

FRONTISPIECE

DETAIL FROM GIANT FELT WALL HANGING. HORSEMAN APPEARING BEFORE A SEATED FIGURE.

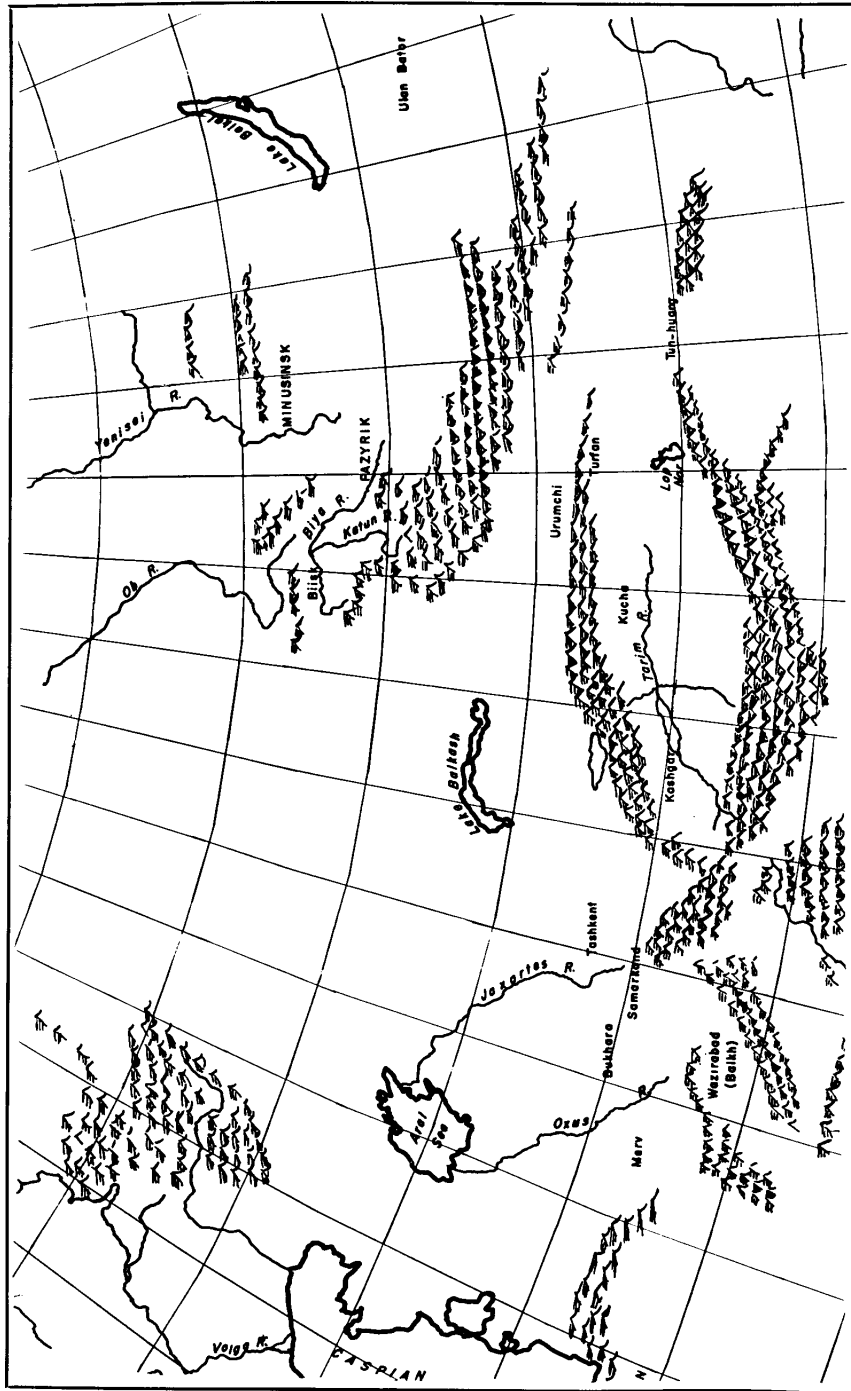
PAZYRIK, THE VALLEY OF THE FROZEN TOMBS*

by

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IN THE summer of 1927, Soviet scientists began an investigation of a site which led to some of the most startling archeological discoveries of the twentieth century. During the course of a forty-seven day field trip in the Siberian Altai region, M. P. Giaznov and S. I. Rudenko opened one of the great burial kurgans (tumuli) near the hamlet of Pazyrik ($50^{\circ} 44' N. Lat. - 88^{\circ} 03' E. Long.$).¹ (See map.) The chain of Pazyrik kurgans, twenty-five in number, stretches north and south along the old bed of a glacier which must have at one time been a lake. They all are located between the Chulishman and the Ulagan, two tributaries of the Biya river. These tumuli, or kurgans, under the Russian term by which they are known, first noted in 1924, are situated in the eastern Altai Mountains, about four thousand, nine hundred feet above sea level and are probably the earliest of the Altai kurgans.² Five of them are quite large and are known as the "Great" or "Princely" kurgans.

The locale, a mountainous terrain north of the fiftieth parallel, had a long and cold winter season. Combined with a very deep frost level, this acted in a curious way to preserve the contents of graves which long ago had been dug there. Sometime in antiquity, not too long after the burials took place, many of the kurgans were broken into and re-entered by treasure hunters. Water then seeped into the tombs from below, due to a high water table, and rushed down through the breaks in the walls and covering of the kurgans made by early grave robbers. This may clearly be seen in the strata of ice in the funeral chamber, a clean layer upon which is superimposed one of a dirtyish yellow. During the long winter months the moisture in the graves froze into a solid block, turning the entire necropolis into a vast refrigerator, a deep freeze of ancient art. The actual construction of the tombs played a major part in the preservation of their frozen contents. The burials were laid out in deep pits. A central tomb chamber was constructed of freshly cut logs. The wood was



SKETCH MAP OF EASTERN SIBERIA.

uncured for the excavators noted a strong odor of resin as soon as the kurgans were opened. The chamber had a log flooring and was covered by a log and sod roof. The entombment was ceiled by layers of loose stones. The green timber would sweat, adding to the internal moisture, and the stone covering reflected the sun's rays, but permitted water to seep through. The summer season was too short to thaw the ground to the depth reached by the graves, and when they were finally excavated, most of the objects which had been buried with the dead were found in nearly perfect condition. The ground around the tombs was not frozen, but the great blocks of ice which the chamber had become, so remained.³ The tombs and their contents were thus congealed in an accidental glacier for more than two thousand years, preserving for us much valuable information about the artistic production of the peoples in antiquity. These discoveries filled many lacunae in our knowledge about past cultures.

The kurgans of the Pazyrik group were rich not only in art treasures, but such mundane objects as chariots (or wagons), furniture, clothing and other objects of daily life. The remains of the dead were found as well and have proven to be of great anthropological interest. Many horses of unexpectedly excellent stock were found interred with the dead. The horse sacrifices are an index to the high economic level of the tribes responsible for the Pazyrik burials. The animals were buried in full harness, richly caparisoned in gold-trimmed accoutrements.

These refrigerated treasures included bone, ivory and wood often covered with gold, tin or silver foil and were enhanced by other materials; felt, leather and textiles were among the latter. There were also pieces made of precious metals, although most of these were lost when the tombs were rifled.

The construction of the tombs has shed much light on early building methods and has led to interesting speculation about a so-called "block-house" style of architecture.⁴ Nothing indicates, however, that the Pazyrik burials were made by sedentary people, nor is there proof that they actually lived in the immediate vicinity.

The Griaznov-Rudenko discoveries of 1928 were duly published in the popular and scientific press all over the world.⁵ The date of the material was uncertain but the style presented by the Altai finds seemed to be analogous to the well known Sino-Eurasian "Animal Style." Altai art from Pazyrik was immediately labeled "Scythian" and tentatively dated between the last two-pre-Christian and the first two post-Christian centuries.

Sergei Ivanovich Rudenko, his wife and a handful of excavators re-entered the Pazyrik valley in 1947 and began a systematic excavation of the major kurgans. The final results of all these expeditions, 1947, 1948 and 1949 have at last appeared in a single volume published three years ago, and entitled: *The Culture of the Populations of the Altai Mountains in the Scythian Period*.⁶ The book included materials from eight kurgans, much of which was illustrated for the first time. Fourteen of the kurgans apparently were opened.

Southern Siberia, including the Altai mountain region, had been well known as a source of artistic treasures for many years prior to the Griaznov discoveries. The kurgans at Berel and Katanda were reported by Radlov in 1865. Even earlier, local *Schastlivichiki* (literally “lucky dogs”) had been unearthing antiquities which, as chance finds, had entered the Imperial Art Collection forming a part of the famous “Siberian gold treasures of Peter the Great.” No accurate date or exact provenance, however, was known for the Siberian material.

The uncertainty about the chronological position of the Altai finds proved to be a major source of irritation. It was inconceivable that such important art should be left hanging, as it were, timeless in space. The first positive steps were taken in 1929 by S. A. Teploukhov.⁷ Working with materials excavated at the great metal producing site of Minusinsk (53° 56' N. Lat. – 91° 40' E. Long.) near the Yenisei River, he produced a schematic plan of stratification from the Stone Age to the tenth century A.D. Teploukhov's plan has recently been expanded and reorganized by S. V. Kiselev, first in 1949 and again revised in 1951.⁸ Meanwhile another Soviet scholar, S. P. Tolstov, reported his twelve years of excavation in Uzbekistan, ancient Chorazmia.⁹ The Pazyrik region has been bracketed by these two archaeological stratifications, both of which have carefully appended chronologies. Kiselev stated that the Pazyrik culture of the Altai should be contemporary with the third Tagar level at Minusinsk. Kiselev placed the Tagar period composed of three stages within the last eight centuries of the pre-Christian era, from *circa* 700 B.C. to 100 B.C. If we accept his chronological tables this would place the Pazyrik group of kurgans roughly between the last half of the fourth century, B.C. and the beginning of the first century B.C. This would be the date of the Kangui culture at Khorezm. Kiselev terms the period Hunno-Sarmatian.¹⁰

Rudenko, however, does not entirely agree. He wishes to advance, albeit cautiously, the theory of an Altaian “Scythian Stage” as represented

by the Pazyrik kurgans. He would place them several centuries earlier than Kiselev will allow.¹¹ Theories on the migrations of peoples in antiquity advanced by the late professor Marr as well as those of Debets quite rightly prohibit Rudenko from re-introducing any late migrations of Altaic peoples into the Pontic region. He has, for this purpose, invented the word "Scythic" and has stated that he presents it as a collective one in the classical sense. In support of his theories he discusses several textiles found at Pazyrik, which were obviously importations from Western or Central Asia. One of the most interesting of these is a carpet of wool pile weave, measuring approximately six feet square. This piece has received a great deal of attention and has been hailed as the "world's oldest carpet."¹² Rudenko believes it to be of Achaemenid Persian manufacture and earlier than the middle of the fourth century B.C.

