

THE IMAGE OF THE WHEELED VEHICLE IN THE MONGOLIAN ALTAI: INSTABILITY AND AMBIGUITY

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The representation of a wheeled vehicle – whether wagon, cart, or chariot – is one of the most widely found, ancient image types across Eurasia. It also refers to one of the most discussed and ambiguous visual signs in both Eurasian prehistory (Gening 1977; Piggott 1983; Pare 1992; Raulwing 2000; Anthony 2007) and the history of Eurasian rock art. Whether we look to Scandinavia, Armenia (Piggott 1983; Littauer 1977), Kazakhstan (Novozhenov 2012), or the Russian Altai and Sayan mountains, we find hundreds of images referred to by a multitude of scholars to the archaeological contexts of those regions or to those of the Near East and even Egypt. Against this background, information regarding images of wheeled vehicles in the Mongolian Altai has, until recently, been scanty, even almost non-existent,¹ despite the fact that there are probably more such images in that region than have been documented for adjoining areas in the Altai and Sayan ranges. Moreover, the specific character of this material, examined in situ, challenges traditional interpretative strategies based on artificial notions of continuity of meaning across vast space and time. As an image it is unstable; as a sign it is ambiguous.

This paper proposes to examine petroglyphic images of wheeled vehicles from the Altai Mountains in the northwestern part of Mongolia with several questions in mind: How is the vehicle image indicated? With what material variations and styles? How is the charioteer handled? How do pictorial and physical contexts constrain possible meaning? And given those considerations, what signification is reasonable to assign to these images within the Altai? Wherever our inquiry leads us, we confront the certainty that any visual sign transmitted over thousands of kilometers, hundreds of years, and by an uncertain number of cultures necessarily shifts in signification, accruing new layers of meaning; this basic cultural principle must be applied to a consideration of the wheeled vehicle no less than to any other material sign. In other words, our inquiry here must address the inherent instability and ambiguity of meaning in any cultural artifact and, most particularly, in those that have undergone extensive cultural transmission.

Victor Novozhenov's recent publication (2012) of the Eurasian chariot covers a huge span of time, space, and material; it will henceforth be one of the indispensable resources for this subject.² Because the subject addressed here – like Novozhenov's study – is so embedded in complex archaeological and theoretical contexts distant from the Mongolian Altai, some preliminary comments are in order. Although details vary from scholar to scholar, this much seems certain: the four-wheeled wagon, seen in profile elevation, had appeared in the Ancient Near East by the fourth-third millennium (Francfort 2002). Terracotta and bronze figurines of two-wheeled carts indicate the existence of this mode of transport in the Harappan Culture (Novozhenov 2012, pp. 128-30). The two-wheeled vehicle appeared in the Near East by the early second millennium BCE, spread from there to the Hittites and Hurrites (seventeenth century BCE) and further down to Egypt (sixteenth century BCE) (Pare 1992) where it was perfected as a light (i.e. spoke-wheeled) vehicle for ritual and warfare. Wheeled vehicles appeared at the same time in Mycenaean and perhaps earlier in burials of the Sintashta Culture of the northern Eurasian steppe (Gening 1977; Piggott 1983; Anthony 2007) from where they spread to Europe and Scandinavia by the middle Bronze Age.

As long as we are considering the actual vehicle, the historical background is relatively clear. When, however, we turn to the images of wheeled vehicles – four-wheeled wagons and two-wheeled carts as well as a large number of images of vehicles without horses or drivers – we begin to confront difficulties. Images of a great variety of wheeled vehicles have been recorded at Syunik, in western Armenia and dated to the second millennium BCE (Littauer 2002); but these images were curiously found at an elevation (approximately 3,300 m) where it is unlikely the real vehicle could ever have been used (Littauer 1977; Piggott 1983). Images of wheeled vehicles from Sweden and Italy (Val Comonica) date to the end of the second millennium and the beginning of the first millennium BCE (Piggott 1983); but again, it is the image that remains from those regions rather than any actual vehicles.

Within these extensive references to vehicles, both real and represented, those most central to the origins of chariot imagery are the actual vehicles, light in construction, characterized by two wheels with spokes, drawn by horses and found in burials of the Sintashta Culture (late third – early second millennia BCE) (Gening 1977). These are associated with male warriors and the emergence of warfare requiring movement in a steppe environment (Anthony and Vinogradov 1995; Anthony 2007); or, conversely, only with ritual needs (Littauer and Crouwel 1996; Jones-Bley 2000) including rituals relating to death and passage to the land of the dead (Kozhin 1968; Gening 1977). These vehicles have also been related directly to the spread of a Bronze Age cattle-herding culture, which moved east out of present-day Kazakhstan as far northeast as the Minusinsk Basin by the early second millennium BCE. Whether that particular culture was the Afanasiev Culture which reached the Minusinsk Basin via a route that went north of the Altai Mountains, or the later Andronovo Culture (Kuz'mina 1974, 1992; Anthony 2007), or its successor – the Begazy-Dandybai Culture (Molodin 2011) – remains a point of debate. However the vehicle image arrived in the Minusinsk Basin, it appeared first as a four-wheeled wagon preceded by two bovids on a large figurative stone from Znamenka, in present-day Khakassia. Most scholars date this image to the Okunev Period (early second millennium BCE) and associate it with other four-wheeled cart images found on Okunev stelae (Kyzlasov 1986; Savinov 1997b; Ozheredov 2006). These carts are distinctively heavy and shown in profile elevation rather than in the view typical of Central and North Asian vehicle images, “from above” or “split” (Francfort 2002). Regardless of who brought the vehicle image or artifact to the region, up to the present there have been no wheeled vehicles or any parts thereof found in burials of the Siberian manifestations of the Afanasiev, Okunev, or Andronov cultures.³

