Koy-Krylgan-Kala, Kiuzeli-Gyr, etc.; ossuaries) (P) (B)
- 1955 VDI 3  
(1953: Kiuzeli-Gyr, Kalaly-Gyr, Koy-Krylgan-Kala)
- 1957 *Arts Asiatiques*, Paris, IV, 2, 3  
(Survey in French of work 1951-55; excellent plates) (B) (P)
- 1958a Tr. Kh. E. II  
(Valuable detailed report on expeditions 1949-53; Toprak-Kala inscriptions, pages 208-212) (B) (P) (L)
- 1958b SA 1  
(Exp. 1955-56; excellent general report; aerial photographs) (B) (P)
- 1959 M. Kh. E. 1  
(1954-56: Tazabagyab, Akcha-Darya delta, Barak-Tam, Kokcha, Angka, Koy-Krylgan-Kala and others) (P)
- 1960a M. Kh. E. 3 *Nisovya Amu-Darii, Sarykamysh, Uzboy*  
(Lower Amu-Darya. English digest of this extensive survey by A. Sollohub in *East & West*, Rome, 1962, No. 2-3, June-September) (B) (P)
- 1960b M. Kh. E. 4  
(1957: Angka, Kavut, Yakke-Parasan, Koy-Krylgan-Kala, Kavut-Kala, Chirik-Rabat, Babish-Mulla) (B) (P)

- 1960c XXVth Congress, vol. III, pp. 147-169  
(Scythians of the Aral and Khorezm; in English)
- 1962a *Po Drevnim Deltam Oksa i Yaksarta*  
(Ancient deltas; vast survey, emphasis on past and future irrigation; documents found at Toprak-Kala; problems of Khorezmian language and chronology) (P) (B) (L)
- 1962b SA 4  
(Ancient bed of Syr-Darya, 1961; Tagisken) (B)
- 1964 Ch. in I. Dr.  
(Ancient India; new Khorezmian finds in relation with ancient India) (B)
- 1967 Ch. in *Koy-Krylgan-Kala* (See AN SSSR Inst. Etnografii; detailed report) (L)(P)
- S. P. Tolstov & M. A. Itina 1960 SA 1  
("Suiyargan" culture) (P)
- 1966 SA 2  
(Saka of the Syr-Darya delta; based on material from the Tagisken necropolis 9th-8th century B.C.; beginning of "animal style") (B)
- S. P. Tolstov & M. A. Itina & A. V. Vinogradov 1967 Ch. in *Arkh. Otkr.* 1966 (On new explorations in Akcha-Darya delta, Kokcha, Western Kizil-Kum, Toprak-Kala, Syr-Darya; large districts will be flooded as from 1972).
- S. P. Tolstov & V. A. Livshitz 1964a SE 2  
(Dated inscriptions from Tok-Kala ossuaries; disagree with Altheim & Stiehl. See also Gudkova 1963, 1964, 1968; Gudkova & Livshitz 1967; and Staviskiy 1966) (L)
- 1964b *Acta Antiqua* 1-2, Budapest  
(Tok-Kala inscriptions) (L)
- S. P. Tolstov & M. G. Vorobyeva 1959 Tr. Kh. E. IV *Keramika Khorezma*  
(Chapters on pottery by Itina, Nerazik, Vorobyeva, etc.) (P)
- S. P. Tolstov & T. A. Zhdanko 1962 Ch. in *Narody Sredniy Azii* I (On history and archaeology: pp. 38-114; abstracts on Khorezmian language, pp. 138-140; see also Livshitz) (L) (See Bibl. ONE AN SSSR 1962a)
- 1963 M. Kh. E. 6  
(Explorations in 1958-61 of the deltas of Amu-Darya and Syr-Darya. Vast and detailed survey) (B) (L)
- T. A. Trofimova 1957 *East & West*, Rome, VIII, 3 (On Palaeoanthropology; in English) (A)
- 1958 Tr. Kh. E. II  
(Palaeoanthropology; vast anthropological survey) (A)
- 1959 M. Kh. E. 2 *Drevniye Naseleniye Khorezma po dannym Palaeoantropologii*  
(Palaeoanthropology of ancient Khorezm) (A)
- 1961 M. Kh. E. 5  
(Anthropology, Tazabagyab period) (A)
- 1963 M. Kh. E. 6  
(Aral Saka) (A)
- S. A. Trudnovskaya 1952 Tr. Kh. E. I  
(Jewelry and ornaments from Toprak-Kala)
- 1963 M. Kh. E. 6  
(Chirik-Rabat) (B)
- 1967 Ch. in *Koy-Krylgan-Kala* (AN SSSR Inst. Etnografii) (ornaments, glassware, pottery) (P)
- B. I. Vainberg 1962 VDI 1  
(Early Khorezmian coins; pre-Kushan mint)

- N. N. Vakturskaya 1957 *Oriental Art. III*, No. 4. (On cultural intercourse between mediæval Khorezm and China; numerous finds of Chinese origin, especially at Tash-Kala and Urgench)
- A. V. Vinogradov 1957a SE 1  
(Kelteminar culture; its relation with other regions)
- 1957b M. Kh. E. 4 (Kavat, etc.) (P)
- 1963 M. Kh. E. 6  
(Kelteminar culture, Dzhanbas-Kala, etc.) (P)
- M. G. Vorobyeva 1958 SA 1  
(History of Khorezm from Stone to Middle Ages; a very useful synopsis)
- 1959 Tr. Kh. E. IV  
(Survey of Archaic, Kangha, Kushan pottery; see also Itina, Nerazik) (P)
- 1967 Several chapters in *Koy-Krylgan-Kala* (See AN SSSR Inst. Etnografii) (P)
- 1968 Ch. in *Ist. Arkh.* (On early Khorezmian figurines)
- V. L. Voronina 1960 SA 2  
(Pre-Islamic worship)
- V. N. Yagodin 1963 SE 4  
(History of religion in Khorezm) (B)
- N. G. Zalkind 1952 Tr. Kh. E. I  
(Anthropological survey) (A)

## VI. UZBEKISTAN II (excluding Khorezm)

("Tr." = "Trudy Instituta Istorii i Arkheologii Uzb. SSR.")

- AN SSSR 1958 *Ocherki Istorii*, vol. II  
(see Bernshtam & Zadneprovskiy; Bibl. ONI Dyakonov & Mandelshtam, Mandelshtam)
- 1962 *Narody Sredniey Azii*  
(see Ch. V. Khorezm)
- 1966 *Sredniya Aziya v Epokhu Kamnia i Bronzy*  
(ed. V. M. Masson; see V. Masson, Okladnikov)
- AN Uzb. SSR 1941 *Termezskaya Arkh. Eksp.* 1936, vol. I, Tashkent (L)
- (M. E. Masson) 1945 *Termezskaya Arkh. Eksp.* 1936, vol. II, Tashkent (see also Vyazmitina)
- 1955 *Istoriya Usbekskey SSR* vol. I, Tashkent  
(see Trever, Yakubovskiy)
- 1959 and following: *Istoriya Materialnoy Kultury Uzbekistana*, Tashkent  
(Useful summaries of current archaeological work)  
IMK: No. 1, 1959; 2, 1961; 3, 1962; 4, 1963; 5, 1965, etc.)
- AN Uzb. SSR 1969 *Afrasiyabskaya Kompleksnaya Arkheologicheskaya Eksp.*  
(Y. Guliamov) Afrasiab I, Tashkent
- L. I. Albaum 1955 Tr. 7  
(Surkhan-Darya, Angor) (P)
- 1960a *Balalyk-Tepe*, Tashkent (Mostly wall-paintings; analysis of their cultural and historical meaning; Ephthalites; balbals. Good bibliography) (R)
- 1960b KS 80 (Analogies between paintings and balbals) (R)
- 1963 IMK 4  
(Zang-tepe; Brahmi inscriptions) (L)
- 1964 Ch. in *I. Dr.* (On Zang-tepe) (P) (L)

- M. Amindzhanova 1961, 2 IMK 2, 3  
(Glass making; glassware in Uzbek Museums)
- A. Askarov 1962 IMK 3  
(Andronovo tombs in Zeravshan valley) (B). English translation: Russian Translation series Peabody Museum, Vol. III, 1
- O. N. Bader 1965 *Kapovaya Peshchera*  
(Palaeolithic paintings in the Bashkiriyan Kapovaya cave; excellent reproductions. Text in Russian and French) (R)
- A. M. Belenitzkiy 1962 Izv. AN Tad. 1 (28)  
(Zoomorphic thrones)
- 1964a KS 98  
(Cultural links with India 6th-8th century A.D.; Buddhism in Sogdiana)
- 1964b Ch. in I. Dr. (On cultural links with India) (See also Staviskiy 1964b)
- 1964c Ch. in ITN vol. II (On Mongol period)
- I. B. Bentovich 1964 SA 4  
(Sogdian textile designs, 7th-8th century A.D.; analogies. See also Shishkin 1960, 1963, 1966)
- A. N. Bernshtam & 1958 Ch. in Ocherki II  
Yu. A. Zadneprovskiy  
(Valuable historical and cultural survey, 6th-7th century A.D.; Western Turks, balbals) (B)
- V. A. Bulatova-Levina 1961 SA 3  
(Kuva, Uzbek Fergana: Buddhist shrine)
- 1966 IMK 7  
(Kuva shrine)
- B. Dagens 1964 *Monuments pré-islamiques d'Afghanistan*, MDAFA XIX  
(Hadda, Kapiça; Bactrian sculpture in Afghanistan; rock monasteries)
- F. A. Davidovich 1955 Tr. 7  
(Coins in Uzbekistan)
- N. V. Dyakonova 1961 Tr. Erm. vol. V, 6  
(Pre-Islamic Iconography)
- A. A. Formozov 1966 SA 4  
(Rock engravings in Zaraut-Say; general survey of rock engravings) (R)
- B. G. Gafurov & B. A. 1963-4 *Istoriya Tadshikskogo Naroda*, vols. I & II  
Litvinskiy (Eds)  
(Belenitzkiy, Mandelshtam, Nerazik, Okladnikov and Ranov, Staviskiy, Vorobyeva) (L) (P)
- J. C. Gardin 1957 *Céramiques de Bactres*, MDAFA XV  
(Analogies with Soviet finds; see also Kabanov) (P) (L)
- I. V. Grek & E. G. 1964 *Kara-Tepe* (Buddhist shrine; inscriptions) (L) (See also Staviskiy  
Pchelina & B. Ya. 1969)
- Staviskiy
- M. E. Grigoryev 1946 KS. XIII on Tali-Barzu (Figurines)
- Ya. G. Guliamov 1956 Ch. in Tr. IIA, VIII on Makhan-Darya (P) (B)
- 1969 See AN Uzb. SSR
- M. Hallade 1960-64 Chapters in *Encyclopedia of World Art* (Amer. ed.):  
Vol. II (Bactrian art); VIII (Indo-Iranian art); IX (School of Mathura)
- H. Humbach & 1963 XXVIth Congress (New Delhi)  
R. Göbl  
(Bactrian language; see also Livshitz) (L)
- S. K. Kabanov 1962 IMK 3  
(Southern Uzbekistan pottery, analogies with Afrasiab, Balkh, Begram; see also Gardin) (P)