Greek authors in antiquity applied the name Scythia to all of the territory north and northeast of the Black Sea. They placed within its borders a great number of peoples who are known to us mainly by the names given to them by these same classical authors.¹³ Most of these tribes were supposed to have been dominated by the nomadic "Royal Scyths" who lived in the Pontic region. Herodotus, who was the first to present a detailed discussion of these people, said that the clan name of the Royal Scyths was *Paralatae* and their tribal name was *Scoloti*.¹⁴ The latter appellation was derived from the name of an early chieftain. Herodotus states, however, that the Greeks call them "Scythian" without giving any reason for this.¹⁵ In a later paragraph he tells us that the Persians had done more or less the same thing, calling the Scythians "Saka."¹⁶ Whoever the Scythians may have been, the charm and rugged beauty of the art associated with them have, for nearly two hundred years, fascinated all who have seen it.¹⁷

The date of the arrival of the Scythians in the Pontus is as much a subject of controversy as their name and origin. The Greek epithet *Skúthēs* was first used, apparently by Hesiod who knew of the mare-milking Scythians, but not of the Cimmerians, who were supposed to have lived in the region prior to the Scythian invasion.¹⁸ Homer knew of the mare-milkers (Iliad, xiii 4-8)¹⁹ and treats the Cimmerians as a people of nearly fabulous antiquity, clothing, of all places, western Europe in Cimmerian darkness. Aristeas, who was supposed to have lived among the Scythians, indicated that the Cimmerians had departed long before his journey.²⁰ Herodotus, however, explicitly states that the Cimmerians were driven out by the advancing Scythians.²¹ The Scyths were, in turn,

supposed to have been driven from the East by another tribe.²² The Assyrian chronicles mention the Cimmerians on the Urartuan borders as late as 714 B.C.²³ About 676 B.C., Bartatua, a Scythian chieftain, demanded the daughter of Esarhaddon as a wife.²⁴ In the same year the Cimmerians are mentioned again. However this may be, the Scythian invasion is now more or less accepted as having taken place toward the end of the Second Millennium B.C., or at the beginning of the First, *circa* 1000 B.C.-900 B.C. The Cimmerians were doubtlessly absorbed by the newcomers and were not really driven anywhere. With the Scythians, we probably have to do with a mixed population, called by the foreigners after the ruling tribe.²⁵

There is a gap of approximately three hundred years which cannot be filled by archaeological evidence. We have no art in western Asia that can safely be dated prior to the beginning of the sixth century B.C. What they did in this interval we do not know. If, however, we accept them in the Pontic region as early as the tenth pre-Christian century, we can hardly hold the Scythians responsible for the Pazyrik kurgans in the Altai. It would seem that Rudenko has only confused the issue by insisting upon the use of the classical term "Scythian" as a collective name for the Siberian as well as the western tribes. All present archaeological evidence would seem to indicate that Herodotus was correct. The Scythians did migrate into Western Asia from somewhere in the Far East. It is unlikely however, that any sizable group of them remained in their original homeland for three centuries.

If we deny the Pazyrik kurgans to the Scythians, who then were responsible for them? We need to find a people whose socio-economic structure and modus vivendi fulfill a certain number of conditions, conditions which will be in accord with the external (historical) and internal (archaeological) evidence. This social unit must, in all probability, have been a tribal society of pastoral nomads who:

1. Lived or had control of the Pazyrik Valley during the critical years 700 B.C. to 100 B.C.;
2. Were in contact with both Persia and China;
3. Practiced tattooing, primitive embalming, and perhaps, cannibalism;
4. Were nomadic horse and cattle breeders and probably sheep herders. Despite the log construction of the tomb chambers in the kurgans, there is little evidence in furnishings that the Pazyrik culture was a sedentary one. The inhabitants of the frozen tombs were not in life a

people of towns.

In addition to fulfilling the first four requirements, the Altai population must have been a rich and powerful tribe or confederation of tribes. They must have had, or have had access to, an almost limitless supply of gold. The great kurgans at Pazyrik with their intricate log tomb chambers, princely burials and funereal treasures were not the products of a culture which dwelt on the fringes of economic depression. There are several other qualifications of which account must be made.

5. There is no trace of Greek artistic influence in the Pazyrik burials. There is in fact nothing at all from Western Asia that cannot be explained by contact, presumably through trade, with Achaemenid Iran. The absence of any Greek material could indicate that the entire group of kurgans at Pazyrik were completed prior to 327 B.C., or that, for some reason, contact with Hellenized Bactria was not possible.²⁶

6. Finally a reason must be shown for the sudden cessation of the burials at Pazyrik about the middle of the second century B.C. The tombs were robbed very soon after the interment took place. This would indicate either that the people responsible for the tombs did not remain to guard them, or that the robbers could despoil the tombs secure in the knowledge that they had control of the area.

There are also some indications that the social position of women was relatively high. This agrees perfectly well with what we know of the tribal morphology of Inner Asia.²⁷

These facts have caused many to agree that the Royal Scythians of Herodotus could not have been responsible for the Pazyrik kurgans. It has also been noted that Rudenko's use of a classical Scythic designation is much too broad and general to be entirely acceptable in the light of modern investigations into the tribal society of High Asia.

A strong case has, therefore, been made in favor of the Sarmatians (Sauromatae) as having been the bearers of the Pazyrik culture.²⁸ As will be shown, however, there are again too many instances where the evidence available to us at present would seem to be at variance with the facts.

There is only one tribal unit mentioned in our sources who would seem to fit all, or nearly all, of our requirements. These are the Massagetae. About them, Herodotus had to say:²⁹

“. . . When Cyrus had achieved the conquest of the Babylonians, he conceived the desire of bringing the Massagetae under his domain. Now, the Massagetae are said to be a great and warlike nation dwelling eastward, toward the rising of the sun, beyond the river Araxes (in this

case not the Volga, but the Oxus, or quite possibly, the Jaxartes), and opposite the Issedonians.³⁰

“. . . At this time the Massagetae were ruled by a queen named Tomyris, who at the death of her husband, the late king, had mounted his throne.³¹

“. . . In their dress and mode of living, the Massagetae resembled the Scythians. They fight both on horseback and on foot, neither is strange to them; they use bows and lances but their favorite weapon is the *sagaris*.³² Their arms are all of gold or bronze. For their spear points, and arrow heads, and for their *sagaris* they make use of bronze; for headgear, belts and girdles, of gold. So too, with the caparison of their horses, they give them breastplates of bronze, but employ gold about the reins, the bit, and the cheek-plates. They use neither iron nor silver, having none in their country, but they have bronze and gold in abundance. . . .”³³

It is well known that the Altai mountains are to this day rich in gold ore. The name Altai is a derivation of *Altin Tagh*, the “golden hills.” Siberian gold was the source of much of the wealth of the Achaemenian empire. The gold route lay north of the *T'ien-shan*, and ran through territory which must have been under the domination of the Massagetae.³⁴

North of the Caucasus, and south of the Urals in the West, there begins a vast plain reaching from the Black Sea more or less without interruption to the foothills of the Altai chain. The Caspian and the Aral Seas are surrounded by the steppe land. From the Scythian capital, Tanais on the Don,³⁵ to Pazyrik in the Altai, is nearly level prairie land. If the Massagetae had, as they seem to have had, military and political control of the territory around the Aral Sea, they would have been in command of the gold producing Altai region and the westward trade routes from it.

While the Massagetae are not mentioned by name in any old Persian inscription, Herodotus tells us that Cyrus was killed while fighting the Massagetae. This occurred in 528 B.C. Ctesias would have Cyrus fall, mortally wounded, in a battle with the Derbices. The latter, however, are listed as a sub tribe of the Massagetae; so that in the main, Herodotus was probably correct.

If the Greek name “Massagetae” is broken into its component parts, we find: *massa-getae*. *Massa* is listed as an old poetic comparative form of *makros*: “great.” There were at least two other tribes to whom the name *getae* was applied.³⁶

A people in Thrace were called Getae, and there were the nomadic

Thyssagetæ (perhaps, "wild Getae"?), who lived north of the Caspian Sea. In Massagetæ, we have "Greater Getae."

The Chinese histories spoke of a tribe known as the *Ta Yüeh-chih*.³⁷ The Chinese character, read *ta*, in this instance, means "great," but it can also mean "greater" if used as a comparative. The characters read *Yüeh-chih* would mean "moon people," or "lunar tribe" in translation. We are told, however, that the ancient pronunciation of *Yüeh-chih* was probably *gwat-ti, *gut-ti or *geti.³⁸ The Chinese *Ta Yüeh-chih* meant the same thing as the Greek Massagetæ, *id est* "Greater Getae."³⁹

It is not known whether the Massagetæ actually called themselves the "greater Getae," or if this is merely a Greek epithet. The latter seems unlikely in view of the Chinese equivalent. The correct Greek form should have been *massonogetæ* if this is really what they were trying to say. It is far more likely that both the Chinese and the Greeks were translating the original name of the nomads.

If the Greek Massagetæ and the Chinese *Ta Yüeh-chih* are accepted as the same tribe, our first four requirements are well met.

The Massagetæ warred with Persia in the sixth century B.C., and dwelling where we are told they did, would be in control of the routes to the Pazyrik region at least as early as this. The Chinese sources tell us that the *Ta Yüeh-chih* were forced westward some time between 174/161 B.C. The Massagetæ/*Ta Yüeh-chih* would thus be in control of the Altai, or the gold routes and in contact with both Persia and China between 528 B.C. and 174/161 B.C. This is well within the limits of our period.

While tattooing and embalming are not mentioned specifically for the Massagetæ, Hippocrates, Herodotus, Pomponius Mela, Amianus Marcellinus and Pliny the Younger, all give accounts of tattooing as practiced among their contemporaries in Rome, Greece, Thrace, Judea, Asia Minor, Assyria and many nomadic peoples. Among the latter are the Agathyrsians, Dacians and Sarmatians.

Both the Greek and Chinese histories explicitly state that the Massagetæ/*Ta Yüeh-chih* were nomadic stock breeders.⁴⁰ Being in control of the gold producing regions of the Altai would certainly have made them wealthy. One wonders if they dug for the gold themselves or received it as tribute? The skill with which the funeral pits at Pazyrik were dug and then timbered, would seem to be a strong indication that the former was the case.

The Chinese histories go on to tell us that the *Ta Yüeh-chih* con-

quered Bactria about 129 B.C.⁴¹ Warfare with the Hellenized kingdom in Afghanistan might be the reason for the lack of Greek art in the Altai.

Tomyris, queen of the Massagetae, led her troops in battle. This equal status for women was true also of the Sarmatians.⁴² The latter, however, do not seem to have been as strong politically as either the western Scythians or the eastern Massagetae.

The *Ta Yüeh-chih* were driven from their homeland by the *Hsiung-nu* in the middle of the second century B.C. *Hsiung-nu*/Hun military supremacy is probably the reason for the end of the necropolis at Pazyrik.

THE FIFTH PAZYRIK KURGAN

The numbers assigned to the Pazyrik kurgans are those in the order in which they were excavated. Detailed descriptions of the excavations of the first four kurgans have appeared many times in publications in western European languages, so that this information need not be repeated here.⁴³ It is with kurgan five (K.5) that we are most concerned, for this tumulus contained the richest trove of textiles ever to come from Central Asia. As with the other kurgans, these were found in a nearly perfect condition, preserving for us an idea of the youthful color and love of drama in the art of the northern nomads.

We have no fabric, leather or other material not made of metal, representing the art of the western Scythians.⁴⁴ This lack in our knowledge has caused Rudenko to assume that the so-called "animal style" was, so to speak, a nomad court art similar in all cases for the various tribes; in the same manner that high renaissance and baroque were fairly standardized in western Europe.⁴⁵ This is not entirely so. We cannot accuse the northern nomads of having two separate and distinct styles in art. Everything found in the Pazyrik kurgans presents a uniform picture when closely studied.