By contrast to the situation in the Early Bronze Age, there are hundreds of chariot images dating to the latter second millennium BCE from sites within present-day Kazakhstan, Russian Tuva, the Altai Republic,⁴ Mongolia and North China. With the exception of a few images from Kyrgyzstan and Kazakhstan (Novozhenov 2012, Figs. 45, 46), these Bronze and Early Iron Age images are seen from above rather than in profile elevation. Paradoxically there have been no certain finds of actual vehicles within Bronze Age burials. Only in the frozen burial 5 from Pazyryk, dating to the Early Iron Age (fourth century BCE), have there been found the elaborate carriage and spoke wheels of a fine vehicle, but that object is likely to have been Chinese in make (Rudenko 1970). On the other hand,

the most impressive array of wheeled vehicles from East Asia includes actual vehicles found in burials of the Shang, Zhou, and Ch'in dynasties (late second-early first millennia BCE) (Lu 1993; Novozhenov 2012). These were light bodied, spoke-wheeled, and drawn by horses and were thus status symbols intended for ritual use and warfare (Lu 1993). Whence the Chinese obtained knowledge of this technology and the desire to exploit it remains disputed, but this much is certain: a technology we know only visually from across Bronze Age Siberia and Mongolia was real and widespread in early dynastic China. However, if style sequences within the visual record can be tentatively relied on, then the earliest Chinese wheeled vehicles may have been later than the earliest representations of wheeled vehicles found to the north.

The images of wheeled vehicles in North Asia are puzzling. Whether four- or two-wheeled, the vehicle and its image in Eastern and Central Asia were certainly freighted with references to status (wealth, social status) and beliefs associated with death. In its manifestations in northern India and Iran, the chariot – together with the horse – may have carried references to Vedic and Avestan myths (Kuz'mina 1974, 1977). It was also the mark of human movement across the steppe. The images of carts on Okunev stones – certainly the work of an incoming, cattle herding population – may reflect all those references. By the time those images were carved, however, the actual vehicle was invisible within the archaeological record and would not reappear for at least 1000 years. Moreover, the image of the profile cart also disappeared; we see no more of it in North Asia until the Iron Age. On the other hand, by the latter second millennium BCE, the image of a two-wheeled vehicle, both solid- and spoke-wheeled and viewed from above, had spread across the Sayan, Altai, and Khangai regions; but what meaning they carried is uncertain.

The use of vehicle images from all the regions mentioned above has been problematic: almost invariably, researchers have recorded the images in terms of simple drawings devoid of any indication of pictorial context; nor do they note such related elements as stone patina, orientation or the elevation of the surfaces involved. Moreover, drawings are a notoriously imprecise way of reproducing images that are frequently over-pecked, overlaid, or of questionable clarity: drawings reduce all layers to a single layer or the recorder may misinterpret the chronology of layers or even the details of any part of a layer.⁵ These limitations need to be considered when one addresses the variety of ways in which scholars have interpreted the vehicle motif. Prevailing interpretative approaches relate the images to solar cults, with the wheeled vehicle referring to the Vedic and Avestan/

Indo-European chariot of the sun and the movement of the sun through the heavens (e.g. Sher 1980; Kilunovskaia 2011; Novozhenov 2012); and to the invocation of ceremonies intended to secure to the deceased his or her journey to the land of the dead, an interpretation drawn from the chariot burials of Sintashta and ancient China but not necessarily sustained by the rock pecked images. The wheeled vehicle has been cited, by extension, to refer to cults of the male warrior (Anthony and Vinogradov 1995; Anthony 2007) – the charioteer par excellence, equipped with spear, bow, and a curious bronze object, frequently described as yoke-shaped and associated by several scholars with the driving of a chariot (Novgorodova 1984; Varenov 1984; Novozhenov 2012). Other scholars have argued that the steppe chariots found in Sintashta burials were not functional war chariots; they were rather related to the burial ritual (Littauer and Crowel 1996; Jones-Bley 2000). Frchetti (2008) has suggested that vehicle imagery from the Tianshan Mountains in Kazakhstan may have functioned to indicate sources of political power beyond the region where the images appear; the image was thus a sign of significant political relationships.

Other approaches, rooted in analyses of economic, social, and cultural change, interpret the sign of the wheeled vehicle as an indicator of the emergence of cattle herding with the advent of a cooler, more arid climate in the Eurasian steppes after c. 2500 BCE (Anthony 2007). A number of scholars have seized on this approach to associate the actual vehicle with the movement of cattle herders across the Eurasian steppe into South Siberia where they merged with autochthonous Siberian peoples and cultures (cf. Kuzmina 1974, 1977). From that integration, some have postulated, a chariot-based culture emerged out of South Siberia and moved down into Mongolia and North China in the Late Bronze Age (cf. Novgorodova 1989, Novozhenov 2012). Among the Russian scholars who have been especially interested in the significance of the chariot, Novgorodova has argued most consistently that while wheeled vehicles were used for hunting and ritual processions, especially at the time of burial, they were above all intended for military purposes (Novgorodova 1989). The image functioned as the sign of a stratified society, at the pinnacle of which was the warrior-charioteer. A single image, from Chuluutyn Gol, of a charioteer driving a solid wheeled vehicle and seemingly confronted by a giant serpent (Fig. 29) encouraged her to overlay the Bronze Age wheeled vehicle with Indo-Iranian mythic traditions; in this case, the charioteer can be understood, she has argued, as an image of Indra in the Rigveda, particularly in his serpent-killing role (ibid., pp. 153-4). Her tendency to slip from image to imported myth and

thence to expansive theories of cultural development has been seconded by many scholars, most recently by Victor Novozhenov (2012). For Novozhenov, however, the chariot image is overwhelmingly the sign of a pan-Eurasian information highway manifested through the pictorial indication of communication routes across the mountainous regions of Central and North Asia. Whatever the significance of the vehicle in antiquity, the culture most closely associated by Russian scholars with the expansion of the chariot out of Siberia and down into Mongolia and North China is the Late Bronze Age Karasuk Culture (Novgorodova, Novozhenov); but, as was noted above, no chariots or carts or parts thereof have been found in any Karasuk burial to date.