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- D. N. Lev 1955 Tr. 7  
(Palaeolithic, Aman-Kutan)
- B. A. Litvinskiy 1963 Ch. V, VI, XI in ITN vol. I on history and culture of Soviet Central Asia; include much data on Uzbek territories
- V. A. Livshitz 1960 XXVth Congress: *The Sogdian Letters from Mt. Mugh* (L)  
1964 *Tesisy*: Bactrian inscriptions in Kara-tepe (L)  
1965 *Tesisy*: Sogdian inscriptions on Afrasiab wall-paintings (L)
- A. M. Mandelshtam 1958 Ch. in Ocherki II on Soviet Central Asia, 6th-7th century A. D.  
(Historical and cultural survey)  
1964 Ch. in ITN vol. II on Soviet Central Asia, 6th-7th century A.D.  
(Historical and cultural survey; Ephthalites, Turks)  
KS 98 (History of Bactria and Tokharestan)
- M. E. Masson (see AN Uzb. 1941, 1945)
- V. M. Masson 1966a *Strana Tysiachy Gorodov*  
(The Land of 1000 Cities)  
1966b *Sredniaya Aziya v Epokhu Kamnia i Bronzy*  
(Central Asia in the Stone and Bronze Age; ed. by V. M. Masson (See Bibl. ONE AN SSSR, 1966b)
- V. M. Masson & 1964 *Istoriya Afganistana I*  
V. A. Romodin (Bactria, Parthia, Kushans, Ephthalites, etc.) (L)
- V. A. Meshkeris 1962 *Terrakoty Samarkandskogo Museya*  
(ed. by the Hermitage Museum)  
1966 *Tesisy* 1965  
(Sogdian figurines, 5th-8th century A.D.)  
1968 Ch. in Izv. Tad. AN 2(52) on the Sogdian figurines (classification based on the aspects and iconography; well illustrated)
- E. A. Monchadskaya 1961 Tr. Erm. V  
(Bactrian and Sogdian rulers, 6th-4th century B.C.)
- A. R. Mukhamedzhanov 1967 SA 4  
(A detailed and comprehensive survey of Uzbek archaeology, including Khorezm)
- E. E. Nerazik 1963 Ch. IX in ITN I on Soviet Central Asia, 4th-5th century A.D.  
(Chionites, Ephthalites.)
- O. V. Obelchenko 1956 Tr. VIII  
(Kuyu-Mazar tombs) (B) (P)  
1959 IMK 1  
(Kuyu-Mazar and Liyavandak: ossuaries, funeral rites) (B)  
1961 IMK 2  
(Liyavandak tombs. An important study of tombs and funeral rites in Central Asia. Sarmatian origin of tombs) (B) (P) (A)  
1968 *Problemy*  
(Saka tombs in the Zeravshan valley) (B)
- A. P. Okladnikov 1963 IMK 4  
(Mousterian on the Upper Chirchik)  
1966 Ch. in *Sredniaya Aziya* (On the Stone Age) (See Bibl. ONE AN SSSR 1966b)
- M. K. Pachos 1967 SA 1  
(On Afrasiab) (Samarkand issaid not to be necessarily Marakanda)  
1968 *Problemy*  
(Zoroastrian ossuaries with a cross) (B)
- G. A. Pugachenkova 1962 VDI 2  
(Khalchayan medallion)  
1963 *Iskusstvo Afganistana*  
(Art in Afghanistan)

- V. I. Kozenkova
- 1964 SA 3  
(Afrasiab pottery) (P)
- 1961 SA 3  
(Burial rites; ossuaries in Soviet Central Asia) (B)
- 1965 MIA 130  
(Figurines in Khalchayan)
- 1966 *Khalchayan*, Tashkent  
(Report of exploration; paintings, sculpture, coins) (P) (B)
- 1967a SA 3  
(Buddhist stupa in South Uzbekistan: Zurmala, Airtam)
- 1967b VDI 3  
(Bactrian coins at Airtam)
- 1968a *Problemy*  
(Kushan art: relations between Airtam, Khalchayan, Dalverzin-tepe, Surkh Kotal, etc.)
- 1968b Ch. in AN Uzb. ON (On North Bactria, Khalchayan, Dalverzin-tepe, etc.)
- G. A. Pugachenkova & L. I. Rempel
- V. Ranov
- 1958 *Vydaiushchiesia Pamiatniki Arkhitektury Uzbekistana*, Tashkent  
(Main Features of Architecture in Uzbekistan)
- 1965 *Kamennyi Vyek Tadzhikistana I*, Dushanbe (Stone Age in Tadzhikistan) (Includes finds in Uzbekistan; particularly valuable)
- L. I. Rempel
- 1961 *Arkhitekturnyi Ornament Uzbekistana*, Tashkent  
(Architectural ornament; many plates)
- D. Schlumberger
- 1959 *Antiquity XXXIII* Cambridge, England  
(Surkh Kotal)
- 1960 Syria  
Descendants non-méditerranéens de l'art grec, Paris
- 1961 *Proceedings of the British Academy*, XLVII, London  
(Surkh Kotal, Hellenism) (L)
- V. A. Sbishkin
- 1960 KS 80  
(Ancient textiles in wall-paintings, 5th-8th century A.D.; see also Bentovich)
- 1961-3 IMK 2, 3, 4 AN Uzb. SSR (P)  
(Uzb. arch. expeditions 1956-61; Palaeolithic; Bronze Age; Afrasiab)
- 1963 *Varakhsa*  
(Main report; wall-paintings, cultural survey, analogies)
- 1966a *Afrasiab, Sokrovishnitsa Drevney Kultury*, Tashkent  
(A Treasury of Ancient Civilization; preliminary note on the wall-paintings)
- 1966b *Iskusstvo* no. 1 on Afrasiab paintings; see also Varkhotova
- 1969 (See AN Uzb. SSR)
- B. Ya. Stavitskiy
- 1961 Tr. Erm. V  
(Bia-Nafman ossuaries) (B)
- 1963 Ch. IV, VIII in ITN I  
(Achaemenians, Kushans; vast historical and cultural survey)
- 1964a *Kara-Tepe I*  
(Buddhist rock monastery; see also Grek) (L)
- 1964b Ch. in I. Dr. on cultural relations of the Kushans with India and Rome. Excellent bibliography. (L) (See also Belenitzkiy 1964)
- 1965-67 *Tezisy*  
(Kara-tepe in 1964-1967) (L)
- 1966 Ch. on the Kushan Empire in his *Meshdu Pamirom i Kaspiem*  
(Between the Pamirs and the Caspian Sea) (B) (P) (L)



- 1967a SA 2  
(Dating of Tali-Barzu; see also Grigoryev)
- 1967b Ch. in *Arkh. Otkr.* on new inscriptions at Kara-tepe in 1966 (L)
- 1969 *Kara-Tepe II, Buddiyskiye pishchery* (Buddhist caves in ancient Termez) (L) With chapters by Staviskiy, Harmatta, Lukonin, Livshitz. (Analysis of script and language)
- V. V. Struve & G. M. Bongard-Levin 1964 *Indiya v Drevnosti*  
(Ancient India; see Albaum, Belenitzkiy, Staviskiy, Vorobyeva-Desyatovskaya) (P) (A) (L)
- K. V. Trever 1934 *Terracottas from Afrasiab* (P)
- 1940 *Pamyatniki Greko-Baktriyskogo Iskusstva*  
(Graeco-Bactrian art; a standard publication with many plates)
- 1955 Ch. in *Istoriya Uzbekskoy SSR* vol. 1 (See AN Uzb. SSR 1955)  
(Sogdiana, Bactria, Kushans, Ephthalites, etc.)
- D. Varkhotova & G. Shishkina 1966 *Vokrug Svieta* no. 1  
(Brief article on recent Afrasiab paintings published in this popular monthly periodical; see also Shishkin)
- M. G. Vorobyeva 1963 Ch. VII in ITN I (On Bactria, 3rd-2nd century B.C.; history, cities, art, etc.)
- M. I. Vorobyeva-Desyatovskaya 1964 Ch. in I. Dr. on Indian inscriptions at Zang-tepe (L)
- V. L. Voronina 1960 SA 2  
(Pre-Islamic worship in Soviet Central Asia; coexistence of various cults) (B)
- M. I. Vyazmitina 1945 Ch. in *Termesskaya Arkh. Eksp.* II on Kushan pottery of Airtam (P)
- A. Yu. Yakubovskiy 1955 Chapters in *Istoriya Uzbekskoy SSR*. vol. I (See AN Uzb. SSR 1955)  
Part II. History 4th century B.C.-5th century A.D.  
(Graeco-Bactria, Kanghiu, Ephthalites)  
Part III. History 6th-9th century A.D.  
(Turks, Arabs; Khorezm)
- F. A. Zaslavskaya 1959 IMK 1  
(Afrasiab figurines)
- V. D. Zhukov 1956 Tr. VIII  
(Bash-tepe, pre-Kushan figurines)

## VII. TURKMENISTAN

(Some abbreviations relate to regional publications: Izv. ANT = Izvestiya Ak. Nauk Turkmen SSR, Ashkhabad. TSSR = Turkmen SSR Tr. IIAE = Trudy Instituta Istorii, Arkheologii i Etnografii)

- Ak. Nauk Turk. SSR *Trudy Yuzhno-Turkmenskoy Arkh. Kompl. Ekspeditzii* (YU-TAKE); edited by M. E. Masson. A remarkable collection of fundamental reports from the earliest periods
- 1949 —, Vol. I (1946 expedition; mostly Nisa; see also M. E. Masson, Pugachenkova, Rempel; various other authors)
- 1953 —, II (1947 expedition; Stone Age; Anau culture; Parthian period, Nisa; see also Davidovich, Okladnikov, Rempel)
- 1955 —, V (History and People of the Parthian Empire, by M. E. Masson. Bibliography; see Vinberg)
- 1956a —, VII Stone and Bronze Age I, 1947-53: see Kuftin, V. M. Masson, Okladnikov (P)
- 1956b *Parfiyanskiye Ritony Nisy*  
(Album of plates; see M. E. Masson & Pugachenkova)

- 1958 —, VI Architecture (see Pugachenkova)
- 1959a —, IV *Parfiyanskiye Ritony Nisy*  
(Parthian rhytons, text to 1956b; see M. E. Masson & Pugachenkova)
- 1959b —, IX Ethnography, Anthropology  
(see Ginzburg, Zezenkova) (A)
- 1960 —, X Stone and Bronze Age II, 1955-58: see Khlopin, V. Masson, Sarianidi, Trofimova (P) (R)
- 1962 —, XI *Keramika Merva* <sup>b</sup>  
(see Pugachenkova, Rutkovskaya) (P)
- 1963 —, XII Merv Archaeology  
(see Pugachenkova, Usmanova)
- 1966 —, XIII  
(Commercial Roads from Merv to Khorezm by M. E. Masson; final volume)
- 1969 —, XIV Merv Archaeology (B) (P)
- 1967, 8 *Karakumshkiye Drevnosti* (Karakumy archaeology) Nos. I and II  
(Many figures) (P)
- E. Atagarryiev & 1967 SA 3  
O. K. Berdyiev  
M. Avl-Yonah 1961 (A useful detailed survey of Turkmen archaeology) (B) (P)
- 1961 *Oriental Art in Roman Palestine, Studi Semitici*, no. 5, Univ. di Roma  
(Frontality is neither Greek, nor Parthian, but "Oriental". Reviewed by G. Goossens in *Bibliotheca Orientalis*, Leiden, vol. no. 20)
- O. K. Berdyiev 1964 Izv. ANT 5  
(Survey of Turkmen archaeology since 1921; Monzhukly-depe, Chagylly-depe)
- 1966 Ch. in *Materialnaya Kultura*, AN, SSSR, on Chagylly-depe (P)
- 1967 Ch. in *Arkh. Otkr.* on archaeological explorations in 1966 (P)
- A. G. Bokshchanin 1960 *Parfiya i Rim* vol. I  
(Largely historical)
- 1966 *Parfiya i Rim* vol. II  
(Largely historical)
- Ch. S. Chard 1960 *COWA Survey* II, Cambridge (Mass.)  
(Archaeology in TSSR, 1955-58)
- V. E. Crawford 1963 *Bull. Metropol. Museum*, New York, April  
(Yarim-Tepe in Iran; chronology, C-14; relation with Turkmenistan)
- E. A. Davidovich 1953 Tr. YUTAKE II  
(Nisa, Square Hall; stucco, chronology)
- I. M. Dyakonov & 1953 VDI 4  
V. A. Livshitz  
(Nisa documents) (L)
- 1957 XXIV Congress  
(Nisa documents) (L)
- I. M., M. M. Dyakonov 1953 Izv. ANT 6  
& V. A. Livshitz  
(Parthian documents) (L)
- I. M., M. M. Dyakonov & 1951 *Materialy YUTAKE 2*  
V. A. Livshitz &  
M. E. Masson  
(Nisa documents; see also Vinnikov) (L)
- M. M. Dyakonov 1954 VDI 4  
(Seals from Old Nisa) (L)
- S. A. Ershov (see S. A. Yershov)