Kurgan number five is the second largest of the Pazyrik group of tumuli. It was opened in the summer of 1949 by Rudenko himself. K.5 lies about a thousand feet southwest of kurgan one. As was the case with kurgans two and four, the grave-diggers made use of a natural declivity to aid in the preparation of the burial chamber. The construction of kurgan five was in the main similar to the other four so-called great or princely kurgans. It consisted of a deep pit, more or less rectangular in shape, set nearly in the center of a large cone-shaped depression that was, in itself, a huge rough circle from which the earth had been scooped. This shallow perimeter, 42 meters (137.79 feet) in diameter was

filled with large heavy stones. The trench itself is 3.75 meters (12.31 feet) deep, with the greatest depth west of the center. Near the edge of the outer circumference of this kurgan, set back about 2½ to 3 meters (8.2 — 9.84 feet) from the rim, set nearly an equal distance apart, was a radial arrangement of vertical stone plinths. This was an unusual feature and did not occur in any other kurgan.⁴⁶

The archeological successors followed the paths of their early rapacious predecessors, digging along the path made by the tomb-plunderers. They dug through the stone perimeter to the earth-strewn covering of the funeral-chamber. This grave-pit proved to be a crude rectangle measuring 6.65 x 8.25 meters (21.81 x 27.06 feet). The outer covering of the tomb appeared when they reached a depth of 4 meters (13.12 feet) from the summit of the mountain. The ceiling itself was covered by a layer of extremely heavy boulders followed by a layer of cobbles (nearly round stones of an almost uniform shape). This covering weighed nearly three tons. Then there was the usual layer of heavy logs, five levels thick, with the balk running east and west. This was supported by a complicated structure of two triple sets of columns, one at the north and the other at the south. Across them were fixed lintels that ran north and south, again of very heavy logs fastened by tongue-and-groove joining in a very carpenterly fashion. Beneath this was another unusual feature; the actual tomb-chamber was protected by a triple thickness of somewhat lighter logs also running north and south. The robbers' entrance measured 1.45 x 1.90 meters (4.75 x 6.23 feet); it led through the lower level of logs, exposing the surface of the tomb chamber.

When the heavy balk was removed, the upper surfaces of the logs over the inner chamber were found to be covered by a shingle-like sheathing of peeled bark. The outer ceiling of the tomb-chamber had a loophole cut during the rape of the tomb. This measured 0.89 x 0.93 meters (2.82 x 3.05 feet). Additional holes had been cut through the inner ceiling measuring 0.43 x 0.90 meters (1.41 x 2.95 feet).

When the entire ceiling and rubble had been cleared away, the remains of a felt ceiling cover and wall-hangings could be seen, even though the chamber was filled with ice.

The burial chamber was composed of an inner and outer framework of logs, the outer framework was rough-hewn, but the inner chamber was constructed of carefully hewn split logs with the smooth surface facing inward. The room was set off-center in an easterly and westerly direction, but was nearly centered north and south. There was a log floor

and a double ceiling, again of split logs. This spacious chamber, which was at one time crammed with treasures, was, however, nearly empty. The inner measurements of the funeral chamber were 2.3 x 5.2 meters (7.54 x 17.06 feet), and it was 1.4 meters (4.59 feet) high.

Kurgan five differed from the rest of the princely kurgans in that the customary layer of bark and brush over the ceiling of the chamber (Rudenko states that this was possibly used for purposes of fumigation) was absent.⁴⁷

The great weight of the rubble, stones and cobblestones, is of marked importance in kurgan five. This is true as well of the great size of the balk covering the chamber, and the double sets of triple columns along the north and south walls. The triple thickness of logs covering the outer chamber was unlike the construction of any other kurgan.

The north third of the outer grave-pit was, as usual, a horse mortuary; this, however, was still nearly packed full of buried treasure.

The abundance of material found in the horse mortuary included many objects which were usually found placed along the south wall of the inner chamber in the other four kurgans.

FINDS FROM THE FIFTH KURGAN

1. In the outer trench between the wall of the pit and the walls of the chamber:

The excavators found the remains of chariots and wagons (a curious type of wagon, still used by peasants in Russia, and called a *telegi*). There were two types of wheels: carefully built wheels with bent felloes, and 32 spokes radiating out from heavy hub axles; the other were probably for some sort of heavy carts, perhaps for transporting a yurt; they were heavy solid wheels cut from logs and roughly smoothed, about 16 inches in diameter, with an axle-hole about four inches across. These wheels have been found in other kurgans as well.

Near the west wall the tongue, or pole, of a chariot and parts of the chassis of a chariot were found, together with a number of the slender wooden rods usually associated with the six-legged wooden structure and the burner set seen in the other kurgans.

When the plunderers raped the tomb, one of the curious wooden pillows noted in other kurgans was left on the roof of the burial chamber. It had probably been used as a step-ladder when the robbers left.

2. From the funeral chamber:

A tree-trunk sarcophagus cut from a single log, about 15 feet long,

was found on the south side of the room. The coffin had a finger-shaped lid carved from the same log, which had been knocked aside. Whether this was done when the tomb was plundered or not is unknown. One curious feature was noted: the coffin had been wedged under five heavy logs, all over six feet long, which had for some unknown reason been rammed through the southern wall, projecting into the room and out into the south side of the pit. The reason for this is not at all clear. It must have been done while the chamber was being built. The logs were carefully hewn, and one had holes drilled through it, possibly for dowelling. Another had a carved mortice for joining.

In the coffin, towards the foot, was the embalmed corpse of a man. He was about fifty years of age, and the cause of death was uncertain. As in other cases, there were the usual signs of post-mortual trepanning; several cuts had been made in the skull and the back of the neck. The contents of the cranium were scooped out and replaced with herbs. A long cut had been made along the spine, and another clear across the shoulders, forming a T-shaped incision on the back. This was re-sewn with very clumsy stitches of coarse linen thread. This stitching was unusual when compared with the careful seams in the leather and felt objects found in the tomb. The entrails were removed and replaced with balsam. The hair had turned grey but there were still traces of chestnut coloring which would certainly not indicate a Mongolian type. He had, however, the dolichocephalic Mongol skull represented by those found at Shibe and Katanda.⁴⁸ He had a rather strong-featured face with high, prominent cheekbones, a rather short straight nose, a long upper lip and protruding chin. Little can be told about his position in the coffin, for he had, no doubt, been moved about when the robbers removed his clothing and jewelry. The man was not tattooed, nor had the body been mutilated; the masses of muscle had not been cut from the thighs.

The corpse of a woman was found in the same coffin with the man. She, too, had been embalmed in the same crude fashion. She was tall and strongly built, but had very delicate hands and feet, and was apparently about forty years old, in excellent health (except for pyorrhoea) at the time of her death.⁴⁹ Her head had been shorn, presumably in connection with trepanning. The headdress, with long plaited tresses of wavy dark hair, was undoubtedly hers, however. The cause of death was not known, but it has been suggested that snake venom was used, and that the woman (presumably the wife of the man buried with her) was killed or committed suicide, a nomadic suttee, at the time of the funeral.⁵⁰

There was a smaller log sarcophagus with a lid on the northern side of the chamber; which may have been for a child; it was, however, empty. This coffin pointed diagonally northeast-southwest, but had probably been moved when the tomb was robbed, so that no conclusion can be drawn from its position.

There were the remains of a large cream colored felt wall-hanging with appliqués of dyed felt. It was found entirely in fragments, and the colors were red, blue, yellow, tan, and black. The material used would seem to have been sheep's wool of exceptionally fine quality. One wonders if the animals were indeed the fauna of the Altai.⁵¹

One applique was the representation of a fantastic human-headed sphinx (Plate I); it had three-fingered hands, eagle wings, a leopard's body and hindquarters, donkey's ears, a Davy Crockett cap, antlers, and a great plumed tail with a stylized floral pattern. The spots on the body were decorated with a quatrefoil. This decoration was topped off by a great swirling black "bar-tender's moustache" of a type common at the turn of the century.

Another fragment from the same hanging showed a fantastic long-legged bird with a fish-shaped body and floral tail-feathers. Below this there was a geometric stylized floral border (Plate II).

A number of wooden pegs, which had been used to fasten the wall-hangings to the ceiling and to the sides of the chamber, were scattered on the floor. Carved wooden legs from three-legged tables were found. These were of two types; one, rounded and tapering straight; the other, also round with a double taper, giving it an hour-glass shape; both sets of legs were dowelled on top.

There was also the top of another small table.

In the sarcophagus with the woman was an ornamented headdress. This had a long plaited tress, wrapped with a kerchief of finely woven white linen. This was set on top of a drum-shaped felt hat, again of goats' hair, which had an ornament projecting over the forehead. There were two sockets on the skull of the cap, probably for additional ornament.

There was a felt cushion stuffed with deer's hair.

A leather bottle with finely sewn seams was found beside a long wooden spatula. The fine seams in the leather would have made it possible to store liquid in the flask. The presence of the spatula, however, suggests that it contained some solid, possibly a powder.

Beside the sarcophagus, a fragment of a felt stocking was found. As



PLATE I

DETAIL FROM WALL HANGING. HUMAN HEADED SPHINX. COLORED FELT.

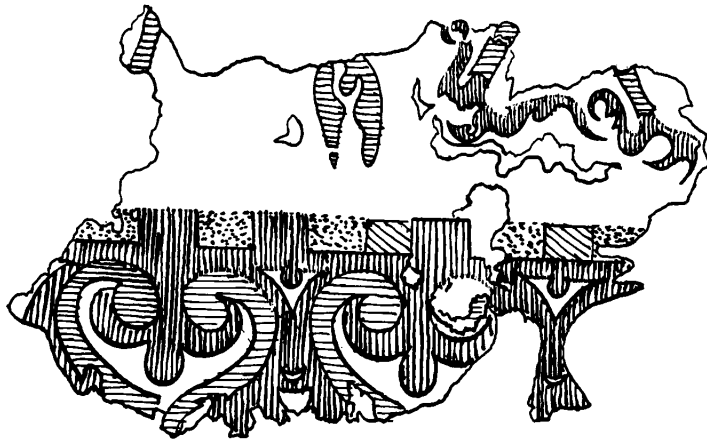


PLATE II

(TOP) COLORED FELT PHOENIX. DETAIL FROM SMALLER WALL HANGING.
(BOTTOM) FRAGMENT OF FELT HANGING SHOWING BORDER DESIGN AND FEET OF PHOENIX.

was usual, the seam was sewn on a bias in such a manner that it would not rub against the boot. This particular vestment is not illustrated, but it was similar to the beautifully decorated examples seen in kurgan two.⁵²

Along the north side of the chamber was a sheepskin, the wool of which was such fine quality that it suggested an animal kept in a shed rather than one left to graze in the open. This was in keeping with the excellent quality of the horses found in the Altai complex. Nearby there was also a goatskin with long fine hair. Rudenko, after examining the various textiles from the earlier kurgan, had seen that the wool used in the thread was of superior quality. Undoubtedly, the Pazyrik culture raised these animals for their fine hair rather than food.

In the center of the chamber were the remains of the six-legged wooden structure which was found together with a burner set in the other kurgans. This was, undoubtedly, a simple inhalation chamber, for in nearly all other cases a felt or leather cover was found together with this wooden sexapod. It rather resembled an old-fashioned photographer's hood arranged like the poles of an Indian tepee. In many cases, hemp and coriander seeds were found near the scaffolding and burner set. This is very interesting when compared with the woolen saddle blanket which will be discussed in a later paragraph. This, no doubt, represents the ceremony which Herodotus confused with a vapor bath.⁵³

Near the wooden sexapod there was a stack of carefully cut rectangular boards, tied together with cords. The purpose of these was not known.

Another one of the single-ended drums was found in the exact center of the room. These drums were made of pieces of cow's horn fastened together forming an hour-glass body, over which was stretched a leathern head.

Along the north wall was found the remains of a goat's cheese.

There were a number of turquoise beads, finely cut with a hexagonal cross-section, and several potsherds of an earthenware pitcher. Near the shards, evidently spilled from it, were a number of coriander seeds.