In effect, too many of these approaches have blurred the line between archaeological fact and pecked or engraved image. They seize on meaning, oblivious of the certain mutability of transmitted signs and without reference to critical pictorial and physical contexts. But are any of these interpretations actually supported by the hundreds of vehicle images already identified in North Asia? If they are so supported, which are the most likely to have real significance for that region? And if they are not supported, what is their validity in a discussion of North Asian traditions? At this time, our awareness of vehicle imagery from the Sayan and Khangai mountain ranges is, at best, fragmentary but we do have a significant subset of vehicle imagery from the northern Mongolian Altai. This body of material is drawn from two large rock art complexes: that known as the Upper Tsagaan Gol (Shiveet Khaikhan) (Jacobson-Tepfer et al. 2006) and that referred to as Tsagaan Salaa-Baga Oigor (hereafter: TS-BO) (Jacobson et al. 2001). Both complexes are among the largest yet identified in North Asia; in both cases, site documentation is virtually complete. The result is an impressive number of relevant images: within the Upper Tsagaan Gol complex we have documented more than 78 images where vehicles are represented in whole or in part; within the Tsagaan Salaa-Baga Oigor complex, we have documented more than 54 images (in whole or in part).⁶ The total subset to be used here is approximately 132 images, including a wide range of specific formulations, which can be described as follows:⁷

Group A: Complete vehicle image (vehicle, driver, horses)

- Vehicles with two wheels expressed as solid or empty circles, two horses, and a driver – 24
- Vehicles with two spoke wheels, two horses, and a driver – 65

Group B: Subset of A

- Vehicle imagery where the driver is clearly using reins – 23

- Vehicle imagery where the driver appears not to be using reins – 34
- Vehicle imagery with a third, outlier horse – 6
- Vehicles with stacked or inverted (rather than opposing) horses – 6
- Vehicle, complete, with driver/hunter (archer) – 20
- Vehicle, complete, with adjacent archer – 5
- Vehicle, complete, with two drivers – 3

Group C: Incomplete (but not necessarily unfinished) imagery

- Vehicle image where there is a driver but no horses – 2
- Vehicle image in which there are horses but no driver – 1
- Paired horses, only – 8
- Schematic, partial vehicles (wheels alone, wheels plus axle, etc.) – 31

Group D: Eccentric imagery

- Vehicles with four horses – 1
- Vehicles with four wheels, with horses or bovinds – 3
- Vehicles viewed in elevation – 1

When these images are examined – individually, within their pictorial contexts, and in groups – there emerge a number of paradoxes. There is no necessary relationship between the completeness of the representation (vehicle, driver, and horses) and the quality of its execution (compare Fig. 1i and Fig. 2a, f with Fig. 1b, c, d). Occasionally the harnessing of the horses is so detailed that the image seems to offer a visual diagram on how to hitch the animals to a vehicle (Fig. 2f, Fig. 12), in other cases the harnessing is only schematic although the image itself is finely executed (Fig. 13). In some well-executed images including vehicle, driver, and horses, there is no attempt to render reins at all: the drivers stand stiffly and without any physical connection to their steeds (Fig. 1h). A number of images show us the full vehicle – wheels, axle, basket and pole – but in other cases the basket is barely indicated or is altogether missing (Fig. 1d, e); or the driver appears to be standing precariously on the axle (Fig. 2a). Sometimes the horses are represented as if at full gallop, their bodies and heads stretched out (Fig. 5a); but such “fast horses” may be hitched, paradoxically, to heavy carts (solid wheels) (Fig. 2b) as well as to chariots (spoke wheels). There are cases of well-represented chariots where the horses appear to be moving at a walk or standing still. A significant number of images are simply incomplete: lacking driver or horses or major parts of the vehicle structure itself (Fig. 3). Adjacent to the large and complex vehicle represented in Fig. 2f is a rudimentary vehicle with small, solid wheels. And so it goes: when we look at the full panoply of vehicle imagery from these two complexes,

there is no consistent relationship between the image typology, the accuracy of the representation and the quality of its execution. Moreover, there seems to have been little interest in imparting to the vehicle image the same kind of detail one so often finds, for example, with representations of loaded yaks. For some reason, the wheeled vehicle could be reduced to a simplified sign and still carry meaning.⁸

It may not be possible to say what the Mongolian vehicles represent, but on the basis of the images themselves and their pictorial contexts it is not difficult to say what meanings could not have been intended. Within the whole corpus of our material, there are absolutely no combat scenes and no scenes of vehicles associated with humans in combat. There are no drivers carrying spears.⁹ There are no scenes in which huge serpents appear to menace the driver and vehicle. With the exception of a single vehicle drawn by bovinds (Fig. 4b) and most certainly no earlier than the Iron Age, there is no indication that vehicles were intended to carry loads. And although a single, standing figure in TS IV carrying a dagger of Karasuk form is surmounted by the image of a “model yoke,”¹⁰ this object appears nowhere in connection with a vehicle or its driver. So if there are no drivers carrying model yokes or spears, no combat scenes, no serpents, and no loads, we clearly have to do with an image type that – at least within the Mongolian Altai – cannot be interpreted as indicative of a warrior cult, warfare, Avestan myth, or the aggressive movement of populations.¹¹

The great majority of the Mongolian images are solitary, without an intended pictorial context. There are, however, a few significant exceptions. In one scene (Fig. 10), located on a boulder set high above the valley floor, a hunter on foot is juxtaposed with two horseless vehicles, possibly suggesting an association between the act of hunting and the vehicles; but in that case, the absence of horses is curious. On several surfaces, vehicles are embedded in actual scenes of hunting where the hunters are on foot. One of the finest such scenes is found on a darkly polished and scraped boulder in TS IV (Fig. 16). In this composition, referred to here as the “Great Hunt,” eleven hunters on foot aim their drawn bows at wild goats or elk. The figures all carry *daluur*¹² at their waists and wear a distinctive large hat, frequently described as mushroom-shaped and suggestive of one made from fur. At the top of the scene is a charioteer driving his horses after a large elk. In the published drawing of this scene, the driver seems quite different from the archers; but a close photograph of the section indicates that he, also, wears a large hat, but he does not carry a bow. The pecking of all the elements is identical, indicating that one hand was responsible for the

whole composition. The relationship of the driver to the fleeing elk suggests that he, also, is a hunter but without a bow; or perhaps he is driving the wild animals closer to the hunters on foot. Or perhaps there is another explanation.