- Shinji Fukai 1960 *East & West*, Rome, XI, 2-3  
(Parthian art, Hatra)
- A. F. Ganialin 1956 Tr. IIAE II  
(Namazga-depe stratigraphy)
- 1959 Tr. IIAE V  
(Altyn-depe; mostly pottery; analogies with Namazga) (P)
- 1967 SA 4 (Altyn-depe: explorations 1959-1961; seals etc.) (P)
- R. Ghirshman 1954 *Iran*  
(Penguin book. Original in French, 1951, Paris) (B) (P)
- 1962 *Parthes et Sassanides*, Paris  
(A beautifully produced survey)
- V. V. Ginzburg 1959 Tr. YUTAKE IX  
(Late Bronze Age; see also Trofimova & Ginzburg) (A)
- I. N. Khlopin 1960 Tr. YUTAKE X  
(A thorough survey of the agricultural population of the Chalcolithic; Geoksiur, Dashlydzhidepe; figurines, pottery; contacts with Iran) (P)
- 1961 Ch. in *Issledovaniya* (see Bibl. ONE Leningrad. Gos. Universitet)  
(On the phases of development of ancient farming cultures in South Turkmenistan as compared with Iran, Mesopotamia, Iraq, etc.)
- 1964 SA 1  
(Review of articles published in *Izv. ANT*, 1960-61, by V. Masson, Pugachenkova, Usmanova, etc.; see also Berdyiev 1964, Sarianidi & Khlopin)
- 1966 Ch. in *Sredniaya Aziya on Chalcolithic Age* (See Bibl. ONE AN SSSR 1966b)
- 1969 *Svod "B" 3-8. Eneolit Yuzhnykh Oblastey Sredney Azii III* (P) (B)
- G. A. Koshelenko 1960 VDI 4  
(Greek cities of West Parthia)
- 1962a VDI 3  
(Parthia in foreign literature; frontality, etc.)
- 1962b Ch. in *Istoriko-arkh. Sbornik on frontality in Parthian art*
- 1963a *Izv. ANT SSR 1*  
(Merv "Corinthian" capital)
- 1963b VDI 3  
(Internal political struggle in Parthia)
- 1963c *Kultura Gorodov Parfii*  
(Civilization of Parthian cities. A short booklet on urban development, art, "frontality")
- 1963d Ch. in *Antichnyi Gorod (IA) on architecture of Greek cities in Parthia*
- 1963e SA 2  
(Parthian fortifications; bibliography)
- 1964a *Izv. ANT 1*  
(Fortifications of Merv)
- 1964b VDI 3  
(Aesthetic views of early Christianity)
- 1965 VDI 4  
(Zoroastrianism in Margiana)
- 1966a VDI 1  
(Painted vase from Merv)
- 1966b *Kultura Parfii*  
(Vast survey, largely covering non-Soviet regions; architecture,

- worship, regional features, art, etc.; a most valuable contribution to the controversy on "Parthian frontality") (B) (L) (P)
- 1966c *Acta Antiqua Academiae Scientiarum* XIV, 1-2, Budapest  
(The beginning of Buddhism in Margiana)
- 1966d Ch. in Sarianidi & Koshelenko 1966 (On the Parthian period)  
(B) (L) (P)
- 1968 VDI 1  
(Early Parthian history; numismatic evidence)
- G. A. Koshelenko & 1965 *Arkh. Otkr.*  
Ya. M. Desiatchikov  
(New finds in Parthian Merv)
- G. A. Koshelenko & 1965 VDI 4  
O. Orazov  
(Burial rites in Parthian Margiana) (B)
- G. A. Koshelenko & 1964 *Izv. ANT* 1  
Z. I. Usmanova  
(Merv fortifications)
- F. Ya. Koske 1962 VDI 1  
(Northern Parthia fighting the Macedonian invaders; survey based on ancient authors and archaeological finds)
- N. I. Krasheninnikova 1964 SA 4  
& G. A. Pugachenkova  
(Nisa round shrine; synthesis of Hellenistic and Parthian architectural features)
- B. A. Kuftin 1956 Tr. YUTAKE VII  
(Chalcolithic and Bronze Age: Geoksiur, Kara-depe, Namazga-depe; figurines, painted pottery; relations with North Iran)  
(P) (B)
- E. E. Kuzmina 1964 Ch. in *Pamiatniki* (see Bibl. ONE ANSSSR 1964a) (On the diffusion of Steppe civilization in South Central Asia during the Bronze Age)  
1966 *Svod "B" 4-9. Metallicheskiye Izdeliya Eneolitai Bronzovogo Vyeka*  
(Early Metal Industry, mainly YUT)
- G. N. Lisitzyna 1963 KS 93  
(Palaeogeography of the Geoksiur oasis)  
1964 KS 98  
(Palaeobotany of the Geoksiur region)  
1965 MIA 128: *Oroshayemoye Zemledielnye*  
(Problems of irrigation and dessication in ancient YUT; detailed bibliography)  
1969 *Antiquity* vol. 43, Cambridge, England  
The Earliest Irrigation in Turkmenia (in English)
- G. N. Lisitzyna 1965 SA 1  
and others<sup>1</sup>  
(Archaeology and palaeogeography of the Geoksiur oasis; climatic changes, irrigation) (P) (B)
- V. A. Livshitz (See Dyakonov & Livshitz)
- B. Ph. Lozinski 1959 *The Original Homeland of the Parthians*, The Hague  
(Questionable; good bibliography)
- V. G. Lukonin 1961 *Iran v Epokhu Piervykh Sasanidov*  
(Iran under the early Sassanians; end of Parthia; Sassanian "Renaissance")
- A. M. Mandelshtam 1963 *Izv. ANT* 2  
(Tombs of Nomads 1st-2nd century A.D.; Sarmatian features)  
(B)
- G. E. Markov 1966 SA 2  
(Dam-Dam Chesme, discoveries in 1964, mostly Neolithic; chronology. See also Okladnikov 1953)

<sup>1</sup>) G. N. Lisitzyna, V. M. Masson, V. I. Sarianidi, I. N. Khlopin.

- A. A. Marushchenko 1954 VDI 4  
(Seals of Old Nisa; script similar to that of Mugh, Toprak-Kala, 2nd century A.D. See also M.M. Dyakonov; Masson & Pugachenkova 1954) (L)
- M. E. Masson 1949 Tr. YUTAKE I  
(Nisa history, chronological table, detailed bibliography) (P)  
1950 VDI 3  
(An excellent survey of Parthian history)  
1951a VDI 4  
(Further survey of Parthian history)  
1951b KS IIMK XXXVIII  
(North-eastern limits of Parthia; historical survey)  
1955 Tr. YUTAKE V  
(Valuable surveys of the history, boundaries and civilization of the Parthian Empire; fieldwork 1948-52) (B) (L)  
1963 Izv. ANT 3  
(Giaur-Kala: Christian church; Merv: Buddhist shrine)  
1966 Tr. YUTAKE XIII: Trade Routes from Merv to Khorezm and Transoxiana
- M.E. & V.M. Masson 1959 *Cahiers d'Histoire Mondiale* I, 1, UNESCO, Paris. (On YUT archaeology)  
(A useful survey of the Chalcolithic and Bronze Age) (P) (R)
- M. E. Masson & G. A. Pugachenkova 1954 VDI 4  
(Nisa seals, mostly 1st century A.D.; see also M.M. Dyakonov, Marushchenko)  
1956a *Yezhegodnik Instituta Istorii Iskusstva*  
(Year-book of the Institute of History of Art; marble sculpture of Staraya Nisa, 2nd century B.C.)  
1956b *Parfiyanskiye Ritony Nisy* (Parthian Rhytons from Nisa)  
(A remarkable, illustrated album)  
1959 *Parfiyanskiye Ritony Nisy*  
(Tr. YUTAKE IV; text to album; ostraca) (L)
- V. M. Masson (see also Bibl. ONE) 1956 Tr. YUTAKE VII (i) Chalcolithic and Bronze Age; cultural features of sites in various periods; classifications; types of pottery (P); (ii) Painted pottery: Anau, Namazga-depe; relations with Iran (see also Kuftin) (P)  
1959a MIA 73: *Drevnezemledielcheskaya Kultura Margiany* (Ancient agricultural period, mainly at Yaz-depe. Scholarly survey of "Middle Asia"; problem of chronology)  
1959b *Drevniye Zemledieltsy na Yugie Turkmenistana*, Ashkhabad (Ancient agricultural tribes; an excellent popular digest) (P) (B)  
1960 Tr. YUTAKE X: Stone and Bronze Age  
—, (i) Mainly the Neolithic Age  
(Dzheyton, Geoksiur, Dashlydzhidepe, Namazga-depe, etc. Analogies with Iran, Afghanistan, Baluchistan. Good bibliography) (P)  
—, (ii) Dzheyton  
(A thorough survey; problems of chronology) (P)  
—, (iii) Kara-depe near Artyk  
(A detailed survey; chronology; painted pottery, figurines, tombs) (P) (B)  
1962a SA 2  
(YUT; analogies with Baluchistan, Mundigak, etc.)  
1962b KS 91  
(Analogies with Mesopotamia)

- 1962c *Svod "B" 3-8: Eneolit Yushnykh Oblastey Sredney Azii II*  
(Chalcolithic Age; problems of chronology and classification;  
analysis of sites and synopsis; numerous plates and selected  
bibliography) (P) (B)
- 1962d SA 3  
(Dzheyton, Kara-depe; painted pottery) (P)
- 1962e Intern. Congress of Prehistoric and Protohistoric Sciences:  
*The Neolithic Farmers of Central Asia* (In English)
- 1963 KS 93  
("Middle" Asia and Iran, 3rd millennium. A short but valuable  
survey) (P) (B) (A)
- 1964a SA 1  
(YUT in relation with other ancient civilizations: Iran, Meso-  
potamia, Kazakhstan, Siberia)
- 1964b *Sredniaya Aziya i Drevniy Vostok*  
("Middle" Asia and the ancient East; comparative chronologies)  
(P)
- 1964c KS 101  
(Collective graves in the Chalcolithic Age; analogies with  
Baluchistan and Afghanistan, Mundigak) (B)
- 1966a *Strana Tysiachy Gorodov*  
(The Land of 1000 Cities; a popular excellent booklet on ancient  
Bactria and Turkmenistan; see Bibl. ONE) (L)
- 1966b Chapters in *Sredniaya Aziya v Epokhu Kamni i Bronzy*  
("Middle" Asia in the Stone and Bronze Ages. See also Bibl. ONE  
AN. SSSR 1966b)
- 1966c Ch. in *Arkh. Otkr.*  
(1965: finds in Altyn-depe; female figurines)
- 1967a SA 3  
("Proto-urban" culture of Central Asia. A particularly valuable  
survey dealing especially with the Bronze Age; Altyn-depe  
and its analogies with the Indus valley civilization, Afghanistan  
and Mesopotamia) (P) (L)
- 1967b Ch. in *Arkh. Otkr.*  
(Proto-urban culture of Altyn-depe: finds in 1966 of seals and  
script) (L) (B)
- 1968 SA 2  
(Altyn-depe: discovery of huge buildings of the Bronze Age)
- V.M. Masson & 1969 VDI 1  
V.I. Sarianidi  
(Possible pictographic script)
- A. P. Okladnikov 1953 Tr. YUTAKE II  
(Stone Age in the Krasnovodsk peninsula of the Caspian Sea:  
Dzhebel, Dam-Dam Chesme, etc.)
- 1956 Tr. YUTAKE VII  
(Stone Age; Dzhebel cave; a thorough study of the Caspian  
region)
- 1966 Ch. in *Sredniaya Aziya* on the Mesolithic period in the Caspian  
region (See Bibl. ONE AN SSSR 1966b)
- M. Oppermann 1968 *Wissenschaftliche Zeitschrift, Univ. Halle, XVII, 1*  
(A scholarly survey in German of Parthian architecture at Nisa;  
comparison with Khorezm, Bactria, Gandhara, Mesopotamia,  
Iran. Maps, figures. Detailed bibliography)
- G. A. Pugachenkova 1949 Tr. YUTAKE I  
(Nisa architecture)