3. The Horse Mortuary:

The horse mortuary is as usual in the northern side of the great pit. Against the outer wall of the tomb, stretched out over the entire longitudinal area, were the bodies of nine horses.⁵⁴ As was the case in kurgan one, these horses were perfectly preserved, not mere skeletons as was the case with kurgans three and four. Again, these steeds from kurgan five were

of superior stock, certainly of the noblest breed. They resemble the best strains of Turkmenistan or Ferghana, and have nothing to do with the "Mongolian" ponies which one would expect to find in Central Asia. They were too sensitive and fine to have come from the High Altai. An examination of the contents of the stomach showed that the beasts had been grain-fed. This, combined with the excellent quality of the wool found in the sheepskin, is another indication that the Altai Mountains were not the natural habitat of the people who were buried at Pazyrik.

The horses had been slaughtered and then tumbled helter-skelter into the pit. They were struck down, caparisoned in all their barbarian finery, and when found, were in full parade harness. Since the majority of the textiles from kurgan five were found, either on the horses or in the horse mortuary, we should examine the pit in detail and follow the excavators as they made their finds.

It might be well, however, to add a brief note about the type of horse-harness found in the Pazyrik kurgans, for it adds much to our knowledge of early equestrian habits.

The bridles, while covered in most cases, with gaudy decoration, were fairly straightforward and workmanlike. We must remember that the horses were buried in their dress uniforms, so to speak, and that the everyday equipment was, in all probability, much less ornate. The bridles consist of a simple head-stall made of leather straps, all of which are tied, no buckles being use. They were made adjustable, either by slitting the leather and passing another strap through, or by the use of slip knots, or wooden cinches. To the head-stall was tied a front-strap, which usually had an ornamented frontlet. The two cheek-straps terminated in a fork at the mouth-piece. The cheek-straps were joined by a leather nose-piece. To the forked end were fastened widely flaring cheek-bars (*psalia*). The latter were frequently counter-curved. A simple snaffle-bit with jointed mouth-piece was fastened to the *psalia* by a ring to which the reins were tied. Despite the wide flare of the *psalia*, these bridles do not seem to have been used with a curb bit. The cheek-pieces were made of wood in many cases and would have broken had they been used in this manner. It is interesting to note that the bridles seen on the horses on the Persepolis reliefs, as did the horses of the earlier Assyrian reliefs, wore snaffle-bits. The horses seen, however, on the silver dishes of the later Sasanians had curb bits.

The saddles seen in the other kurgans were amazingly simple affairs. They were little more than a leather cushion, stuffed with deer's hair or

reindeer hair, thrown over a felt blanket and covered with cloth. The saddles at kurgan five, however, proved to be much more complicated. The Pazyrik saddles are not typical of the later "Asiatic" saddle. They more closely resemble the stock saddles of the west, which were indeed derived from the nomad prototype. In kurgan five, the simple leather cushion is provided with a primitive saddle-tree. Two rather high curved saddle bows at the head and cantle were sewn to the leather pad. These bows are often decorated, being sometimes carved, often covered with painted leather silhouettes, and, frequently, lacquered with additional trim of gold leaf. The bows were often grooved out at the bottom for greater strength and were steamed rather than cut to a curve.

The saddle-seat is usually leather, sometimes of one piece, more often of two. The saddlery was of excellent quality; very fine stitches were used to fasten the pieces of the leather seat. When the seat was a double hide, it was filled again with deer's hair.

It is here that the use of textiles came into its greatest play, for in nearly every case the saddle has a cover (*chaprak*). This was often made of felt, but as will be shown, other stuff was used. In addition to a cover, oddly enough, there was a saddle blanket. The saddle blanket was not to come into full use in the west until much later.

The saddle was strapped to the beast by a pectoral, breech strap and a simple girth. Slip-knots and slotted leather straps were used as with the bridles. There were no true buckles; simple wooden compression buckles with two slots which acted as cinch-rings were used, but none which hooked in any fashion. The harness of the saddle itself (pectoral and girth) were often wrapped with narrow strips of woven fabric.

Nowhere in the Pazyrik complex so far have any stirrups been found, nor is there an indication that the riders used leather straps or other devices in which to rest the feet.

The *chaprak* (saddle blanket and saddle cover), in addition to being splendidly decorated objects in themselves, were often provided with plumed tassels made — in some cases — of dyed silk floss. These were obviously imports from China.

The nine horses in kurgan five lay atop one another on the floor of the pit, still in the contorted positions in which they fell. Going from west to east in the northern end of the horse mortuary, we find. . . .

The first horse, completely harnessed with bridle, saddle and rich caparison. The leather bridle was trimmed with carved fluted wooden knobs bearing traces of gold leaf. The skirt of the saddle was hung with

shield shaped wooden pendants. These were plain but bore traces again of gold leaf.⁵⁵

The saddle cover was a piece of felt over which was placed a finely woven figured wool tapestry, unfortunately existing only in fragments (Plate III). Another part of the saddle cover, again a fragment, is of wool and linen tapestry with figural pattern. An additional piece of similar weave was a narrow band of wool and linen that covered the pectoral (chest strap) of the saddle harness. The latter piece was similar in weave and texture to the narrow bands, discovered in kurgan two which were then called "runner borders," and the weave "proto-gobelin" by Rudenko who first discovered them.⁵⁶ The two fragments of the saddle cover are entirely different in material, design and feeling, although the colors are the same.

One, entirely in wool, has an abstract geometrical repeat pattern of guidon-shaped rectangles, bordered on one side by a tear-drop design, all framed in a square. This saddle cover seems to have been made in more than one piece of the same material joined together without too much regard for the pattern. This is in keeping with what may be termed the nomadic disrespect for materials, for we shall note that this clumsy join was true again of the Chinese silk embroidery which we shall discuss in a later paragraph. It is difficult to understand this lack of feel for certain materials when the workmanship seen in other objects was of such fine quality. Possibly they treated only imports in so casual a fashion. This one textile, however, has the least "imported" appearance of any found on the first horse.

The colors are unusually subtle when compared with the violent pinks, greens, and blues seen on other material from the Pazyrik kurgans. The soft brown, black and white do not somehow look as barbaric as the other saddle trappings.

The same soft colors are used in the other fragments from the saddle. This is half of what was once a square which measured 9.6 cm. x 8.9 cm. (3.75" x 2.75") in its entirety. This square is a complete picture (Plate IV). The design represents two pairs of confronted ladies engaged in some sort of a ceremony. Two of the ladies are tall, wear crowns with four crennels, and have long veils covering the head and hanging shawl-like to the knees. The borders of the veils are decorated with the same merlon-shaped sawtooth band which borders the square itself in larger scale. They carry flowers (bells?) in one hand, the other being upraised. Behind the tall central pair on either side stands a shorter female figure.

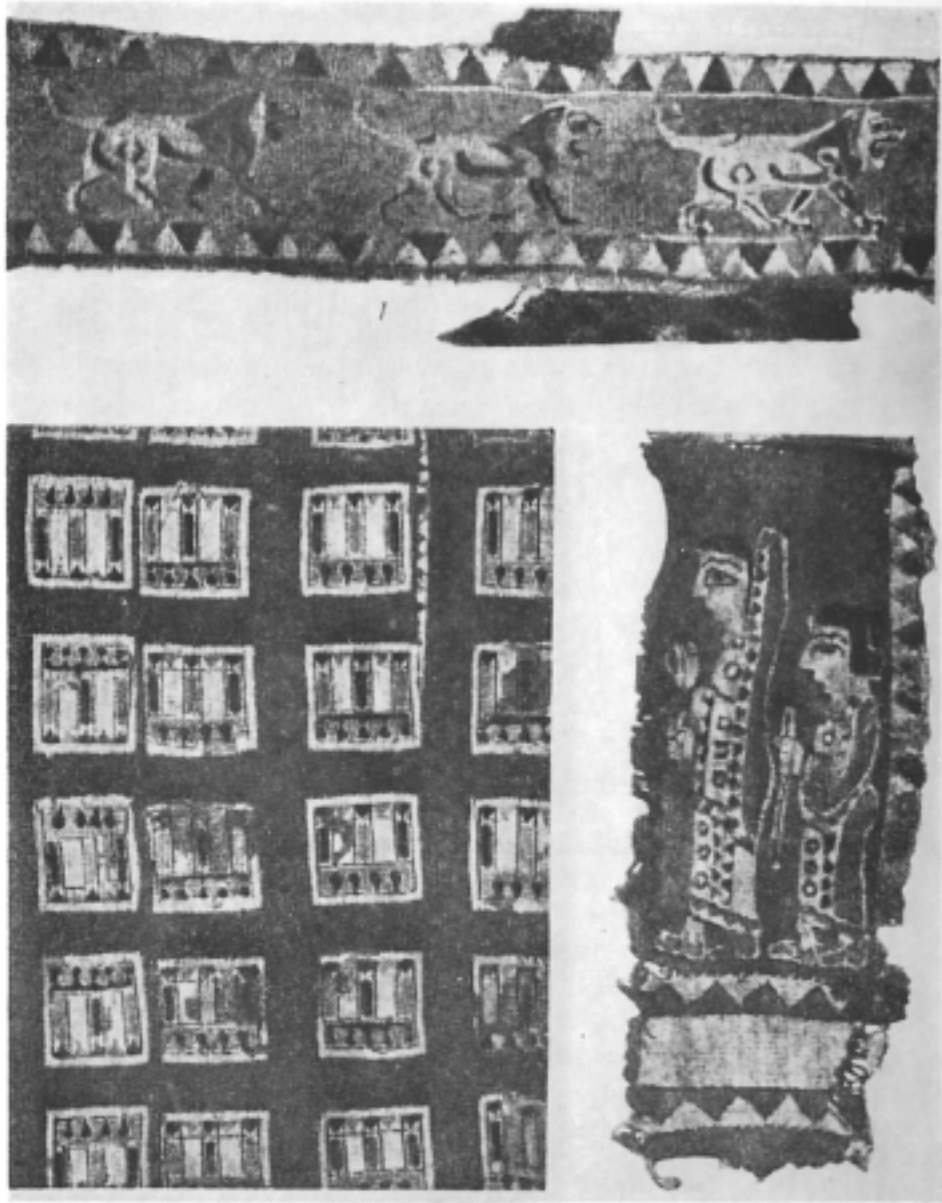


PLATE III

TAPESTRIES FROM KURGAN FIVE. (TOP) LINEN AND WOOL BREAST STRAP.
(LOWER RIGHT) LINEN AND WOOL SADDLE COVER. (LOWER LEFT) WOOLEN SADDLE COVER.



PLATE IV

DETAIL FROM SADDLE COVER.

WOMAN FACING AN INHALATOR. LINEN AND WOOLEN TAPESTRY.



PLATE V

LINEN AND WOOLEN TAPESTRY. DETAIL FROM BREAST STRAP.

The shorter ladies, while also crowned, have dutch bob haircuts but no veils. Their cloaks have the same design as the first pair. These secondary figures each carry a curved flexible object which may be a whip, or more probably, a tube. Rudenko has reconstructed the design and believes that the ladies face one another across an incense-burner which is also provided with a flexible tube.⁵⁷ In this case, the cone-shaped objects carried by the taller women might be an inhalator. It is rather amusing to note that the ladies all wear shoes with actual heels. None of the foot-gear found in the Altai is so constructed, the soles of all being flat, without heels. It is very significant that the breasts of all four of the females are exposed. The reason for this is not clear. All of the clothing found in the Altai was of a rather high-necked variety and would not provide for this almost Mycenaean characteristic.