In fact, representations of hunting with chariots are both intriguing and problematic. Just as the territory where these images are found is far too rocky and uneven to permit the use of light, wooden vehicles, so the notion of driving a chariot after fleet animals, particularly as they dash up a steep and boulder strewn slope, is ludicrous. Nonetheless, such scenes occur. On a broad outcrop (the "Large Panel") overlooking the Tsagaan Gol, there are more than 740 individual images, representing several cultural layers from the Bronze Age through the Turkic Period. Within the earlier cultural layers there are at least eleven images of vehicles, several juxtaposed with wild, sometimes dashing animals. At least three of these vehicles are sufficiently clearly preserved to indicate that their drivers are hunting wild animals (Fig. 9). In a fourth, finely executed image (Fig. 11), the driver of the vehicle carries on his shoulder a gorytus with bow – weaponry datable to the Late Bronze or Early Iron Age. In this complex, there is only one other image that could be dated to that period.¹³ The Great Hunt and the images on the Large Panel support what we see elsewhere, within both complexes: chariots are frequently associated with dashing wild animals, whether or not the driver carries a weapon and whether or not there are adjacent hunting scenes.¹⁴

The number of vehicles on the Large Panel is exceptional: vehicles more typically appear on a single surface alone or in fewer numbers. This is certainly the case in TS-BO, where, for example, a fine image occurs alone on a beautifully scraped boulder in TS V (Fig. 1h), or, in TS I, where a dimly visible chariot drawn by four fleet horses is the sole image on a broad, horizontal outcrop.¹⁵ In the Upper Tsagaan Gol, a well-executed vehicle from the Khar Salaa section (Fig. 1i, Fig. 12) is the only such image on a broad outcrop on which there are many (unrelated?) images from the Bronze Age, Late Bronze Age, and Turkic Period. However, on another large surface from the upper Shiveet Khaikhan section and one of the highest concentrations of imagery in the Upper Tsagaan Gol complex, there are at least six vehicle images, all different¹⁶: one image includes only the wheels and axle and one vehicle carries two figures, of different size (Fig. 14); a third image is partially pecked and partially gouged, and the "driver" stands on a circle-basket, his shoulders raised like the wings of a bat (Fig. 15); a fourth image is completely engraved. Two finely pecked images are joined to an equally finely pecked elk, but neither driver carries any weapons (Fig. 8). It

is noteworthy that paired drivers do not commonly occur; in the Upper Tsagaan Gol, we have documented two cases (e.g., Fig. 14), in both of which the figures are of markedly different size. Within the TS-BO complex we have documented just one, in BO IV (Fig. 5b), where the figures are only marginally different in size.¹⁷

The most unusual instance of multiple vehicles is found on a single boulder we dubbed "Vokzal" ("the bus or train station") – for obvious reasons. The boulder is located on a high slope under the abrupt south-facing rise of Shiveet Khaikhan in the Upper Tsagaan Gol complex (Fig. 17).¹⁸ On this surface there are ten images, ranging from a small pair of wheels to vehicles with circles for wheels to fully finished chariots with large, spoke wheels, and elaborate harnessing. The vehicles are directed from right to left and the reverse, the whole surface suggesting a scene from some busy, urban boulevard. Almost all the vehicles have recognizable drivers, and they all reflect a specifically full Bronze Age date. They are tall and thin, they wear mushroom-shaped hats, carry *daluur* at their waists, and several appear to have quivers across their lower backs. The drivers may be compared with several panels¹⁹ in which the activities of the figures, their appearance, and their spears and long bows confirm a Bronze Age date – a period earlier than the adoption of horse riding but contemporary with the appearance of caravan scenes with loaded yaks. Across this remarkable panel there are no indications of combat or load carrying; and since the vehicles are moving in at least two different directions, it is hardly a scene indicative of either chariots of the sun or the movement of populations. There are neither spears nor yoke-shaped objects, and no sign of actual hunting even though there are a number of wild animals scattered across the surface, most standing quietly. Clearly the Vokzal images carry some significance other than what we find in traditional interpretations of the vehicle image.

The Bronze Age date of the Vokzal panel helps us to date many of the other vehicle images from both Mongolian complexes. Not all drivers are equally elegant, but many have the same kind of headdresses and *daluur* and carry the typical Bronze Age quivers across their lower back. This is visible in the fine image from Fig. 12, where the style in which the horses are rendered is similar to that of several horses in Vokzal.

Domestic scenes involving people, domestic animals, domestic activities and, sometimes, wild animals recur frequently in rock art of the two complexes, but vehicles are rarely included. In one composition from TS IV covering a large boulder on which there are many wild animals,²⁰ is represented a strange object reminiscent of a cart with solid wheels. The "large"

style with which the animals are rendered indicates a date in the Late Bronze Age. A somewhat similar scene, but certainly earlier and far more elegant in its composition and rendition, is from BO III; it includes wild animals, birds, domesticated animals, and a man, a woman leading a yak and two small girls (Figs. 18, 19). In this case, a spoke-wheeled chariot drawn by two horses is found on the left side of Fig. 19. While the published drawing suggests that there may have been a driver standing in the basket, a photograph of the same section (Fig. 19 — photo detail) does not reveal that detail. Assuming that the photograph is more accurate, this seems to be a representation of a vehicle with harnessed horses as part of an idealized family setting, where the transition between the wild and domesticated worlds is seamless. I know of only one other, parallel instance from the Bronze Age: that represented by the large caravan scene from Kalbak-Tash in which a man accompanying a loaded yak seems to be pulling a small cart, as if it were part of the family belongings (Kubarev and Jacobson 1996, Fig. 449).²¹

There is a curious, recurring motif in our complexes in which two horses are shown back to back, posed as if they were hitched to a chariot but are not. A good example is offered by Fig. 26, on a high outcrop above the Tsagaan Gol. In this case, the horses are completely finished, but there is not even the beginning element of a chariot or cart. In TS IV, there is at least one example of a crude pair of horses, but without any indication of a vehicle (Jacobson et al. 2001, Vol. I, Fig. 443). The intentionality behind these pairs of horses — that is, the intention that they stand in for a vehicle — seems confirmed by a small composition from Yelangash (Fig. 27). In that case, a man leads two horses, seen in modified back-to-back position, toward a small spoke-wheeled vehicle. We might assume, quite simply, that the paired horse motif is either the beginning of an unfinished image of a vehicle or a schematic stand-in for the entire vehicle.