- 1953 Tr. YUTAKE II  
(Old Nisa: Square Hall)
- 1957a Tr. Tashkent. Universiteta IV  
(Gems, mostly in Tashkent Museum)
- 1957b Izv. ANT 3 (Merv gems)
- 1958 Tr. YUTAKE VI *Puti Razvitiya Arkhitektury*  
(A vast and scholarly survey of art and architecture)
- 1959 SA XXIX-XXX  
(Margian goddess; figurines)
- 1962 Tr. YUTAKE XI  
(Merv figurines as from the 3rd-2nd century B.C.; frontality.  
See also Rempel)
- 1963 Tr. YUTAKE XII  
(Merv gems and seals)
- 1967 *Iskusstvo Turkmenistana*  
(Art of Turkmenistan) (A vast survey with excellent plates) (P)
- G. A. Pugachenkova & L. Ya. Elkovich 1956 *Ocherki po Istorii Iskusstva Turkmenistana*  
(Marble sculpture of Nisa, 3rd-2nd century B.C.)
- R. Pumpelly 1908 *Explorations in Turkestan*. Carnegie Institution no. 73 Wash-  
ington D.C.  
(Expedition of 1904: mainly Anau and Merv)
- L. I. Rempel 1949 Tr. YUTAKE I  
(Merv figurines, Staraya (Old) Nisa figurines. See also Puga-  
chenkova 1962)
- 1953 Tr. YUTAKE II  
(Nisa sculpture, Anau figurines, Namazga-depe, Giaur-Kala,  
etc.)  
(see Bibl. ONE Masson & Romodin)
- V. A. Romodin 1964
- M. Rostovtzev 1938 *Dura-Europos and its art*, Oxford
- S. I. Rudenko 1963 (On C-14 method: see Bibl. ONE 1963)
- L. M. Rutkovskaya 1962 Tr. YUTAKE XI  
(Merv pottery) (A thorough survey by chronological periods, as  
from the 1st century B.C.) (P)
- V. I. Sarianidi 1960 Tr. YUTAKE X  
(Chalcolithic Geoksiur: figurines, painted pottery; a vast and  
thorough survey; analysis of pottery) (P) (B)
- 1962 SA 1  
(Places of worship in Anau civilization: YUT, Khorezm, Uz-  
bekistan)
- 1964 KS 98  
(Khapuz-depe, a site of the Bronze Age)
- 1965 Ch. in MIA 130 on the Geoksiur necropolis; exploration in 1963,  
round collective tombs 3rd millennium. Analogy with Mundigak  
(B)
- 1966a KS 108  
(Geoksiur necropolis; exploration of 1961, collective tombs;  
large collection of skulls) (B) (A)
- 1966b Ch. in Sarianidi & Koshelenko 1966 (On the Stone and Bronze  
Ages) (P) (B) (A)
- 1966c Ch. in *Arkh. Otkr.* on collective tombs at Geoksiur and Altyn-  
depe (P) (B) (A)
- 1967a Ch. in *Arkh. Otkr.* on Khapuz-depe, Altyn-depe, in 1966 (B) (P)
- 1967b *Tainy Ischermuvshego Iskusstva Karakumov*  
(The Mystery of the vanished Karakumy Art; a most interesting

- and stimulating booklet. Analogies between the Karakumy region and Sumer) (P)
- V. I. Sarianidi & I. N. Khlopin 1962 SA 2  
(Review of articles published in *Izv. ANT* in the course of 1951-1959; see also Khlopin 1964)
- V. I. Sarianidi & G. A. Koshelenko 1966 *Za Barkhanami Proshloye*  
(The Past beyond the Sand-hills. A useful and instructive booklet of a popular nature. Part I by Sarianidi covers the ancient civilizations of South Turkmenistan; Part II by Koshelenko the Parthian period)
- V. I. Sarianidi & Z. I. Usmanova 1967 SA 1  
(Twenty years of the YUTAKE. Useful synopsis; bibliography)
- D. Schlumberger 1960 *Syria*  
Descendants non-méditerranéens de l'art grec, Paris
- 1966 *Accademia Nazionale dei Lincei*, 76: La représentation frontale dans l'art des Sassanides, Roma  
(An abstract in Russian with comments by Koshelenko and Meshkeris was published in 1968 in *Izv. AN Tad.* 2 (52))
- A. Ya. Shchetenko 1964 KS 98  
(Painted pottery in Namazga-depe) (P)
- 1968 *Problemy*  
(Relation with Harappa culture)
- B. Ya. Staviskiy 1963 Ch. in ITN I on Parthia, 2nd century B.C.-3rd century A.D.
- 1966 *Meshdu Pamirom i Kaspiem*  
(Between the Pamirs and the Caspian Sea; among other subjects: ancient Turkmenistan, Parthian Empire) (B) (P) (L)
- M. Szyrmer 1955, 1962 *Semitica* V, XII, Paris  
(Nisa ostraca) (L)
- T. A. Trofimova 1961 Tr. YUTAKE X  
& V. V. Ginzburg (YUT anthropology in the Chalcolithic period; Kara-depe, Geoksiur) (A) (B)
- Z. I. Usmanova 1963 Tr. YUTAKE XII  
(Margiana, especially Erk-Kala; figurines. Good bibliography; see also Koshelenko & Usmanova)
- N. V. Vinberg 1955 Tr. YUTAKE V  
(Bibliography: history, archaeology of Parthia)
- I. N. Vinnikov 1954 VDI 2  
(Nisa documents; disagrees with Dyakonov, Livshitz, Masson 1951) (L)
- M. G. Vorobyeva 1963 Ch. ITN I on Graeco-Bactria and Parthia; historical survey
- M. I. Vyazmitina 1953 Tr. YUTAKE II  
(Novaya Nisa: analysis of the various layers) (P) (B)
- S. A. Yershov 1949 Tr. YUTAKE I  
(Detailed report on Staraya Nisa)
- 1959 Tr. IIAE V (Interesting report on ossuaries at Bayram-All; seals, gems) (B)
- V. Ya. Zezenkova 1959 Ch. in Tr. YUTAKE IX: analysis of skulls from Merv (A)



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PLATES I-LXVII



SAIMALY-TASH



I. Saimaly-Tash (Kirgiziya). Miscellaneous engravings

SAIMALY-TASH



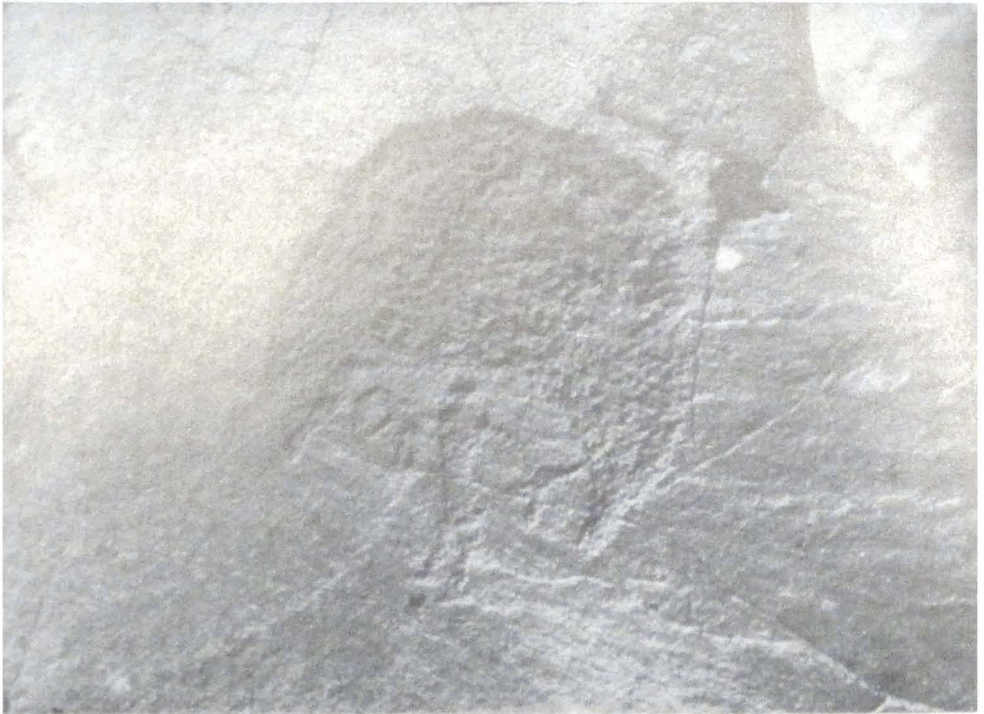
II. Saimaly-Tash (Kirgiziya). Ploughing with yaks



SAIMALY-TASH



SAIMALY-TASH



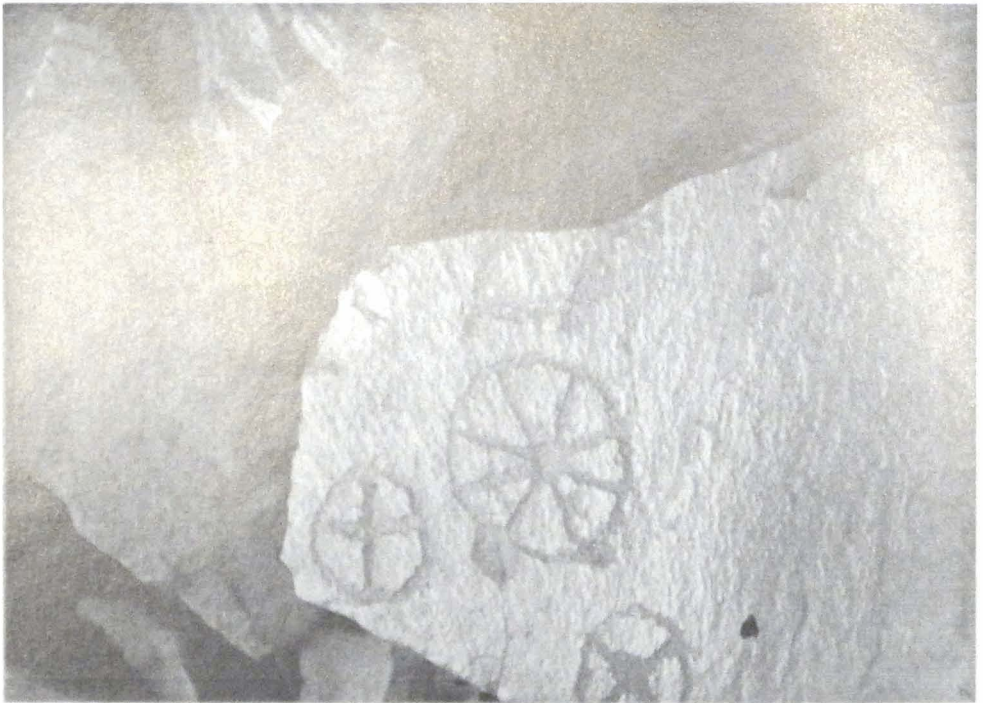
IV. Saimaly-Tash (Kirgiziya). Ritual dance