The square with the four figures is bordered by a band with a double sawtooth pattern; each of the teeth being of the familiar merlon-and-crenell which is prevalent throughout the near east.

A similar sawtooth border is seen on the pectoral band. The latter, a narrow strip 3.4 cm. x 13.6 cm. (1.7" x 5.47") has as its main motif a pride of lions three in number, all pacing from left to right (Plate V). Again the same subtle colors are used as in the fragments of the saddle trapping. This band was fitted to the leather pectoral, and we have no way of knowing whether or not it formed a part of a larger design. It is again a wool and linen combination. Rudenko has marked the almost Assyrian appearance of the lions. There is almost a painterly quality in the modeling of the animals' bodies. This stiff procession of animals is interesting when we note the procession of stags on the rug from this kurgan.

The problem here is fourfold. When were these small tapestries woven? Where? And by whom? Finally, what are they doing as part of the caparison on a horse from a Siberian tomb?

Rudenko sees in these pieces direct importation from Achemmenid Persia. This is quite possible, however, as will be shown, there are many indications that these so-called imports were not necessarily done on the Iranian plateau.

A microscopic examination of the technique of working various materials included these pieces. The scientists found in these tapestries an example of very fine work. The warp contained 22-24 threads per cm. (about 58 to the running inch); the weft 100 threads per cm. (about 250 per inch).⁵⁸

A second horse is completely harnessed with saddle, bridle, and a rich caparison. The bridle has simple disk-shaped carved wooden ornaments. The saddle is simple and embellished with wooden shield-shaped tassels ornamented with what appear to be stylized reindeer horns. The saddle-cloth is felt with floral appliqués. The background is the greyish white natural felt. The central rectangle is covered with a repeat of cut-out appliqués in what might be termed a “bomb-burst” pattern (Plate VI). A central red quatrefoil is encircled in blue, around is a floral design in pink which radiates outward. The repeat pattern and the blue floral border are cut from felt. The felt extended down to cover the girth. At the cantle-end of the saddle cover was a scalloped border in red felt with a cutout design in each suggesting an antler.

A third animal again is in complete harness, with bridle, saddle and trappings. The bridle is decorated with carved wooden ornaments. These are beautiful examples of full-round sculpture; each represents what seems to be a feline head. The forked end of the cheek-strap terminates in what seems to be a wolf’s head. This is interesting when we think of Ugrian art. The saddle is plain leather. The bows, however, are decorated with lacquer ornament. There is no saddle cover, but there is a felt saddle blanket with a stylized floral pattern (Plate VII). The blanket is natural colored felt. Again there are appliqués in red and blue. The central rectangle is covered with a pattern of superimposed arches, each provided with a cut-out which may be a stylized antler. In later art in Central Asia as well as China, Persia, and India, this design represented mountains. We don’t think that this is the case here. These arches alternate red and blue. The red felt border is provided with a repeat cut-out pattern resembling a capital script “E.”

The fourth animal also is completely harnessed, with bridle, saddle and blanket. The bridle is decorated with carved wooden ornaments, which seem to be in the shape of the heads of antelope. These again are full round, and quite important.

The saddle was very ornate, with carved wood and cut goats’ leather decoration. The decor is again antelope heads. The leather trimming on the saddle bows is cut with a representation of the heads of horses. These full-round sculptures are examples of a most significant pseudo-realistic school in the animal style at Pazyrik. Even fantastic animals are given life in these sculptures. The saddle has long wood pendants imitating leather, which are carved with the representation of horned feline heads.

There is again a felt saddle blanket with floral appliqué. This blanket



PLATE VI
FELT SADDLE COVER FROM KURGAN FIVE.



PLATE VII
FELT SADDLE COVER FROM KURGAN FIVE.

is interesting in that it has carved wooden weights painted to represent tassels suspended from the border. The colors here for the first time approach the subtlety seen on the tapestries. They are a soft burnt orange, vermilion, and black. There is a floral border with a double spiral cut-out. The central rectangle is a crisscross diagonal pattern, the interstices of which are covered by four quatrefoil appliqués of black felt, and the intersections with a black circle in which is a red quatrefoil.

The fifth horse, also richly caparisoned in full harness, is unique, for it has one of the horned horse-masks and an additional decoration on the mane. The bridle has wooden *psalia*, the upper tips of which are carved with the heads of griffons. The bridle straps are adorned with carved wooden cats' heads, and the nosepiece with figures of stags. The forked ends of the cheek-straps are again wolves' heads. The saddle-cover is decorated with squares on which are sewn additional decorations cut from pieces of tabby-woven silk, without a doubt from China. Rudenko calls this raw silk, and it is of a soft yellow color. The silk cut-outs are in the shape of crosses with equal arms and rounded ends. In the center of each are sewn three gold beads. There are two of these crosses placed diagonally in alternate corners of an orange felt square. The other two corners are decorated with squares of felt appliqué, in which there are three triangles, two of blue felt with a trumpet pattern cut-out, the third triangle has an animal's head in frontal view which, like the crosses, is cut from pieces of silk. Rudenko calls the beast an elk.

One wonders if the fifth horse were the favored steed in the string of ponies buried with the man and his wife in kurgan five. As we have mentioned, this animal was the only horse of the nine in the kurgan with one of the ornate mask-like, horned headdresses which have become so well known as a feature of Pazyrik decoration.

The saddle itself, with the lavish silk and felt decoration on the cover, was further enhanced by large plaques with tooled leather elks and shield shaped strap ends of carved, painted and gilded wood. Again, there were the wooden imitations of leather straps carved with representations of elk (?): the protomes of which are twisted so as to be seen from above, while the hind quarters are in profile.

A note of humor is added in that both sets of saddle bows were provided with ten full-round sculptures of gilded carved wood feline protomes, so set that they rise above the cantle and head of the saddle and seem to peer over the crest of the saddle bows.

This saddle had rudimentary side bars to the tree, with long leather

latigos terminating in disk shaped rings.

Not only was the animal masked, but there was a leather and dyed horse hair plaque on the mane as well. In addition to these features, there was a saddle blanket. The latter is most interesting from an artistic point of view as well as evidence of cultural interchange.

The saddle blanket, a true caparison, was fairly large. It measured 62 cm. x 226 cm. (24.30" x 88.96"). A piece of the customary natural colored sheep's wool felt was covered by a rectangle of cream colored silk. The silk cover was decorated by a multicolored design in red, blue, yellow and black silk threads. The design was applied in chain stitch embroidery. This decor was purely Chinese, as no doubt was the silk itself. Around the embroidery was a border of felt with a double band between which a row of colored felt appliqués, cut in a three-pointed design, were set diagonally. Along the short side of the trapping were three long tassels of dyed horse hair.

The design was a form of Chinese art which could be fairly well localized. It represented birds, possibly pheasants, roosting on — or running along — branches of a stylized tree. Additional birds, and single leaves or flowers were set in the pattern. The main element of the embroidery was a confronted repeat of two similar designs. One was an "E" shape branch with a pheasant roosting on the central bar; the other was a rough "C" shape branch with a pheasant running along the lowest curve.

Here again, as was the case with the woolen blanket, we meet the "disrespect for material" so typical of the nomads. The silk had been cut and sewn together, to widen it, and no attempt was made to match the pattern. It is doubtful if the silk came to Pazyrik mutilated in this fashion. One is reminded of the scraps of silk used to stuff clothing found at Noin Ula.

In order to find a parallel for the silk embroidery design, we must turn to China, and compare the art of a particular region. This is in the South, in the artistic production of the tribes from the state of Ch'u. The last capital of the Ch'u kingdom was near the modern city of Ch'ang-sha, the provincial capital of the province of Hunan.

Shang/Yin, the first historical period for which we have archeological evidence in China, was conquered by a western tribe about the middle of the eleventh century before Christ. This conquering people called themselves and the resulting dynasty, Chou. The Chou in turn fell *circa* 771 B.C., and although the dynastic name continued to be used until

about 221 B.C., the central government was feeble, and the Chinese hegemony was broken into a series of feudal states. Five of these began to emerge as more powerful than the others. In the northeast was Ch'i, in modern Shantung and Hopei; in modern Shansi, in the north, was Ch'in; to the west, in Shensi, was Ch'in; on the plain, in Honan — near the old centers of An-yang and Lo-yang, was Sung. Ch'u, in the Yangtze River Valley, Hupei, Anhui and Hunan, was one of the strongest. They appear, indeed, to have been at first almost entirely non-Chinese. The Ch'u were regarded as "barbarian" by the northern Chinese.

The Chou period (*ca.* 1030 B.C.—221 B.C.) is usually listed in three stages: Early (Western), Middle and Late (Eastern). The Chinese call the last two periods, *Ch'ün-chiu*, "Spring and Autumn," and *Chan-kuo*, "the Warring States." Spring and Autumn covers the period from 771 B.C. until about 480 B.C., and the period of the contending states lasted from 480 B.C. until the conquest of *Ch'in* in 221 B.C. In the last stage — that of the warring states — one of the most powerful feudal territories was the kingdom of *Ch'u*. Precisely who the Ch'u people were is unknown. As we have mentioned the Chinese seem to have regarded them as barbarians. They lived on the southern fringes of China, and had access to the sea. Unlike the wheat eating charioteers of the north, the Ch'u seemed to be rivermen and rice was their staple food. There is some indication that they had a ruling aristocracy who came from the north. They had, however, many Oceanic, Southeast Asian and Indian affiliations. They produced an art that was distinguished by its grace and elegance and was the most colorful of the Late Chou period. The *Ch'u* kingdom was erased by the conquering *Ch'in* in 222 B.C. Their greatest period of artistic production seems to have been during the period of the warring states: from the middle of the fifth to the last quarter of the third centuries before Christ.⁵⁹

The decor on the silken saddle blanket from kurgan five in Pazyrik is remarkably akin to that seen on lacquer shields recently excavated near Ch'angsha.⁶⁰ A beautiful example of painted silk was unearthed in 1949 from a tomb in a suburb of Ch'angsha. It represents a woman with a phoenix and dragon. The plumage of the bird is very close to that on the pheasants on the Pazyrik silk saddle cover.⁶¹ The silk saddle trapping from kurgan five was undoubtedly a Chinese import, representing one of the many objects listed by the Chinese as a "gift," and by the nomads as "tribute" in the later Chinese histories.

The horse's mask was a full head piece, entirely covering the horse's

head. It was made of leather, and topped by a carved wooden stag's head with spreading antlers.

The remaining four of the nine horses in kurgan five wore bridles only, and were not provided with rich trappings. The horses with the less ornate harness were all on the western side of the horse mortuary. This was in keeping with the other kurgans, where the horses with ornate decoration were on the eastern side of the burial pit.

All of the bits discovered were simple iron snaffle bits. They were all of a type, although none of them exactly resembled another. This too, was typical.

On top of the horses were the heavy solid wooden wheels and thick axles common in the other tombs. Rudenko has suggested that perhaps the sarcophagus was wheeled to the burial chamber. These heavy wheels, however, may well have been used to transport the base of a traveling yurt. No draught animals of any sort were found in any of the kurgans, but this does not mean that they were not used.

Four spoked wheels from a quadriga were discovered along with pieces of the chariot pole and yoke. The latter was made so that four horses could be harnessed.

A pair of yellow felt cut outs representing swans confronting one another were sewn to the sides of a black felt wagon cover (Plate VIII). The birds have a distinct Chinese aspect, and may have been cut in imitation of some Chinese object, since lost.

Numerous slender rods made of wood, usually associated with the burner set and wooden sexipod used as an inhalation device, were in the horse pit. These should have been in the main room of the burial chamber, if the pattern of discoveries in the other kurgans represents a ritual.