There are three compositions from BO III that suggest that the motif of paired horses is more complicated in meaning. The compositions are all found on the same outcrop; all were clearly done by the same skillful artist responsible for the idealized rendition of a family scene with wild and domesticated animals and a chariot (Figs. 18, 19). In all three compositions, the style of the images and the absence of weapon types associated with the Late Bronze or Early Iron Ages, allow us to speak confidently of the whole group as dating to a period earlier than the advent of riding. Taken together, the compositions on the outcrop²² suggest a complex narrative lying behind the image of a chariot and the principle, applied there, of *pars pro toto*.

The first scene (Figs. 20a, b) includes a curious combination of elements. On the far left and within a square enclosure sits a small figure with legs drawn up. He holds the leads of two horses posed back to back, as if hitched to a chariot. To the right of this enclosure is a partially surrounded area in which stands, closest to the enclosure, a woman identifiable as such by her frontal position, her long gown and her plaited hair. To her left stand horses alternating with strange, partially human figures. Below this group is yet another figure, horned, and with large *daluur*; he holds the lead of a single horse.

Slightly to the northwest of this composition and on the same broad outcrop is a second composition (Figs. 21, 23a and b, 24), related to the first by style, subject matter, and execution. In this case, a pair of back-to-back horses is being led to the right by a strange, partially human figure; behind the horses are three similar creatures. Like two of the figures in the first composition, the treatment of their heads, their long thin legs, and their curious tailed shapes suggest figures half human, half bird. The first birdman is facing an unclear frontal figure guarding the entrance to a large, squared enclosure. Within that enclosure, in turn, we see another pair of back-to-back horses, held (by a lead) by another figure, also with legs drawn up. The third composition (Figs. 21, 22) is located just below the second on the same large outcrop. In this case, two figures, seemingly of the birdman type, lead two horses to the right; they are followed by a third birdman. This procession is directed to a square enclosure within which stands a large female figure — frontal, dressed in a robe, and with long plaits on either side of her head.

While the horses in the third composition are not arranged back-to-back, they are of the same slender type we see in the other two compositions. In all three compositions, horses are being led towards an enclosure, in two of which crouch figures holding the leads of other horses. In the third composition, the enclosure is dominated by a woman and in the first composition a similar woman stands as if guarding the enclosure on the left. In the second composition, the figure guarding the entrance to the enclosure is difficult to identify, but fully frontal positions are almost always reserved for female figures. All these compositions, like that of the idealized family scene on the same outcrop, impress one not only by the beauty of their execution but also by the confidence with which the artist appears to have represented an established narrative. But what would this narrative be and how does it help us to understand the motif of the chariot in the Mongolian Altai?

The compositions are located on a very high terrace

in BO III, and on an elegantly scraped and darkened outcrop well out of range of any travelers going up or down the valley. The location is, indeed, a place that would have been difficult to access with a light wheeled vehicle. This is also true of many of the outcrops on which we find chariot images, whether in the TS-BO complex or in that of the Upper Tsagaan Gol. The images might have been seen by herders following their flocks up the mountain slopes or by hunters stalking prey, but they could not have served as way markers for travelers. It follows that their isolated, high locations would have rendered them ineffective as indicators of distant power relationships, as others have argued (Frachetti 2008). As much as any images we find in the corpus of Altai petroglyphs, these appear to be highly personal notations, not intended to address an extensive community.

Another but related issue is the character of the stone outcrops on which so many of the vehicle images appear. The drawings traditionally used to record petroglyphic imagery in the Altai-Sayan regions (and, of course, elsewhere) offer no indication whatsoever of the stone's larger context; and the texts indicate next to nothing about such issues as the orientation of the surface, its elevation, or its view shed. When we consider the materials from the two large sites in Bayan Ölgii, we find that those issues may be relevant to our discussion. Many of the images – and especially those of particular refinement – are found on horizontal surfaces that are of an unusual beauty in terms of the coloration of the patina, the quality of the scraped texture, and in terms of view shed. It becomes clear to any careful observer that the stone surface itself and its location were significant factors in the inscription of most of the images involving vehicles, and that within the valleys, those places were off the beaten track. The compositions high in BO III (Figs. 18–24) or those on the Large Panel of the Upper Tsagaan Gol are a case in point.

When we consider the corpus of vehicle imagery we have documented in the two high valleys of the Mongolian Altai, we have to conclude that the image of a light vehicle with spoke wheels must have come into this region as a cultural sign but not as a practical vehicle. We have to imagine, also, that the frequent substitution of solid wheels for spoke wheels, even when the vehicle body is light and drawn by fast horses, further points to its virtual character. Altai herders may have known a heavy wheeled vehicle, but their pictorial memory translated it into something finer – a light and elegant vehicle known only through myth and lore.

With that in mind, it is difficult to support the application of most traditional interpretations to the chariot

image as it appeared within the Altai-Sayan regions. A consideration of all the images, as a group, indicates that the vehicle was clearly not intended to symbolize a chariot of the sun, or to indicate combat, warriors, heroic ancestors, population movements, or power relationships; clearly there must be another, larger narrative that allowed the sign to retain a cultural vitality at least through the Late Bronze Age, but not later. As we have seen, the visual image varies radically in all its details, from fairly complete, straightforward representations to deliberate reversions to the principle of *pars pro toto* (Fig. 3) – a way of rendering the chariot as a sign that was quite sufficient to artists and to contemporary viewers even if to modern viewers those bits and pieces seem awkward or inadequate. Similarly, the charioteer varies between what might be called, on the one hand, an engaged driver and, on the other, a figure that seems hardly alive, planted stiffly on the axle, with arms and hands rigid, with little or no indication of the act of driving. As has been said above, the images of hunters shooting at animals from chariots also defy reality: imagining such a scene and one in which the skilled driver actually drops his reins to draw his bow (e.g., Fig. 5b, c, d) leads one to glimpses of immanent self-destruction – of both the vehicle and the driver. In other words, the hunting scenes are drawn from an imaginative re-creation just as are the images of chariots on high, isolated outcrops and just as are the scenes from the high outcrop of BO III.