SAIMALY-TASH



V. Saimaly-Tash (Kirgiziya). Solar-cosmic representation with bulls

SAIMALY-TASH



VI. Saimaly-Tash (Kirgiziya). Solar emblems

SAIMALY-TASH



VII. Saimaly-Tash (Kirgiziya). Mirror (Minussinsk type of engravings)

SAIMALY-TASH



VIII. Saimaly-Tash (Kirgiziya). Fighting animals (pre-Saka)

TYAN-SHAN



IX. Tyan-Shan. Balbal

SEMIRECHIYE



X. Semirechiye. Balbal



XI. Dzhambul (Kirgiziya). Balbal

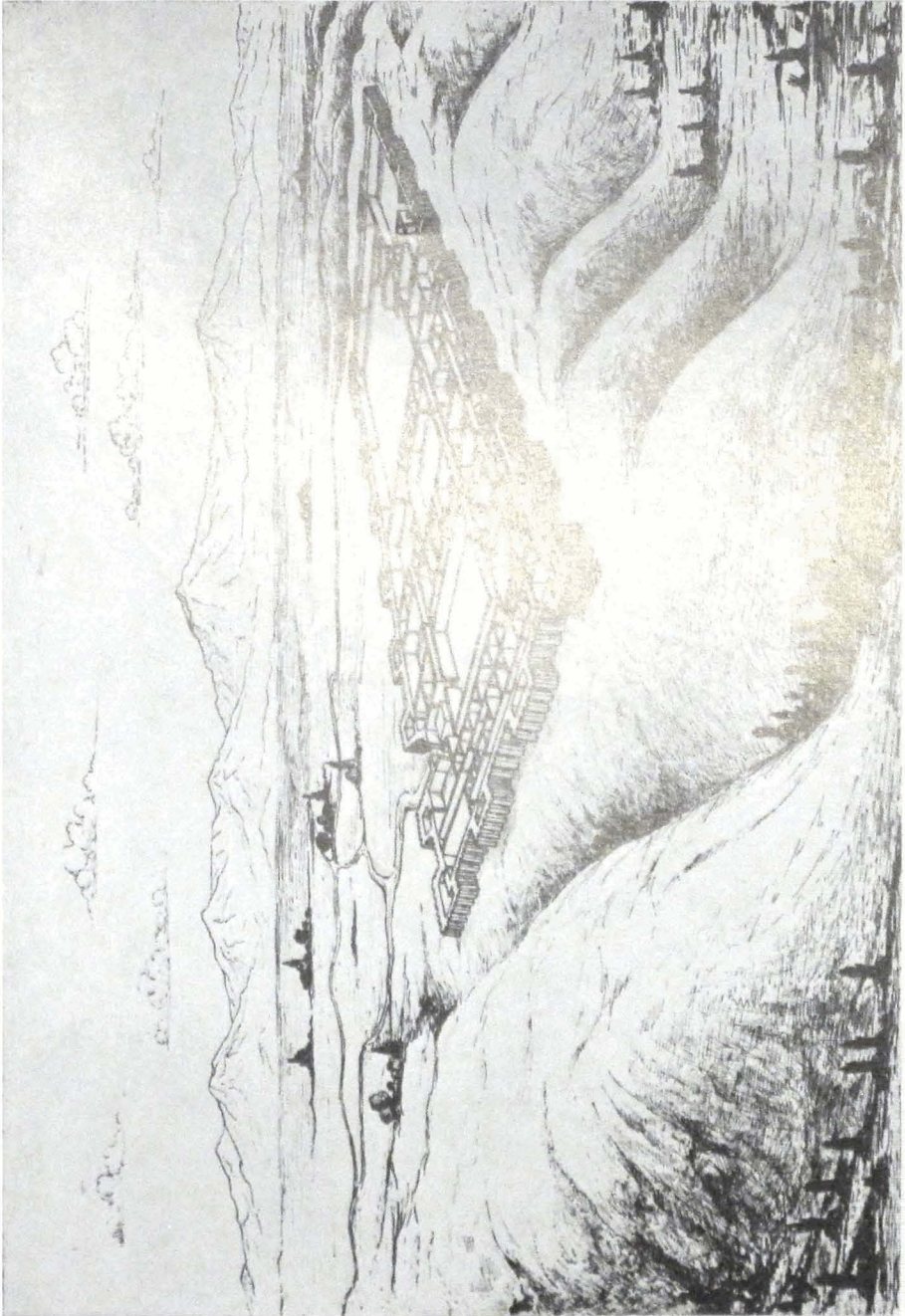


DZHAMBUL



XII. Semirechiye. Balbal

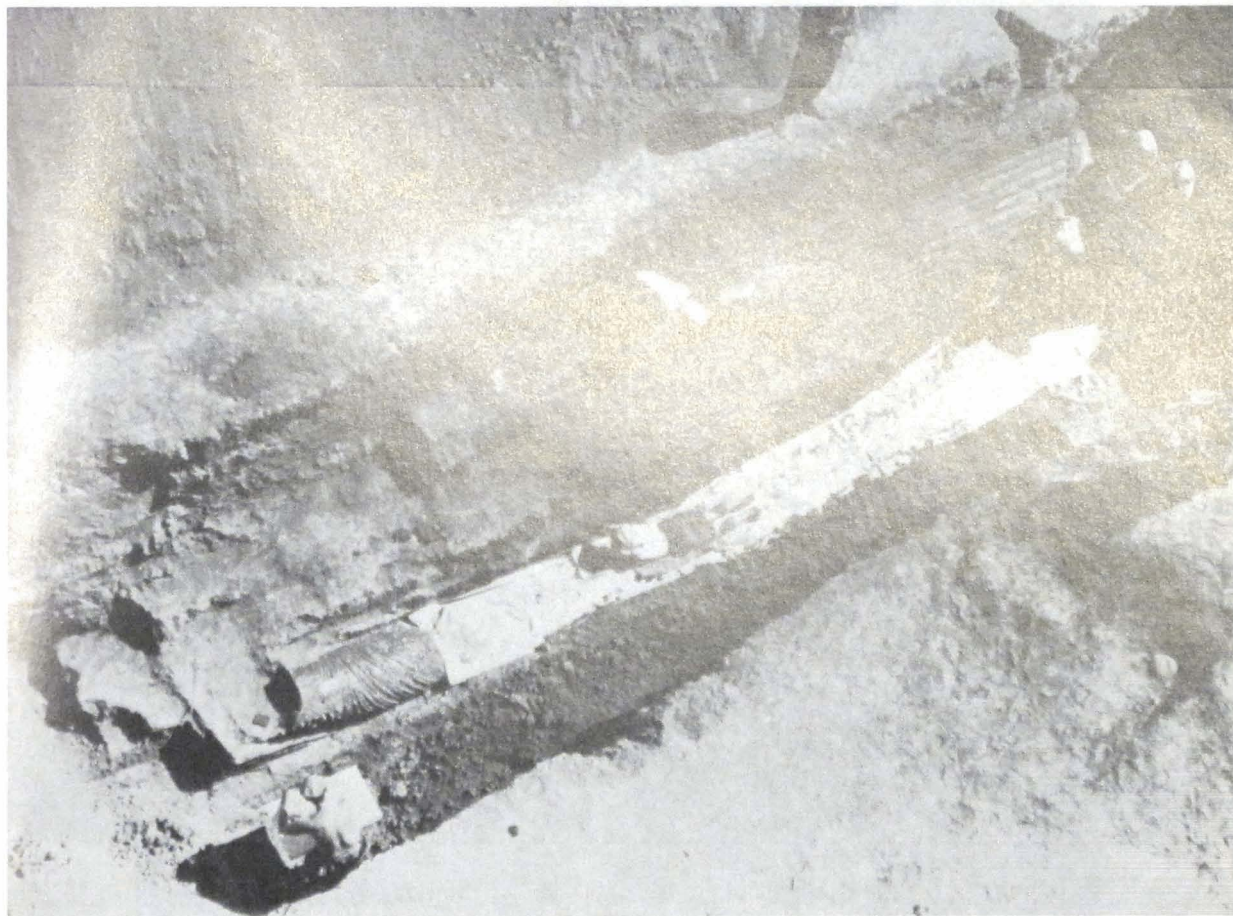
KUKHNA-KALA



XIII. Kukhna-Kala (Tadjikistan)



XIV. Adzhina-tepe (Tadjikistan). Buddha head



XV. Adzhina-tepe (Tadzhikistan). A Buddha in Parinirvana.



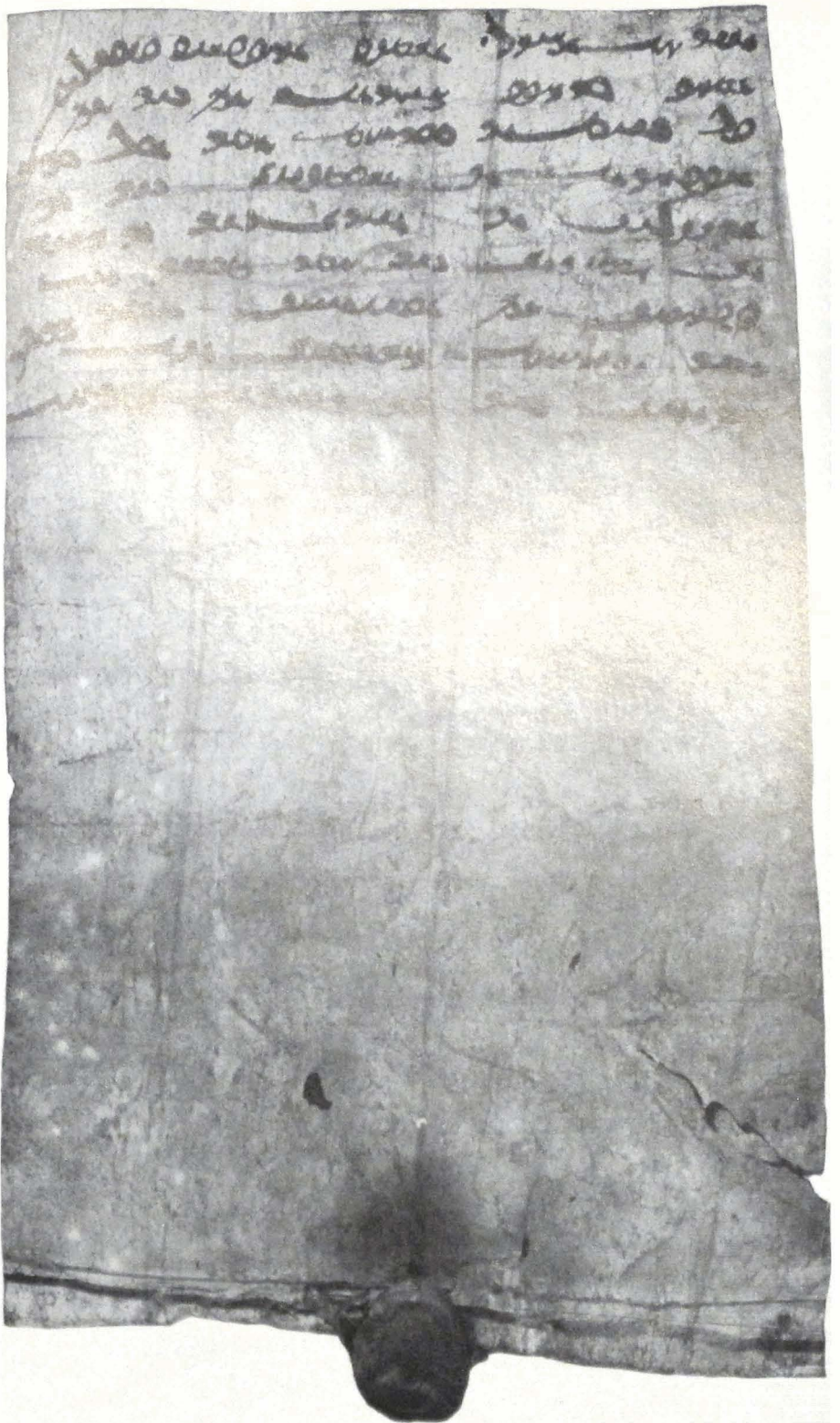
XVI. Adzhina-tepe (Tadzhikistan). Detail of the image in plate XV