There were pieces of a felt tent with a domed cupola. The tent was interesting in that the excavator's description brought immediately to mind the pavilions used as dressing tents in illustrations of medieval tournaments. The walls of the felt tent were separate hangings which could be individually detached or raised.

Two final objects from the horse mortuary, along with the Chinese silk saddle cover, are perhaps the most significant finds from the fifth Pazyrik kurgan.

Wadded up on top of the horses were the fragments of a huge felt wall hanging of truly heroic proportions (Frontispiece). The object, when reassembled, was found to measure 4.5 m. x 6.5 m. (14.7' x 21.2'). Decorated with the representations of human figures, aside from the

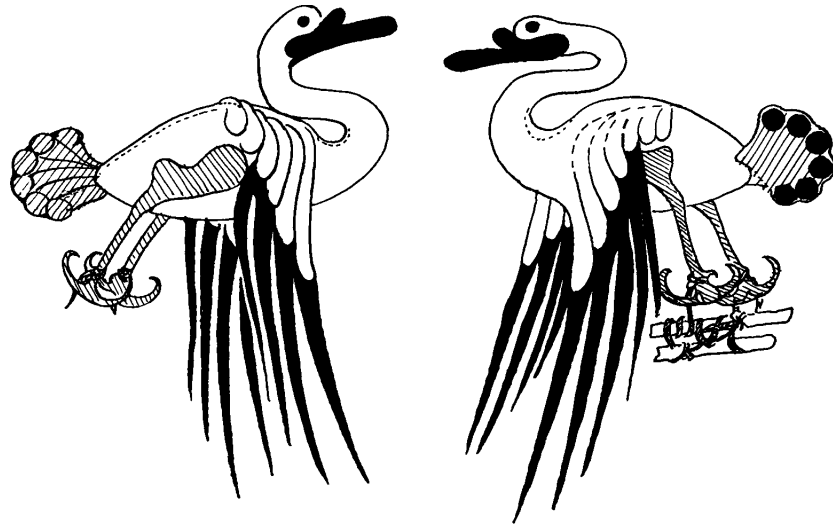


PLATE VIII

YELLOW AND BLACK FELT APPLIQUÉS FROM A WAGON HOOD.

woolen carpet, it was the only object in kurgan five with such designs. The human headed griffon from the other hanging was really a fantastic being.

The background of this giant felt was the usual grey white of natural sheep's wool felt material. The appliqués were cut out of pieces of dyed felt in red, green, blue, buff and black. The design was a repeat of the same scene on two levels. A horseman, mounted and facing the left, is depicted confronting an enthroned personage who raises the right hand and seems to grasp a tree or floral branch with the other. At the top and bottom are borders, repeated again as a separating band between the two levels. The border is a repeat of a quatrefoil plant motif alternating with a square containing a stylized floral design. The squares themselves alternate in color. One has a buff flower on red, the other a red flower on green. The quatrefoil, composed of four fleurs de lys, were all red, with green circles and a white square at the center. These designs occur on other felts from the Pazyrik group of burials.

Rudenko describes the central scene as a mounted horseman appearing before an enthroned goddess who bears a tree. A suppliant king appearing before a god or goddess, or a figure approaching a god-king are common enough in near-eastern iconography. We wonder, however, if this is an entirely accurate description in this particular instance.

The human figures on the felt hanging are of great interest. Human representations in art are not common in the Altai of this period. They do, of course, occur on Scythian and Sarmatian objects found elsewhere: but the Pazyrik examples do not resemble either. The faces were dyed pink which would seem to indicate a fair skinned people. The cast of features is certainly not Mongolian. The horseman is astride a mount which lacks only the flowing caparison to match the horses buried with the hanging. The animal has a bridle, saddle with blanket and harness. The latter includes a breech strap and pectoral. The saddle has a definite head, and presumably a cantle. The bridle has the *psalia*, nose, cheek and chin straps, as well as the head stall; all of which could be seen on the excavated examples. The horse's tail is braided.

The two sabre shaped projections rising from the crest of the mane are a significant feature. We have remarked elsewhere that this is a typical addition to nomadic horse gear.⁶²

The rider is bare headed with short curly black hair, and black "kaiserlich" moustaches. His costume includes tight yellow trousers, soft boots (presumably of felt) and a full skirted blue coat with long

sleeves. A long yellow scarf with black polka dots, tied around his throat, flutters behind him. He is armed with the *gorytos*, the familiar holster shaped quiver of the nomads, which held both bow and arrows. He holds the reins in his left hand.

The seated figure, called a “goddess” by Rudenko, is — or seems to be — completely bald. The head is covered by a large and curiously shaped headdress in the form of a drum. This head piece resembles that of the woman found in the coffin in kurgan five well enough, although it lacks the tresses. The head gear shown on the hanging is red with a forked border in black at the lower brim. The figure wears an ankle length blue robe. One hand is raised to the mouth while the other grasps a stylized floral branch, or possibly, a tree. The throne is a high four-legged chair, with turned legs and an ornate back terminating in an arrow or leaf-shaped design which curves toward the floor. There is no ground, both the chair and the horseman are set above the borders.

Rudenko may quite possibly have interpreted this scene correctly, as a mounted horseman appearing before an enthroned goddess. The woman found in kurgan five was bald. The excavators suggested that this might have been in connection with the preparation of the corpse for burial. We recall, however, that she had a drum shaped headdress to which her tresses had been affixed. The lady’s head may have been shorn in her lifetime and the headgear worn as a wig. There would seem to be, however, yet another interpretation possible for this scene.

Herodotus devoted a good part of his fourth book, “Melpomene,” to a description of the Scythians and their neighbors to the east. While his story and directions become, understandably, more confused the farther east he went; much of what he had to say has been borne out, at least in part, by modern archeological investigation. In the twenty-second and twenty-third chapters of book four, Herodotus states, after describing the lands of the Sauromatae (Sarmatians?), the Budini, the Thysagetae and the Iyrcae that:

“. . . Beyond these people (the Iyrcae) a little to the East, dwells a distinct tribe of Scythians, who revolted from the Royal Scyths, and migrated to these parts . . . you come to a people dwelling at the foot of lofty mountains, who are said to be all — both men and women — bald from birth, to have flat noses and very long chins. These people speak a language of their own, but the dress which they wear is the same as the Scythian. . . . Each of them dwells under a tree, and they cover the tree in winter with a cloth of thick white felt, but take off the covering

in the summer time. No one harms these people, for they are looked upon as sacred, — they do not even possess any war-like weapons. When their neighbors fall out, they make up the quarrel; and when one flies to them for refuge, he is safe from all hurt. They are called the Argippaeans. . . .”⁶³

Nowhere else is Herodotus’s account so confusing as to distance and direction as in the regions just described. This is perfectly understandable. He got his information by hearsay from people who may in themselves not have been too clear. He does, however, mention lofty mountains, which could be the Altai. He further states that the people lived, not in them, but at the foot of them.

It would be interesting to read in the scene from the felt hanging something of the sort that Herodotus describes. The seated figure is bald, and while the nose is not flattened, the chin is certainly long. The seated figure could be a woman. Clutching a branch might be construed as being under a tree. The upraised hand might be a symbol of justice. The mounted figure would then be one of the turbulent neighbors appearing before an Argippaean judge, possibly seeking refuge. There seems to be more than a sexual difference in the physiognomy of the two figures. The rider is not bearded as were the representations of the western Scythians and Sarmatians. Except for the Kaiser Wilhelm moustaches, similar to that on the human headed griffon, he is clean shaven.

Whether the scene represents a goddess and suppliant, or an Argippaean judge and client, the illustration on the felt hanging from kurgan five is unsurpassed as an example of the art of the northern nomads. This, surely, was no importation. The felt material was one of their natural media, and the art reflects their style. The horse is very like the small wooden sculptures of horses, used as clothing ornaments, found at Katanda.

The horse pit contained a piece of maral horn, numerous thin sheets of gold leaf used to gild wood carvings, and a final treasure represented by a woven wool carpet which has recently been the focus of a great deal of attention. The carpet is not large, measuring 1.89 m. x 2.00 m. (6.12’ x 6.6’) (Plate IX).

One corner of the carpet was destroyed, and there are a few tears, otherwise it is in perfect condition. It is woven in a tufted wool pile. There are approximately 30 knots per running inch (12 kn./cm.), and 225 knots per square inch (360 kn./sq.cm.). Rudenko estimates that there are 1,250,000 knots in the whole carpet. When the carpet was taken from the loom, the warp threads were cut so that a fringe border, about

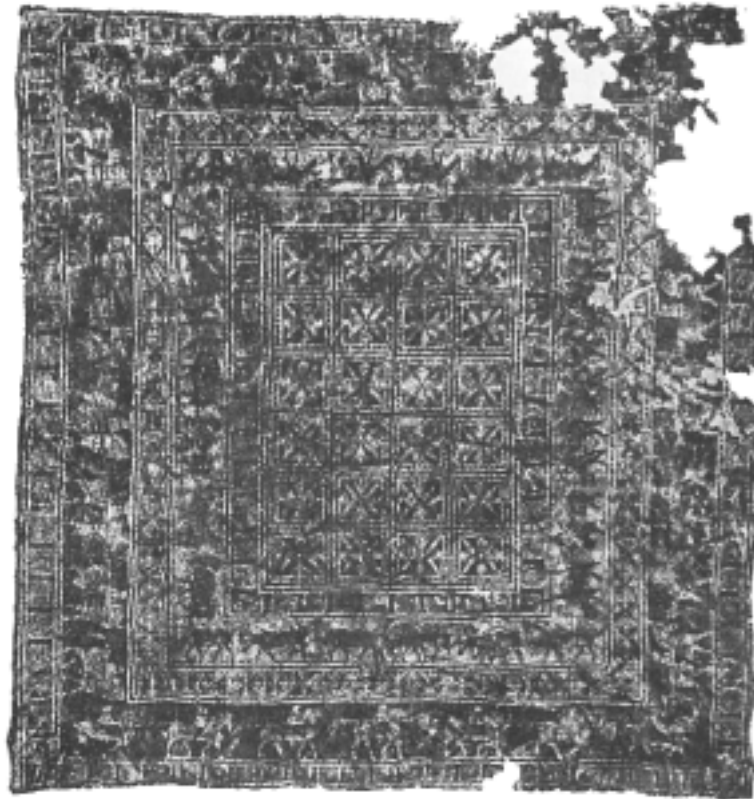


PLATE IX
WOOLEN RUG FROM KURGAN FIVE.

one to one-and-a-half centimeters wide, extends across two sides of the rug. Rudenko examined the carpet and found that the nap did not vary more than two millimeters over the entire surface of the rug. The pile was very thick and dense.

The tufts are tied with the ghiordes or "Turkish" knot rather than the sehna, or so-called "Persian" knot. Rudenko states that a skilled weaver could tie from 2,000 to 3,000 knots per day. Thus, it would have taken approximately 420–625 man-days to produce the rug. Rudenko has cited some interesting figures from authors of antiquity on the price of woven carpets. Metellus Scipio, in the first century B.C., paid 800,000 sesterces (about \$15,500.00) for a carpet; and in the first post-Christian century, Nero was supposed to have paid four million sesterces (about \$78,750.00), for a carpet for his triclinia babylonica. The carpet from kurgan five must have been an extremely valuable object.

The threads in the carpet were a lustrous, still elastic wool, of fine quality. The colors used were red, tan, buff and black. These colors suggest Turkish rather than Persian carpets. Those who have compared the colors in the Pazyrik carpet with the colors in the Noin Ula work, have suggested that the former might not be of Iranian but of Central Asiatic origin. The pile weave from Noin Ula, however, used the Spanish or single warp knot. Very little can really be told about the type of knot in these early carpets. There are too few examples, and the origins of the pieces are not known so that there is no basis for a priority of invention. It is quite possible that all types of knots were used at the same time. The population of the Altai mountains at the time of the Pazyrik graves was probably not Turki.