At the beginning of this discussion I asserted that an inquiry such as this confirms the fact that any visual sign transmitted over vast space, extended time, and many cultures necessarily becomes enwrapped in shifting meaning. The further the sign is distanced from its source, the more forgotten becomes its original reference. The image and its permutations serve, in effect, as indicators of modified cultural contexts and regional environmental constraints. With that in mind, a consideration of the image *as it occurs* within the Mongolian Altai, and *where it occurs*, may allow us to identify the underlying trope. Whether we speak of wheels and other parts of the vehicle, of pairs of horses, of drivers (many seemingly inert), or of the impossible hunting drivers, that basic trope revolves around death: the death of an individual, the removal of the dead to the cliffs above the high valleys, and the transport of the dead to another, parallel world.

It is curious that in the high valleys of the petroglyphic complexes to which I have referred, there are relatively few monuments that could be burials datable to a period earlier than the Iron Age. We find scattered mounds, often muted in contour, on high terraces; these are generally uninvestigated structures but have been tentatively assigned to the Bronze Age (Volkov

1967; Jacobson-Tepfer et al. 2010). There are also a small number of “four-cornered” mounds that have been shown to contain simple Bronze Age burials (Aseev 1985; http://mongolianaltai.uoregon.edu/arch_mounds.php). By contrast to the limited numbers of four-cornered mounds and a small assortment of other as yet undated structures, on the floors of the valleys are found large clusters of surface monuments we call “dwellings”; excavations have indicated that they were not burials, but their house-like organization suggests they were intended to be virtual burials, predicting the dwellings of the dead in the next world (http://mongolianaltai.uoregon.edu/arch_dwellinglines.php). In fact, the relatively small number of burial monuments within either the Upper Tsagaan Gol valley or the Tsagaan Salaa-Baga Oigor valley is completely disproportionate to the very large number of Bronze Age images found in both complexes. Either the herders of those valleys were constantly making rock art (!), or most of their burials are unrecognizable.

Where, then, did they place their dead? Perhaps there were a number of ways in which the dead were consigned to another world. Some may have been placed under the simple mounds that border terraces overlooking the rivers, others were buried in the four cornered mounds or – in acknowledgment of the stubbornly rocky and often frozen ground of that region – they were given sky burials on the high terraces, just as is still done in many of the high Altai valleys today by Uriankhai and other Mongol groups.²³ The ritual structures we have termed “dwellings” and the long rows of stones that so frequently connect them to ridges and to rivers reflect the absence of true burials and the probable placement of the dead on the terraces and cliffs above. Among North Asian vehicle images, there are some that clearly point to the idea of conveying a dead body in a wheeled vehicle: in one case from Wulunchabu, North China (Fig. 28), the “driver” is lying in the basket in an inverted position; and in another case from Chuluutyn Gol, in Mongolia (Fig. 30), the “driver” lies sideways in the basket. The image of the cart or chariot could have been pecked to memorialize one who had died, or groups or families who had died, their bodies carried – at least ideally – into the mountains on carts. This would help to explain why so often the vehicle images appear on high outcrops or boulders and why they often appear to be the only or the earliest of the images on a particular surface.

But, of course, carts or chariots would never have been driven up to those high places. All our knowledge indicates that the idea of the wheeled vehicle came into North Asia from present-day Kazakhstan associated with the transportation of the dead to the other world. In the beginning of that association

– exemplified in the Sintashta burials – the chariot was actually interred with the body. By the time that association reached Siberia, however, it had undergone radical change: there is no evidence from Bronze Age burials in Siberia or Mongolia that any vehicles or their parts were interred with the dead. Within the lower, less rocky valleys of the Mongolian Altai, wheeled vehicles may certainly have been used to transport the body to a sacred place, just as seems still to be the case among some Mongol groups.²⁴ In the high valleys, however, it is more probable that the body was draped over a horse and thereby transported to the terrace or cliff where it would be laid. The representation of pairs of horses (Figs. 25, 26) and the horses led by bird-figures or held by crouched figures in the BO III compositions (Figs. 20–24) suggest that before sacrificed horses began to be included in burials in the Late Bronze Age, they were nonetheless associated with the idea of transport to the land of the dead. The narrative animating the panels from BO III intimates that the dead (the crouched figures) were carried up to high places by horses, but the transport of the dead further to the next world was somehow associated with birds, and the entrance to the land of the dead was understood to be guarded by a female deity of the type we find embedded in archaic Siberian mythic traditions (cf. Jacobson 1993, pp. 179–204).

With this narrative in mind, the lovely panel from BO III (Figs. 18, 19) – where we see a quiet domestic scene framed by the wings of flying birds, in which wild animals are intermingled with domesticated flocks, and where two vehicles stand at the side of the scene – may offer a glimpse into the realm of the dead where life was understood to continue with abundance and well-being. The images of archer hunters, driving at full speed after fleeing horses or elk or hunting on foot beside their chariots (Fig. 16) – all refer to the hunts the dead would undertake in the next, parallel world. This might explain the curious appearance of so many representations of vehicles, in whole or in part, on high, even inaccessible ridges. As for the outcrops or boulders with multiple images of wheeled vehicles, they may have functioned for a community to memorialize the dead placed on the cliffs or terraces above. In the case of a boulder such as the Vokzal (Fig. 17), we may see the record of a number of deaths, as through disease or another natural catastrophe.

By the Early Iron Age, when images of chariots and carts disappeared and scenes of riding indicate that the horse was a preferred mode of transport, the sacrifice of horses became a regular part of the burial ritual regardless of the wealth, gender, or age of the dead (Rudenko 1970; Griaznov 1980; Kubarev 1991); and so they remained through the Turkic Period as is attested by the interment of sacrificed horses with the

dead or by the mounting of dead horses on tall poles outside the burials.²⁵ These horses were intended as steeds, but their role emerged from a more ancient understanding that horses were attached to wheeled vehicles and that the dead had to be transported to the next world by a chariot. Although this was a conception that came into North Asia from the west, within the Altai and Sayan regions it became grafted onto autochthonous beliefs and shaped by the physical realities of a rugged and stony world. The conception famously and literally manifested itself within the burials of ancient China; but within the Mongolian Altai, it seems that the vehicle was a virtual chariot, a sign of the sky burial. Eventually even that sign was discarded and the horse alone was attached permanently to the body of the dead.