XVII. Saksanokhur, Parkhar District (Tadjikistan). Figurine

This image shows a fragment of an ancient document written in Sogdian script. The text is arranged in approximately 15 horizontal lines. The script is a cursive style, characteristic of the Sogdian alphabet. The parchment is aged and shows some wear, particularly at the top where a metal fastener is visible. The text is mostly illegible due to the fragmentary nature of the document and the fading of the ink.





XIX. Mount Mugh (Tadzikistan). Sogdian script

MOUNT MUGH

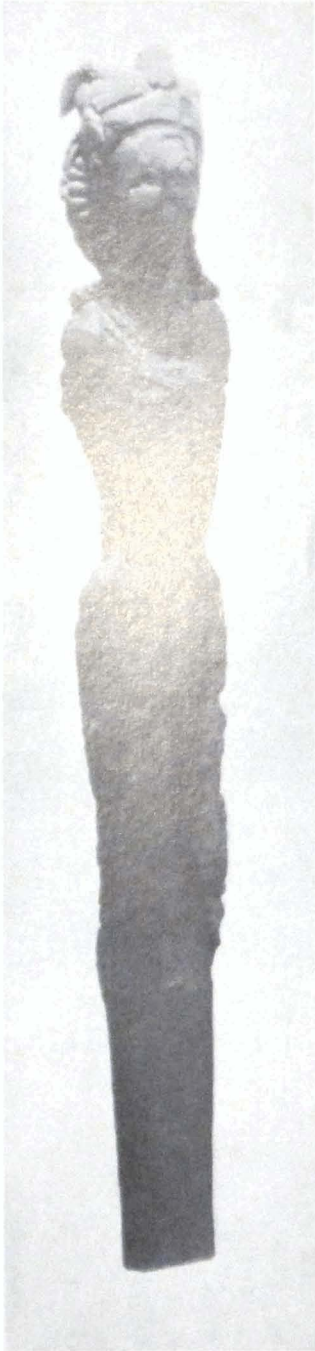


XX. Mount Mugh (Tadzikistan). Detail of plate XVIII

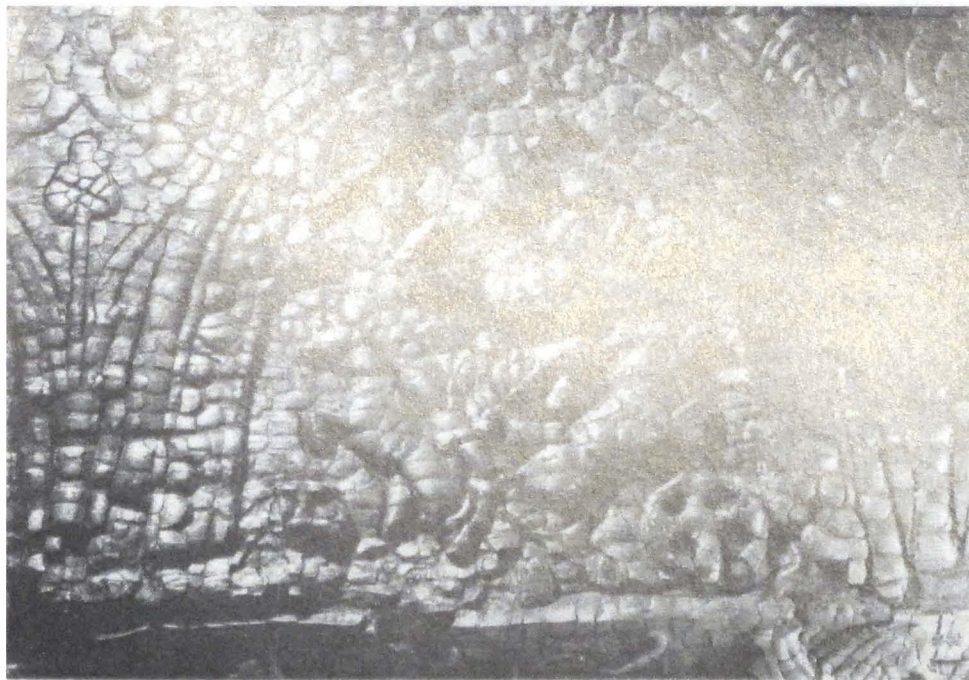
MOUNT MUGH



XXI. Mount Mugh (Tadzikistan). Seal with  
Sogdian script. Detail of plate XIX



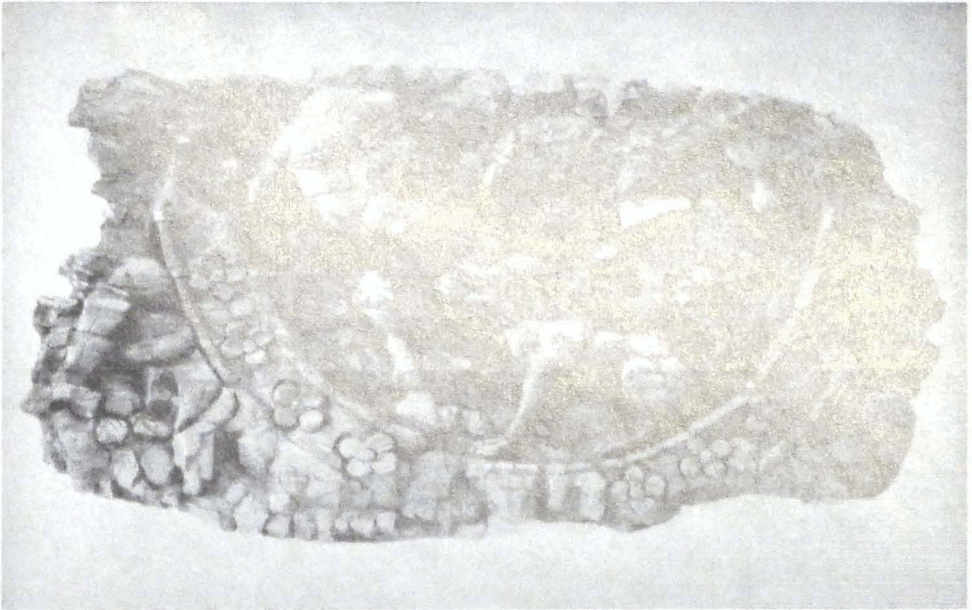
XXII, XXIII. Pendzhikent (Tadzikistan). Wooden figures