The carpet is nearly square, but the design within it is rectangular. A central rectangle is composed of twenty-four squares, each containing a quatrefoil flanked by a double leaf. The squares are bordered by a dot-and-dash pattern. Surrounding the central rectangle is a double band repeating the dot-and-dash border of the central motif (Plate X). Framed by this double band is a repeated series of irregular squares containing the figure of a winged griffon (Plate XI). The body of the fantastic animal faces from left to right, and the head is turned so that it looks backward. The squares containing the griffons are framed by a saw tooth pattern.

A wider, looser band surrounds the more tightly knit design of the center panel (Plate XII). It represents a herd of elk, facing from right to left. The beasts follow one another in single file with lowered heads

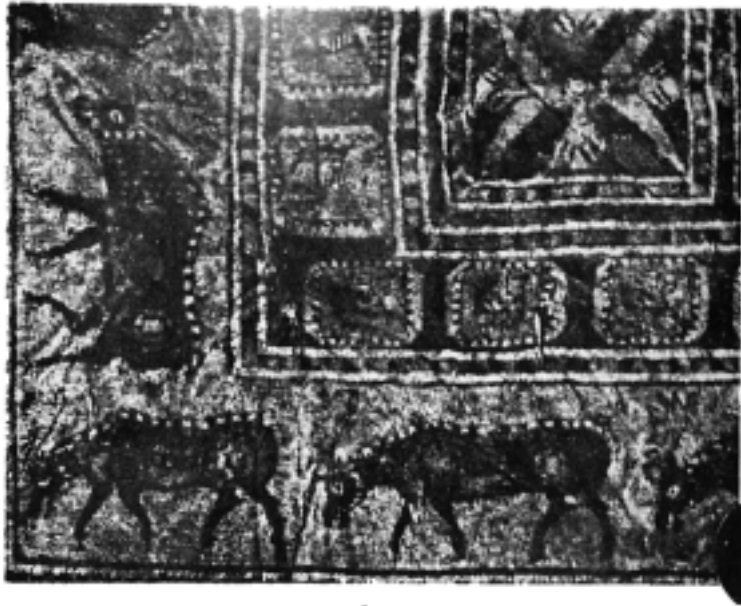


PLATE X
DETAILS FROM WOOLEN RUG. (TOP) CENTRAL MOTIF. (BOTTOM) BORDER.

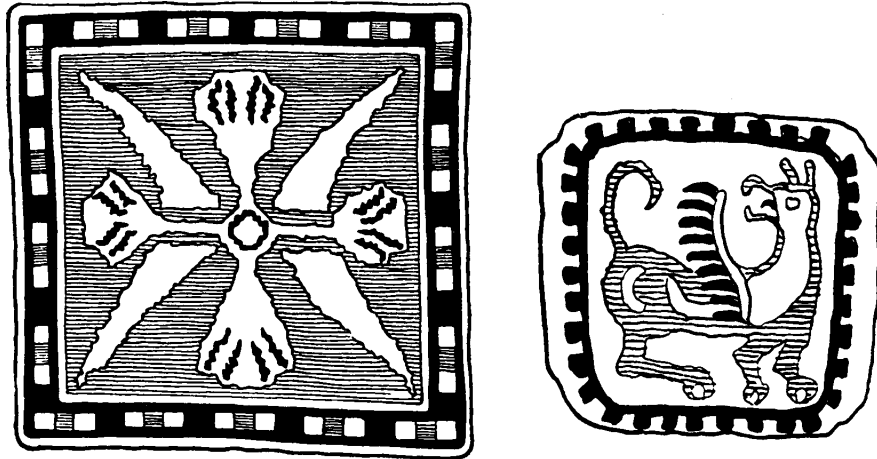


PLATE XI

DETAILS FROM WOOLEN RUG. FLORAL MOTIF AND WINGED GRIFFON.

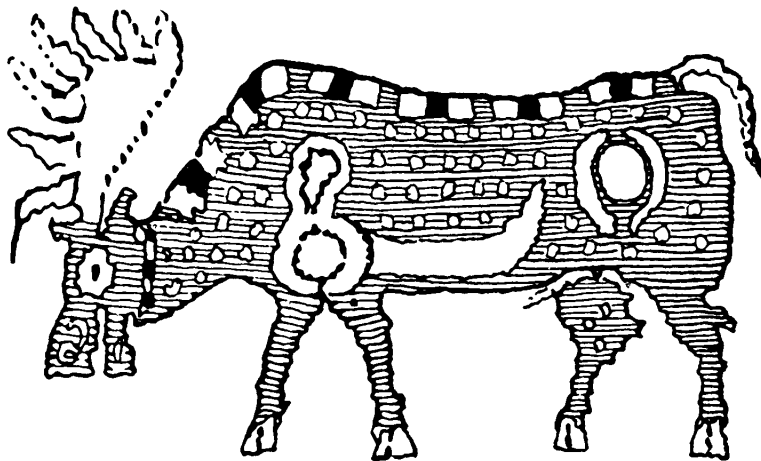


PLATE XII

STAG FROM PROCESSION ON BORDER OF WOOLEN RUG.

in an endless procession around the entire carpet. The dot-and-dash pattern is repeated along the spine of the elk.

The elk procession is bordered by a stylized floral band. The elements in this band, as was the case with the elk, are not set apart by separate borders. The floral pattern reverses that of the central squares. Four spoke-like leaf shapes radiate from a common center, and are separated by a narrow crenellated form from which tendrils are upthrust.

The next border is much wider, and it is here that the slack is taken up so that a rectangular design will fit a nearly square shape. The border has wider margins at the sides than at the top and bottom. This design consists of a procession of horsemen facing from left to right in the opposite direction to that of the elk (Plate XIII). The latter in turn reverse the direction taken by the griffons. In some instances, the rider's leg is shown astride the horse, in others this is not the case. The horsemen all have curious headgear which somewhat resembles a *salade*.

The rider procession is framed by a band of griffons in squares which repeat the inner border both as to size and direction. There is the fringe at the top and bottom, while the sides are trimmed by the dot-and-dash motif repeated once more.

The riders and their horses are quite interesting when compared with the horseman on the felt. First of all, the horses on the pile weave carpet seem to be of an entirely different stock. They are chunkier and more sturdily built than the clean-limbed racer on the felt hanging. Every detail of the bridle and its snaffle bit may be seen very clearly. We have had occasion in other works to note the careful attention which was paid to the depiction of weapons and working tools or equipment in the arts of antiquity. The horse has a plumed topknot and a sickle-shaped decoration at the crest of the mane. The tail is knotted and plumed. The horse is provided with a rich caparison with what seems to be a feathered fringe. No breech strap is shown, however, the manner in which the narrow bands of tapestry were used as a pectoral may be seen.

Rudenko suggests that the carpet was woven in Achaemenid Iran, and that it should be dated in the fifth to fourth centuries of the pre-Christian era. There is a strong possibility that he is accurate. There are, however one or two features which suggest that if the carpet was, indeed, woven in Persia, it had many nomadic elements in the design. The pear and apple motif on the shoulder of the elk and the bow and dot on the hind quarters are typical of the Sarmatian period in the animal style. Alfred Salmony has suggested that these decorations were a special development

of the art of inlay, while Anne Roes would have them be an evolution from stone relief. Many have seen the pear and apple as well as the bow and dot as a derivation of the stylization of musculature. A hint of both can be seen in Assyrian and Hittite art, as well as Achaemenid Persian. The special standardization of the stylization of these elements in their final form, however, is closely linked with nomadic art. The same is true of the "C" shaped design on the flank of the griffons. This is possibly a reduced bow and dot arrangement.

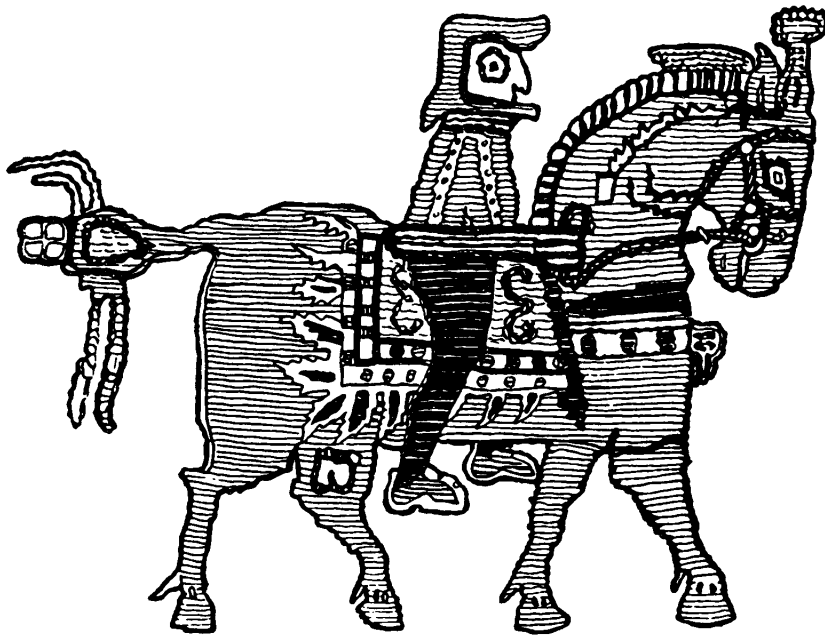


PLATE XIII

HORSEMAN. DETAIL FROM WOOLEN RUG.

Summary

Who were the bearers of the Pazyrik culture and when were they buried in the princely kurgans in the valley of the frozen tombs? The suggestion is made that the great kurgans at Pazyrik were the tombs of the tribal unit known to the Greeks as Massagetae and to the Chinese as *Ta Yüeh-chih*. The Massagetae/*Ta Yüeh-chih* were not a single tribe, but rather a complex of tribes. It is entirely possible that they represented a unit the underlying name of whom has come down to us as Getae. Tolstov would go even farther and see the Hatti (Hittites) as the same or a closely related people. The Guti of Iran in the second millennium should not be overlooked. There are many indications that the people buried at Pazyrik did not live there. The fine horses, which had been grain fed, and the excellent quality of the sheep's wool suggesting sheltered animals are two indications that the Siberian mountains were not the habitat of the Pazyrik knights. In all probability the region around Pazyrik in the high Altai was a sacred ground to which the dead were transported. The region may have been the ancestral home of the tribes.

The skull types found in the Pazyrik complex show a mixture of Europoid and Mongoloid. Even some of the skulls showed a racial mixture. There were short skulled Europoids as well as long skulled Mongoloids. There are none of the objects which we customarily associate with the Huns. The Pazyrik complex must therefore, have existed before the completion of Hun expansion. The Chinese sources tell us that the *Ta Yüeh-chih* were driven from their homeland by the *Hsiung-nu*/Huns in the middle of the second century B.C. This would give us a *terminus ante/quem* for the kurgans.

The silk embroidery from kurgan five is probably the only object from this kurgan which can be placed very closely in time. The work is so strikingly akin to Ch'u art from Ch'ang-sha that another provenance seems unlikely. The Ch'u fell in the first quarter of the third century B.C., and the best of their artistic production seems to have been done in the preceding century. Thus, a date toward the end of the fourth pre-Christian century is very probable for the fifth Pazyrik kurgan; and Rudenko's estimate of fifth to fourth centuries for the whole group is quite likely to be correct.