About the Author

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<<http://mongolianaltai.uoregon.edu>> Archaeology and Landscape in the Altai Mountains of Mongolia.

<<http://boundless.uoregon.edu/digcol/maic/>> Mongolian Altai Inventory Image Collection.

Notes

1. E. A. Novgorodova (1978, 1984) has published a few images from western Mongolia, but the materials she draws on are primarily from central Mongolia. In his publication on wheeled vehicles (1994, 2012) Novozhenov relies on Novgorodova and, for vehicle images from the Russian Altai, on drawings from the publications of A. P. Okladnikov and colleagues.

2. Unfortunately, the book is in Russian and hence not accessible to many readers. It is also rather difficult to use because of the author's idiosyncratic naming of types and subtypes. Other indispensable sources include: Littauer and Crowell 1979; Anthony 2007; Piggott 1983; and articles by V. F. Gening, and E. E. Kuz'mina.

3. Regarding the considerable problems of distinguishing the origins and development of the Okunev Culture, see Savinov 1997a, 1997b.

4. Referred to in scholarly literature, also, as the Russian Altai and Gornyi Altai.

5. One of the best examples of the recording of rock art can be found in the joint Korean-Mongolian publication, Northeast Foundation 2008.

6. These numbers do not account for all the vehicles images we have documented at these sites: many were too fragmentary or obscured to record meaningfully.

7. Note that many vehicle images can be counted within several different typologies, e.g. images with archer-drivers

may also appear in the category of complete images. The typologies identified here were developed independently of those used by Novozhenov (2012, pp. 94–118); his tend to refer primarily to vehicle construction and harnessing.

8. The same appears to be true of all the regions in which there are significant numbers of vehicle images: Armenia, Kazakhstan, Tuva, Russian Altai and North China.

9. Note that the same exclusion applies with regard to vehicles documented in the Russian Altai, but with one putative exception from Yelangash. Novozhenov (1994, Fig. 23) reproduces a panel from Okladnikov (1979) where a spear (?) stands upright on the axle and beside the driver of a schematic chariot. However, the images taken from Okladnikov's publications of Yelangash are too unreliable to allow any certainty in the identification of either details or of the scene as a whole.

10. <<http://boundless.uoregon.edu/digcol/maic/>>. Search: RA_PETR_OI_0138. Jacobson et al. 2001, Vol. II, Pl. 157),

11. The above observations hold true, also, for a conveniently located control group: the images of vehicles documented at the Altai Republic site of Kalbak-Tash. Although increasingly worn by human impact, this small site is one of the most important in the Altai region and has been well documented (Kubarev and Jacobson 1996). There are twenty-one recorded images of vehicles there; in several cases, the representation is complete. In other cases, however, the driver stands without reins in the basket of the vehicle. In the case of sixteen images, the vehicles are seen among wild animals but none of the drivers appear to be armed as hunters. One elaborate panel (Kubarev and Jacobson 1996, Fig. 449) includes a caravan scene in which a man seems to be pulling a small cart; and another scene (ibid., Fig. 510) shows a driver leading a horse while close by a similar figure on foot leads a large yak.

12. An object usually made of yak hair or foxtail mounted on a stick and used in hunting small animals to distract the intended prey. It is still in use today in many parts of Mongolia and is worn precisely as we see in Bronze Age rock art.

13. The other vehicle image is from the Khar Salaa section of the Upper Tsagaan Gol (<<http://boundless.uoregon.edu/digcol/maic/>>. Search: RA_PETR_TG_0374). A few vehicles from both complexes can be dated to the Iron Age by reference to such stylistic aspects as the stacking of the horses.

14. In the material from Yelangash, there are many panels in which chariots are surrounded by or juxtaposed with wild animals, but in none of these cases do the drivers carry bows and arrows. This absence, however, may be due to the schematic quality of the drawings.

15. <<http://boundless.uoregon.edu/digcol/maic/>>. Search: RA_PETR_OI_0022; Jacobson et al. 2001, Vol. II, Pl. 36

16. <<http://boundless.uoregon.edu/digcol/maic/>>. Search: SK_D1.

17. Within the corpus from Kalbak-Tash, there are no double drivers. Within a group of panels from Yelangash (1979)

reprinted by Novozhenov (1994, Fig. 24), there are two instances of double drivers.

18. <<http://boundless.uoregon.edu/digcol/maic/>>. Search: RA_PETR_TG_0591

19. See, e.g., Jacobson et al. 2001, Vol. II, Pls. XXVII, XXVIII, 72.

20. <<http://boundless.uoregon.edu/digcol/maic/>>. Search: PETR_00195_OI; Jacobson et al. 2001, Vol. II, Pl. 188.

21. There are several panels from Yelangash where vehicles are juxtaposed with loaded yaks or herding scenes. Given the quality of the drawings, however, it is not possible to say that these various elements were executed as parts of one scene. See, e.g., Okladnikov 1979, Pl. 32, part 3; and Pl. 34, part 3.

22. This includes the family scene, the three compositions being discussed, a hunting scene and a sixth scene involving

a figure and several cervids; see Jacobson et al. 2001, Vol. 1, Figs. 981, 982; Vol. 2, Pl. 329.

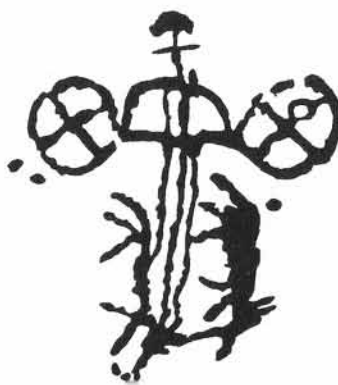
23. Personal observation. Note, also, the continuation of a kind of sky burial in the case of ancient Türks in Mongolia: where the body of an individual warrior or hunter was placed in a natural cist or small cave, usually high on a ridge. This is well demonstrated by the burials represented by the recent exhibition of finds from Mongolia, in Bonn, Germany. See the accompanying catalogue, *Steppenkrieger* 2012.