XXIV. Pendzhikent (Tadzikistan). Wood carving



XXV. Pendzhikent (Tadjikistan). Wood carving

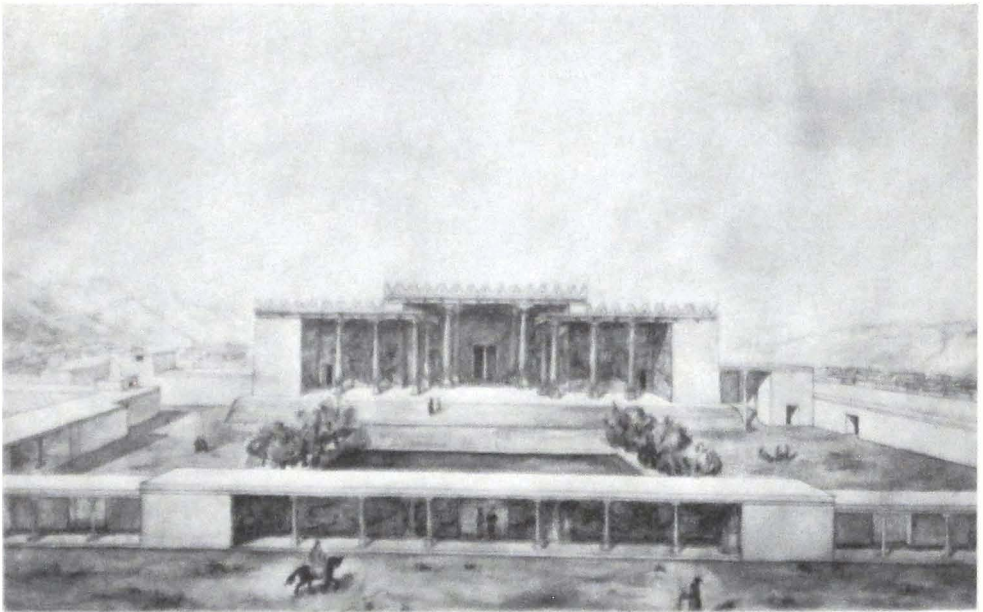


XXVI. Pendzhikent (Tadzikistan). Wood carving

PENDZHIKENT

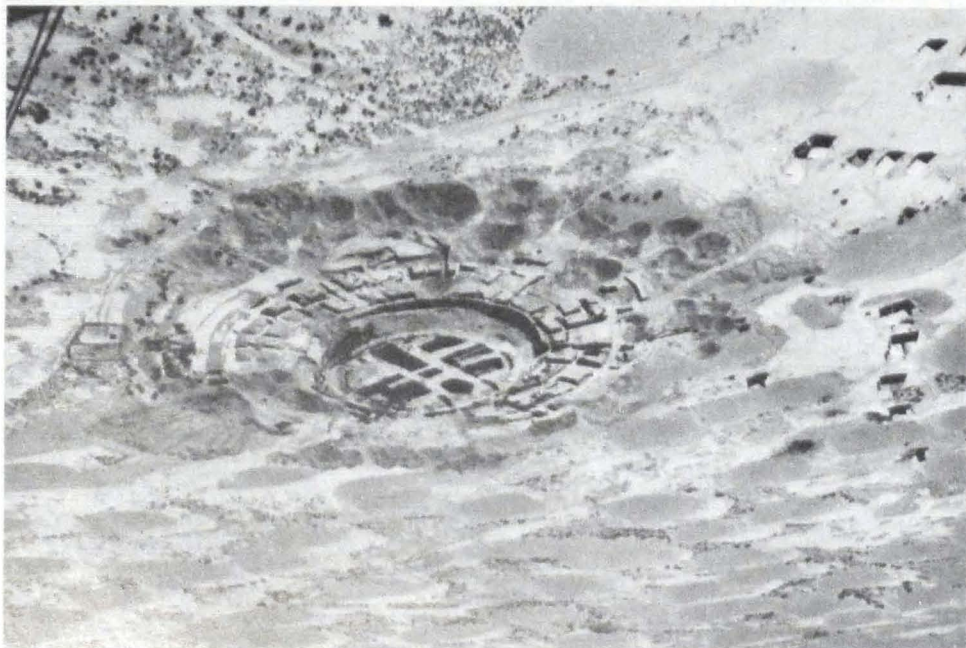


XXVII. Pendzhikent (Tadzikistan). Aquatic scene

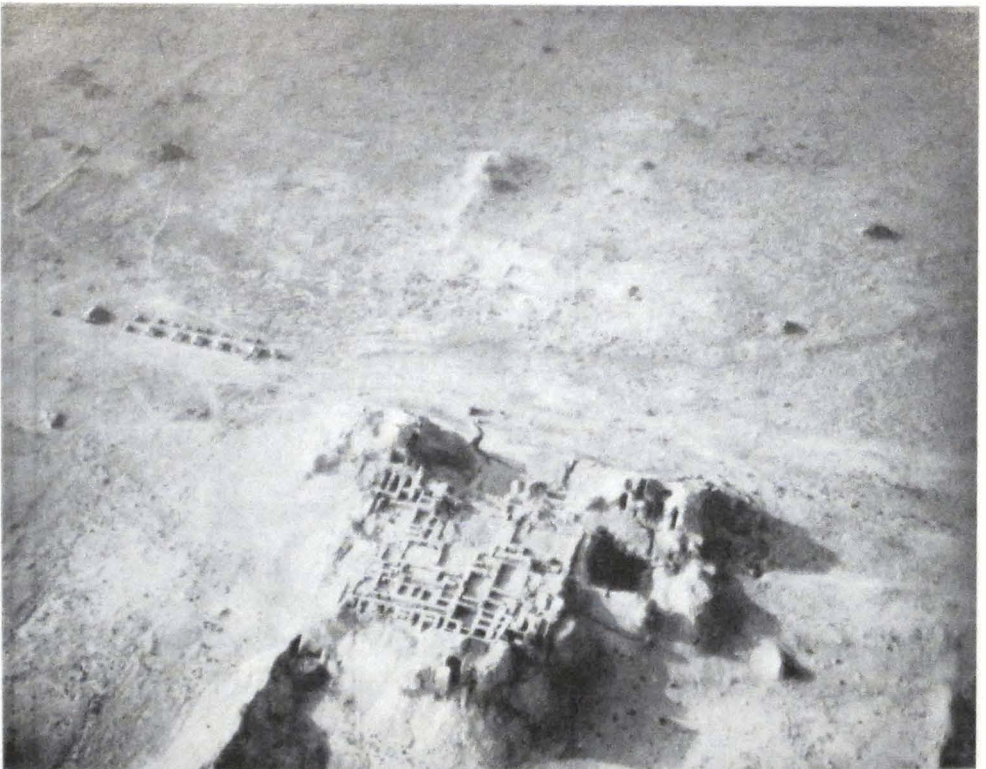


XXVIII. Pendzhikent (Tadzikitan). Shrine with aquatic scene





TOPRAK-KALA

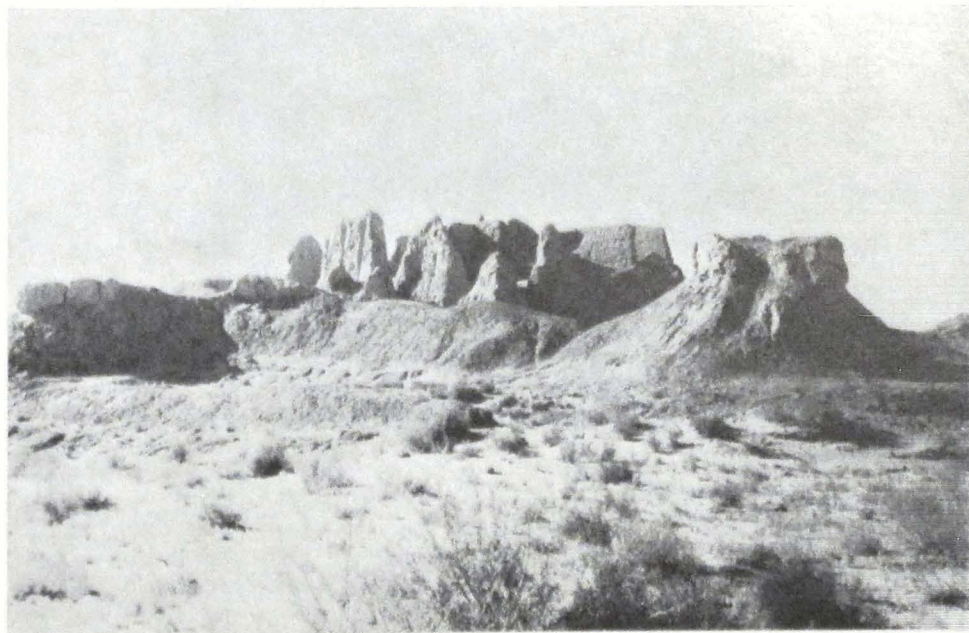


XXXI, XXXII. Toprak-Kala (Khorezm)

TOPRAK-KALA AND YAKKE-PARSAN



XXXIII. Toprak-Kala (Khorezm)



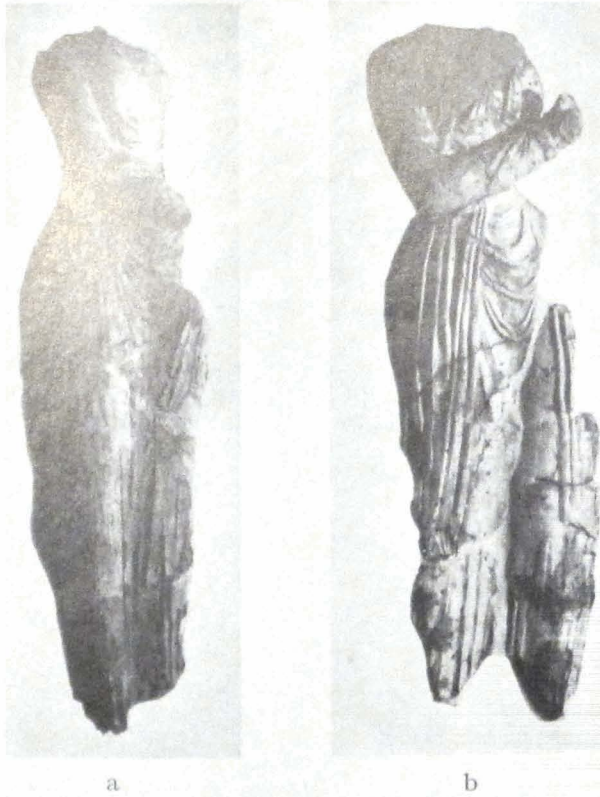
XXXIV. Yakke-Parsan (Khorezm)



XXXVa. Koy-Krylgan-Kala (Khorezm). Figurine of goddess



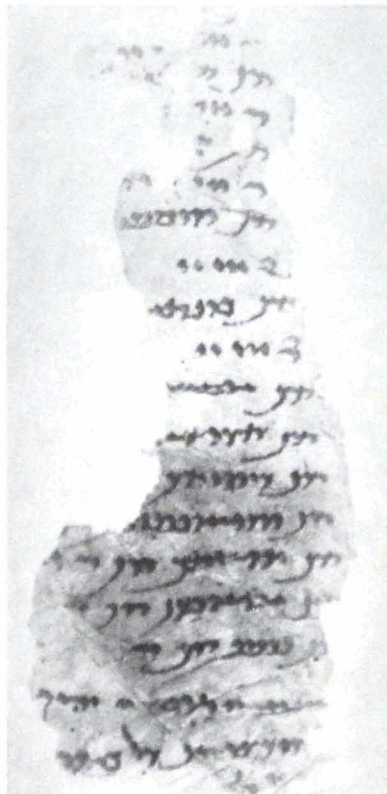
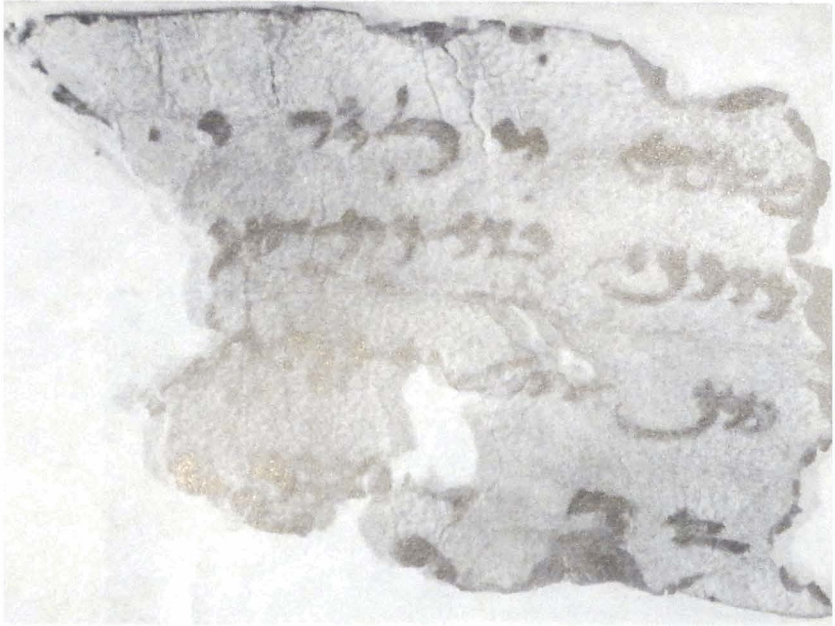
XXXVb. Koy-Krylgan-Kala (Khorezm). Figurine of musician