NOTES

- * This paper evolved from a lecture given before a meeting of The Needle and Bobbin Club on 16 November 1955 at the home of Mrs. Thomas J. Watson, in New York City. The author wishes to take this opportunity to thank the editors of The Bulletin of the Needle and Bobbin Club for the monumental patience they have shown over the many delays in getting this manuscript ready for the printer. I should also wish to thank Miss Jean Mailey of the Cooper Union Museum, New York, for help in typing the manuscript, and for many hints on textile techniques which enabled me to translate the Russian equivalents.
1. Griaznov, M. P., Raskopki kniajeskoi mogily na Altae (Excavations of Tombs in the Altai), *Chelevek*, No. 2 - 4, 1928. See also Griaznov, M. P., and Eugene A. Golomshtok, "The Pazyrik Burial of Altai," *American Journal of Archaeology*, XXXVII, No. 1, 1933.
 2. Griaznov, 1928, *op. cit.*
 3. Scientists sent specially by the Soviet Institute for Frozen Ground Research worked with the expedition which examined kurgan II in 1948 and 1949.
 4. Griaznov, 1928, *op. cit.*, no one could have constructed the log chambers in the great kurgans who was not familiar with the construction of log houses.
 5. Griaznov and Golomshtok, AJA, 1933, *op. cit.*
 6. Rudenko, S. I., *Kul'tura Naseleniya Gornogo Altaya v Skifskoe Vremya* (The Culture of the Populations of the Altai Mountains in the Scythian Period), Akademii Nauk, S. S. S. R., Moscow-Leningrad, 1953.
 7. Teploukhov, S. A., "Opit klassifikatsii drevnikh metallicheskih kuk'tur Minusinskogo kraja," *Materiali po etnografii*, t. IV, vip. 2, str. 41-62, Leningrad, 1929.
 8. Kiselev, S. V., *Drevnyaya istoriya IUjnoi Sibiri* (Ancient History of Southern Siberia), *Materiali i Issledovaniya po Arkheologii*, S. S. S. R., No. 9, Moscow-Leningrad, 1949; see also the summary (in French) by R. Ghirshman, *Artibus Asiae*, XIV, 1-2, pp. 169-189, Ascona, 1951. The expanded and revised edition of this work is: S. V. Kiselev, *Drevnyaya Istoriya IUjnoi Sibiri*, Akademii Nauk (A.N.), Moscow-Leningrad, 1951.
 9. Tolstov, S. P., *Drevnii Khorezm* (Ancient Choresm), Moscow, 1948. See the résumé in French by R. Ghirshman in *Artibus Asiae*, XVI, 3, pp. 209-237, and XVI, 4, pp. 292-319, Ascona, 1953.
 10. Kiselev, 1951, *op. cit.*, lists the last stages of his Tagar period from the IV century B. C. to the II century B. C., p. 288, he then closes the book on Minusinsk and turns to the Altai in part two, which he calls the "Hunno-Sarmatian Period," pp. 307 ff. He lists the Pazyrik princely kurgans in the Hunno-Sarmatian era p. 361 ff; and states on p. 391, that the great kurgans of the Pazyrik complex belong to the third quarter of the III century B. C.
 11. Rudenko, S. I., and N. M., *Iskusstvo Skifov Altaya* (Art of the Scythian Altai), Moscow, 1949. The Persians called the northern mercenaries in their armies "saka" (Scythian). Rudenko, who calls the Altai people "Scythians," relies not only upon the idea of a "Scythian" stage, but upon this application of the term. He has coined the term "Scythic" or Scythian-like to explain the art of the Altai.
 12. Barnett, R. D., and W. Watson, "The World's Oldest Carpet," *Illustrated London News*, 1 January 1955, p. 26.

13. Herodotus IV, *passim*. Most classical authors dealing with Scythia gained their ideas from Herodotus. For the most recent works dealing with this problem see: Hancar, Franz, Die Skythen als Forschungsproblem, *Reinecke Festschrift*, pp. 67–83, Mainz, 1950; and Sulimirski, T., “Scythian Antiquities in Western Asia,” *Artibus Asiae*, XVII, 3–4, 282–318, Ascona, 1954.
14. Herodotus IV, 6.
15. *Loc. cit.*
16. Herodotus VII, 64.
17. The first Scythian kurgan, Litoi-Kurgan near Elisavetgrad, was discovered in 1763. Peter the Great placed all care of antiquities of this nature in the hands of his *manufaktur and berg collegium*. See Alfred Salmony, “The Gold Treasure of Peter the Great,” *Gazette des Beaux Arts*, 1949.
18. Allen, T. W., *Homer, the Origin and Transmission*, Oxford, 1924, p. 83; dates Hesiod to the period *c.* 800 B. C.
19. Iliad XIII, 4–8; and Odyssey XI, 14–19.
20. Herodotus IV, 13. See also: E. D. Phillips, “The Legend of Aristeas,” *Artibus Asiae*, XVIII, 2, pp. 161–177, Ascona, 1955.
21. Herodotus IV, 11–12.
22. Olmstead, A. T., *History of Assyria*, New York and London, 1923, p. 266.
23. *Op. cit.*, p. 360.
24. *Op. cit.*, p. 361.
25. *Sulimirski, op. cit.*, p. 284.
26. Tolstov, *op. cit.*, pp. 231–247.
27. Wittfogel, Karl A., and FENG Chia-sheng, *History of Chinese Society, Liao*, New York, 1949, p. 199 f, and references cited there for a history of the position of women in tribal society among the northern nomads. See Herodotus IV, 116 on the Sauromatae, and women as cavalrymen.
28. Jettmar, Karl, “The Altai Before the Turks,” *Bulletin of the Museum of Far Eastern Antiquities*, No. 23, pp. 135–223, Stockholm, 1951; particularly pp. 204–209.
29. Herodotus I, 201; translation Rawlinson.
30. *Op. cit.*, 205.
31. *Op. cit.*, 215.
32. *Op. cit.*, 215, Rawlinson translates the *sagaris* as a battle axe. Most dictionaries use “a single edged axe or bill.” None of these terms seems to be an exact translation. There is, however, a weapon which was widely used by the nomads which may be the answer to the *sagaris*. This weapon is the curious pick axe or dagger-axe, with the butt surmounted by a “grazing animal,” *cf.* A. Salmony, “The Origin and Age of the Grazing Animal,” *Silver Jubilee Volume of the Zinbun-Kagaku-Kenkyusyo*, pp. 336–338, Kyoto, 1954.
33. *Loc. cit.*
34. See W. W. Tarn, *The Greeks in Bactria and India*, Cambridge, 1938, for a discussion of the gold route.
35. Knipovich, T. N., *Tanais, A. N.*, Moscow-Leningrad, 1949.
36. Tolstov, *op. cit.*, pp. 241–247 has proposed this theory. He believes that we see in Massagetae, an original *Mas*: “great,” plus the tribal Getae. He has not seen that

- the Greek *massa* is a comparative form. Tolstov was following hints first made by J. Klaproth, *Tableaux Historiques de l'Asie*, Paris, 1826, pp. 287–288; and O. Franke, *Beiträge aus Chinesischen Quellen zur Kenntnis der Tuerkvoelker u. Skythen*, Suppl. *Abhandl. d. Koenigl. (Preuss.) Akad. d. Wissensch., Berlin*, 1904, p. 25. Cf. also: Abel Remusat, *Nouveaux Melanges Asiatiques*, II, p. 220.
37. *Shih Chi*, *Ssu-ma Ch'ien*, 123. *Ch'ien Han-hsu*, *Pan Ku*, 96 B, *Hou Han-shu*, *Fan Yeh*, 118. For an examination of the problem of the *Ta Yüeh-chih*, see Gustav Haloun, "Zur Ue-tsi Frage," *ZDMG*, XCI, 1937, 243–318, and Otto Maenchen-Helfen, *JAOS* 65/2, 1945, pp. 77 ff.
 38. Karlgren, B., *Dictionary of Sino-Japanese*, Paris, 1923, #1347, and #879.
 39. The Chinese histories do not give an exact date for the battle between the *Hsiung-nu* and the *Ta Yüeh-chih*, *Han-shu* 96 B, simply states that it took place during the reign of the *Hsiung-nu* chieftain *Mao-tun*, whose dates were 174–161 B.C.
 40. Herodotus I, 216. *Shih-chi*, 123.
 41. Chang Ch'ien, the minister of Han Wu-ti, set out for Bactria in 138 B.C., after a ten year detention by the *Hsiung-nu*, he completed his journey. Tolstov, *loc. cit.*, believes that the story of Chang Ch'ien finding the *Ta Yüeh-chih* in Bactria to be political canard. He states that the *Ta Yüeh-chih* known to the Chinese were only one tribe in the Massagetaean confederation.
 42. Herodotus I, 205, and IV, 116.
 43. An English language summary of the material from the first four Pazyrik kurgans appears in: Jettmar, *op. cit.*, *BMFEA*, 23, 1951, pp. 135–223. Much of the material may be seen in: Franz Hancar, "The Eurasian Animal Style and the Altai Complex," *Artibus Asiae*, XV, 1–2, Ascona, 1952, pp. 171–194, *Festschrift von der Heydt*.
 44. See, however, the article on weaving in Scythian territory in the V to IV centuries B.C.: V. F. Gaidukevich, "K voprosu o tkatskom remesle v Bosporskikh poseleniyakh," *Materiali i Issledovaniya po Arkheologii S. S. S. R.*, No. 25, pp. 395–414, A.N., Moscow-Leningrad, 1952.
 45. Rudenko, 1953, *op. cit.*, 272–325.
 46. *Op. cit.*, pp. 372–373.
 47. There is here an indication that the clean earth was not to be touched by the unclean corpse. Cf. Rudenko, 1953, *op. cit.*, 373.
 48. *Op. cit.*, p. 330.
 49. *Op. cit.*, Table, p. 64 and pp. 329–330.
 50. The same case was noted in the woman buried with the famous "Tattooed Man," from kurgan II.
 51. A microscopic examination of the fibres proved that in no case were they thicker than 50 mikron, and that the sheep's wool had a strength of 10 to 14; thus, it was extremely delicate.
 52. Rudenko, 1953, *op. cit.*, Plate XCVI.
 53. Herodotus IV, 75.
 54. The largest number of horses found in an Altai kurgan was sixteen. The number of animals may have been an indication of the rank of the person in the tomb.
 55. Rudenko, 1953, *op. cit.*, Plate LXV, fig. 1.

56. Rudenko, S. I., Vtoroi pazyrikskii kurgan, Izd. Gos. Ermitaja, Leningrad, 1948, pp. 32-35.
57. Rudenko, 1953, *op. cit.*, pp. 349-350, fig. 190.
58. *Op. cit.*, p. 248.
59. Ch'u Wen-wu Chan-lan T'u-lu; A Catalogue of Historical Objects from Ch'u, Exhibition held in Peking, June-November 1953, published, Peking 1954, no author.
60. Shang Ch'eng-tso, Ch'ang-sha Ch'u-t'u Ch'u Ch'i-Ch'i T'u-lu; An Illustrated Catalogue of Ch'u Lacquer Ware Excavated at Ch'ang-sha, Shanghai, 1955.
61. Cheng Chen-to (editor), Wei-ta t'i-i shu-ch'uan t'ung-t'u lu-hsü; An Illustrated Introduction to the Great Heritages of Chinese Art, Plate XII, vol. I; Peking 1954.
62. Haskins, J. F., "Northern Origins of 'Sasanian' Metalwork," *Artibus Asiae*, XV/3, Ascona, 1952, 241-267.
63. Herodotus, IV, 22-23, Translation Rawlinson.
Photographs after Rudenko, *op. cit.*