XXXVI. Toprak-Kala (Khorezm). Female statues

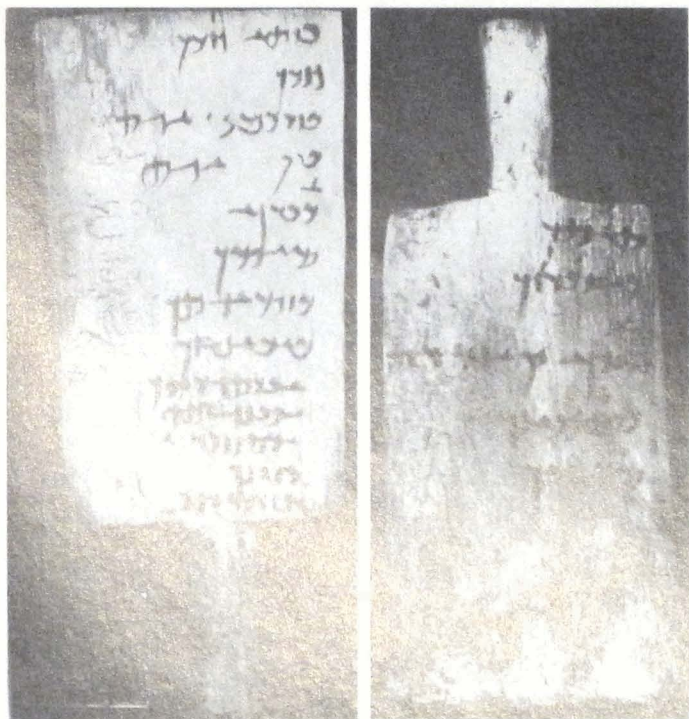
TOPRAK-KALA



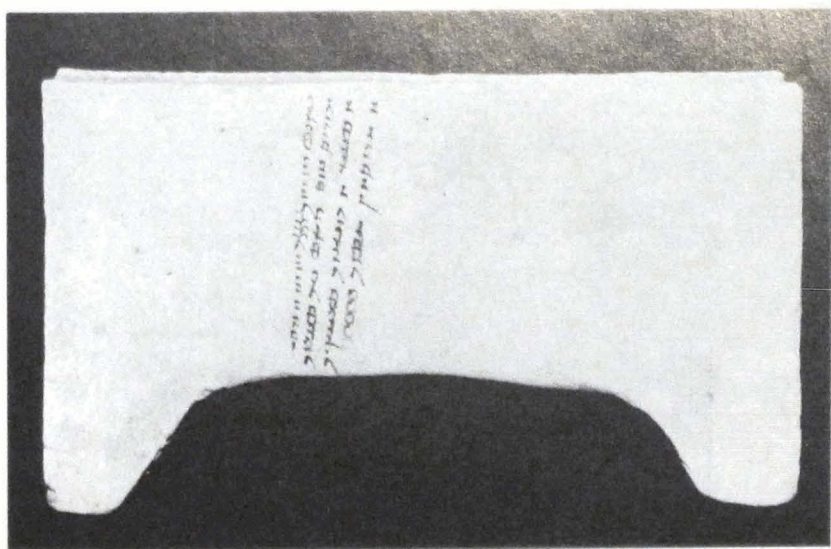




TO PRAK-KALA AND TOK-KALA



XXXIX. Toprak-Kala (Khorezm). Document on wood

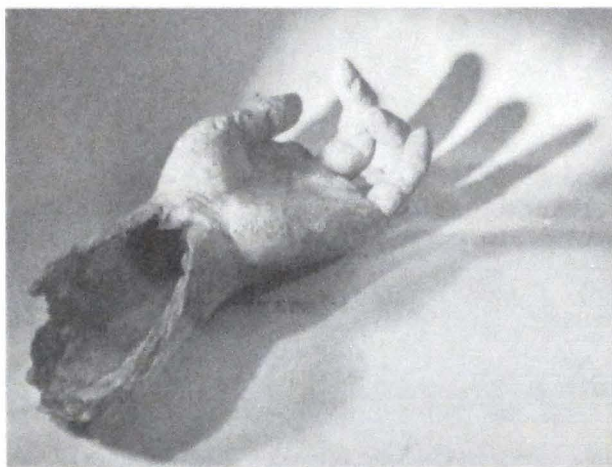


XL. Tok-Kala (Khorezm). Funeral chest

TAGISKEN AND KARA-TEPE



XLI. Tagisken (Khorezm). Funeral pottery



XLII. Kara-tepe (Uzbekistan).  
Fragment of huge statue



XLIII. Khalchayan (Uzbekistan). Fragment of wall-painting

KHALCHAYAN



XLIV. Khalchayan (Uzbekistan). Male head



XLV. Khalchayan (Uzbekistan). Male head

KHALCHAYAN





XLVII. Afrasiab (Uzbekistan). Fragment of a bridal procession



XLVIII. Afrasiab (Uzbekistan). Wall-painting





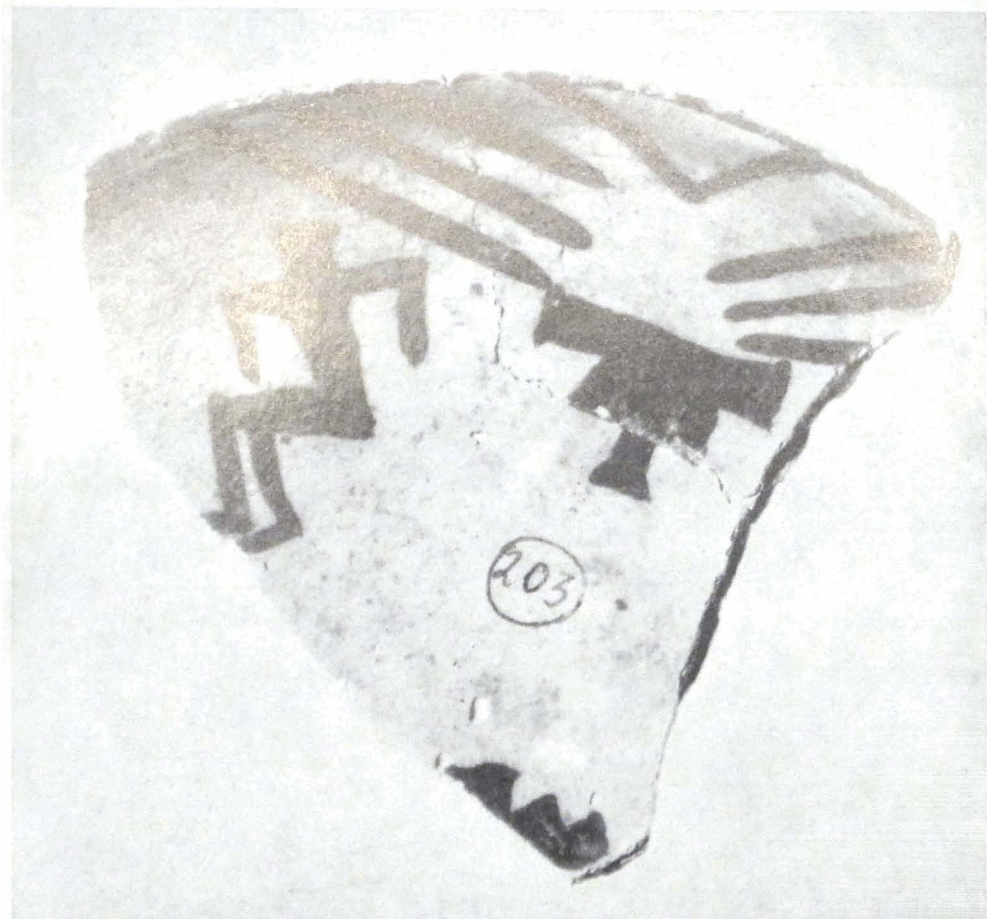
XLIX. Afrasiab (Uzbekistan). Wall-painting



L. Afrasiab (Uzbekistan). Wall-painting



LI. Kara-depe (Turkmenistan). Namazga III pottery



LII. Kara-depe (Turkmenistan). Namazga III pottery



III. Геоксюр (Туркменистан). Коллективный захоронение. III. Geoksiur (Turkmenistan). Collective grave

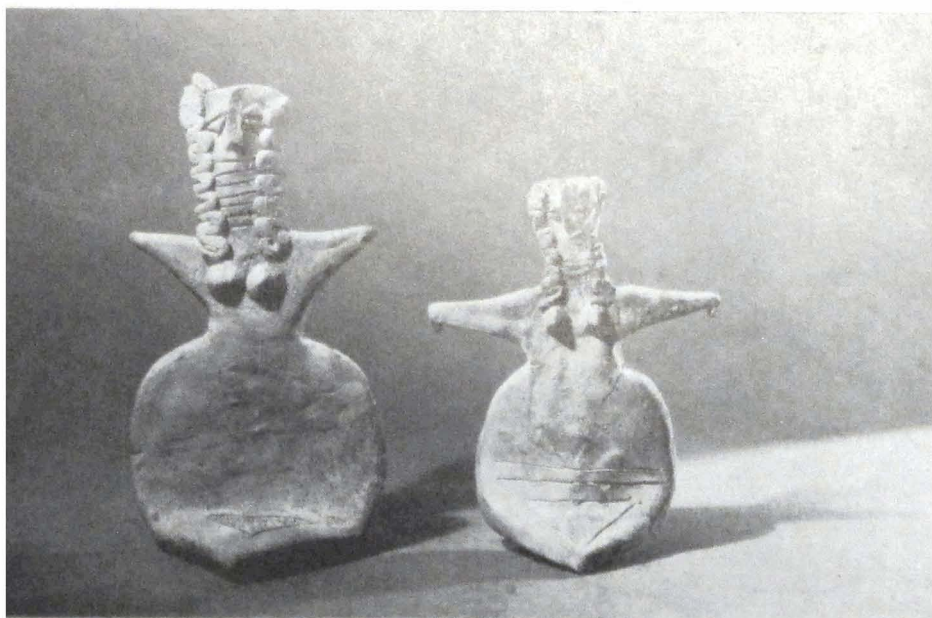


LIV. Geoksiur (Turkmenistan). Pottery

GEOKSIUR AND ALTYN-DEPE



L.V. Geoksiur (Turkmenistan). Necklaces



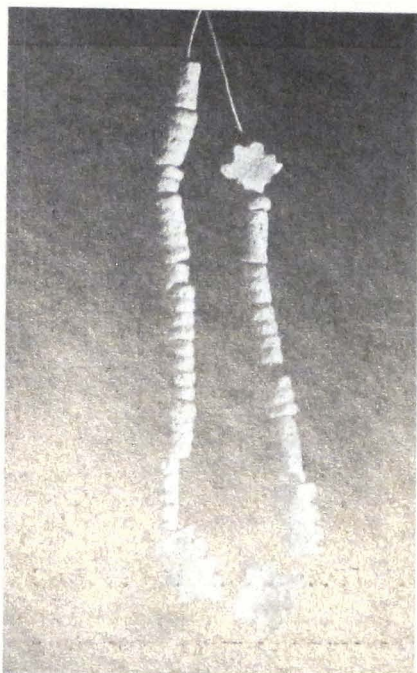
L.VI. Altyn-depe (Turkmenistan). Namazga V figurines



LVII. Altyn-depe (Turkmenistan). Namazga V, fragments of figurines



ALTYN-DEPE



LVIII. Altyn-depe (Turkmenistan). Namazga V, necklace



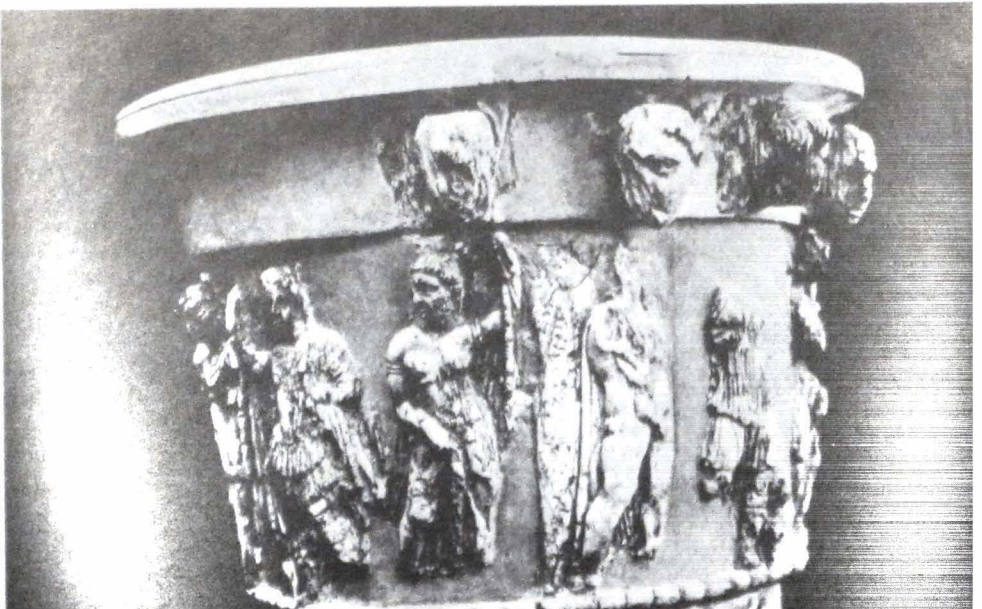
LIX. Altyn-depe (Turkmenistan). Namazga V, stone vessel



LX. Altyn-depe and Namazga-depe (Turkmenistan). Seals



LXI. Nisa (Turkmenistan). Rhyton.





LXIV. Nisa (Turkmenistan). Rhyton



LXV. Nisa (Turkmenistan). Rhyton

NISA