24. See the description of sky burials still practiced among the herders of Inner Mongolia: Jiang 2009, pp. 62–4.

25. This tradition apparently survived into the ethnographic period among Altai Turkic peoples (Kubarev 1984). In the Mongolian Altai, we have recorded a few Turkic burials that had the remnants of cedar logs projecting from the mound (see Jacobson-Tepfer et al. 2010, Fig. 2.29).



a) BO I



b) BO II



c) BO III



d) BO IV



e) BO IV



f) TS I



g) TS I



h) TS V



i) TG_KS section

Fig. 1. Images with full wheeled (spoke and solid) vehicles, driver and horses. In some cases, the images indicate reins and full harness, in others those elements are missing. From a variety of locations in Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol.



a) TG_SK section



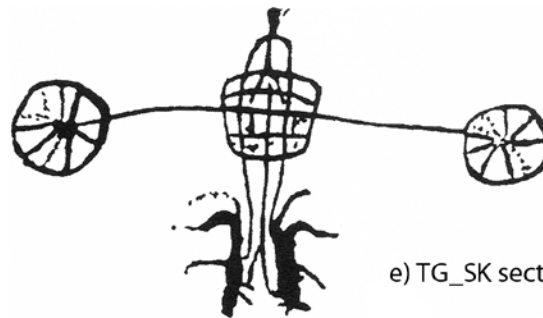
b) TG_SK section



c) TG_SK section



d) TG_SK section



e) TG_SK section



f) TG_KS section

Fig. 2. Images of wheeled (spoke and solid) vehicles, drivers and horses. In all cases the drivers hold reins and the horse harness is indicated. From a variety of locations in Upper Tsagaan Gol.



a) BO II



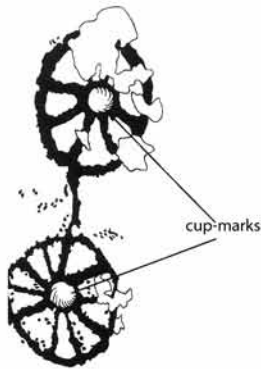
b) TG_KS section



c) TG_KS section



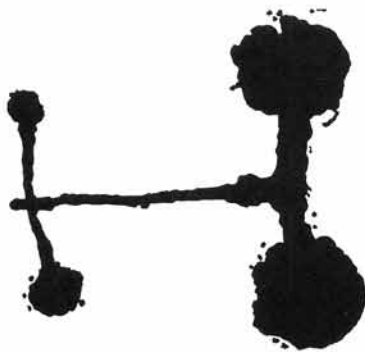
d) TG_KS section



e) TG_KS section



f) TG_SK section



g) TS III

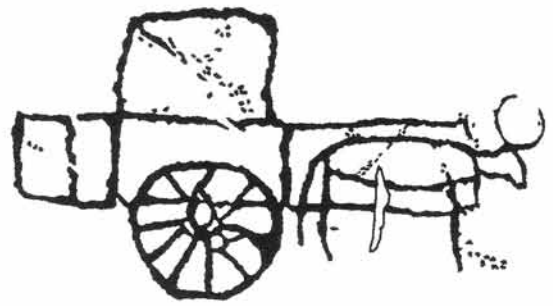


h) TS IV

Fig. 3. Images of partial vehicles. From a variety of locations in Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol.



a) BO IV



b) TG_KS section



c) TS II



d) TS III

Fig. 4. Eccentric vehicle images: one vehicle with horses in a facing position and three four-wheeled vehicles, one seen in elevation and drawn by a bovid. From a variety of locations in Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol.



a) TG_KS section



b) TS IV



c) BO II



d) BO II



e) TG_KS section



f) TG_SK section

Fig. 5. Vehicles with archer-drivers, archers at the side, and wild animals suggesting a hunt. Note that some of the vehicles are solid wheeled. From a variety of locations in Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol.



Fig. 6. Two partial vehicles, one with driver standing on the axle and without reins. On flat outcrop. BO II.



Fig. 7. Archer-driver standing in an elaborate basket; large spoke wheels, no reins or horses. On flat outcrop. BO IV.



Fig. 8. Two vehicles with drivers and horses, chasing an elk (not shown here). On scraped, horizontal outcrop of pinkish patina on which there is one other finely pecked vehicle. Upper Tsagaan Gol_SK section.

0 5 CM



Fig. 9. Archer-driver shooting at small animal (horse?), with two hitched horses and larger horse above. On a large, scraped horizontal outcrop on which there are eleven images of vehicles, whole and partial. Upper Tsagaan Gol_SK section.



Fig. 10. Hunter on foot beside two vehicles, neither with horses. On broad, pink horizontal surface of a boulder high on the east face of Shiveet Khairkhan. Upper Tsagaan Gol_SK section.



Fig. 11. Driver carrying a gorytus with bow and driving two fully harnessed horses. On the right is a partial vehicle with spoke wheels, axle, and basket. On the same horizontal outcrop as Figure 23. Upper Tsagaan Gol_SK section.



Fig. 12. Driver carrying a quiver, standing in the basket of a spoke wheeled vehicle with two horses and full harness visible. Deeply pecked and engraved on a horizontal outcrop distinguished by a fine blue patina with stripes of mineral variation. Upper Tsagaan Gol_KS section.



Fig. 13. Figure standing in a low basket of a light vehicle with no visible reins. Two elegant horses attached to the pole. Lightly pecked on broad, horizontal outcrop on which there is one other finely pecked vehicle image. Upper Tsagaan Gol_SK section.



Fig. 14. Two figures of unequal sizes in the basket of a spoke wheeled vehicle; two horses. Unclear reins may have been added later. On a large horizontal outcrop on which there are five other vehicle images. Upper Tsagaan Gol_SK section.



Fig. 15. Vehicle with figure standing in the basket with raised shoulders, no reins. On same surface as Figure 14. Upper Tsagaan Gol_SK section.

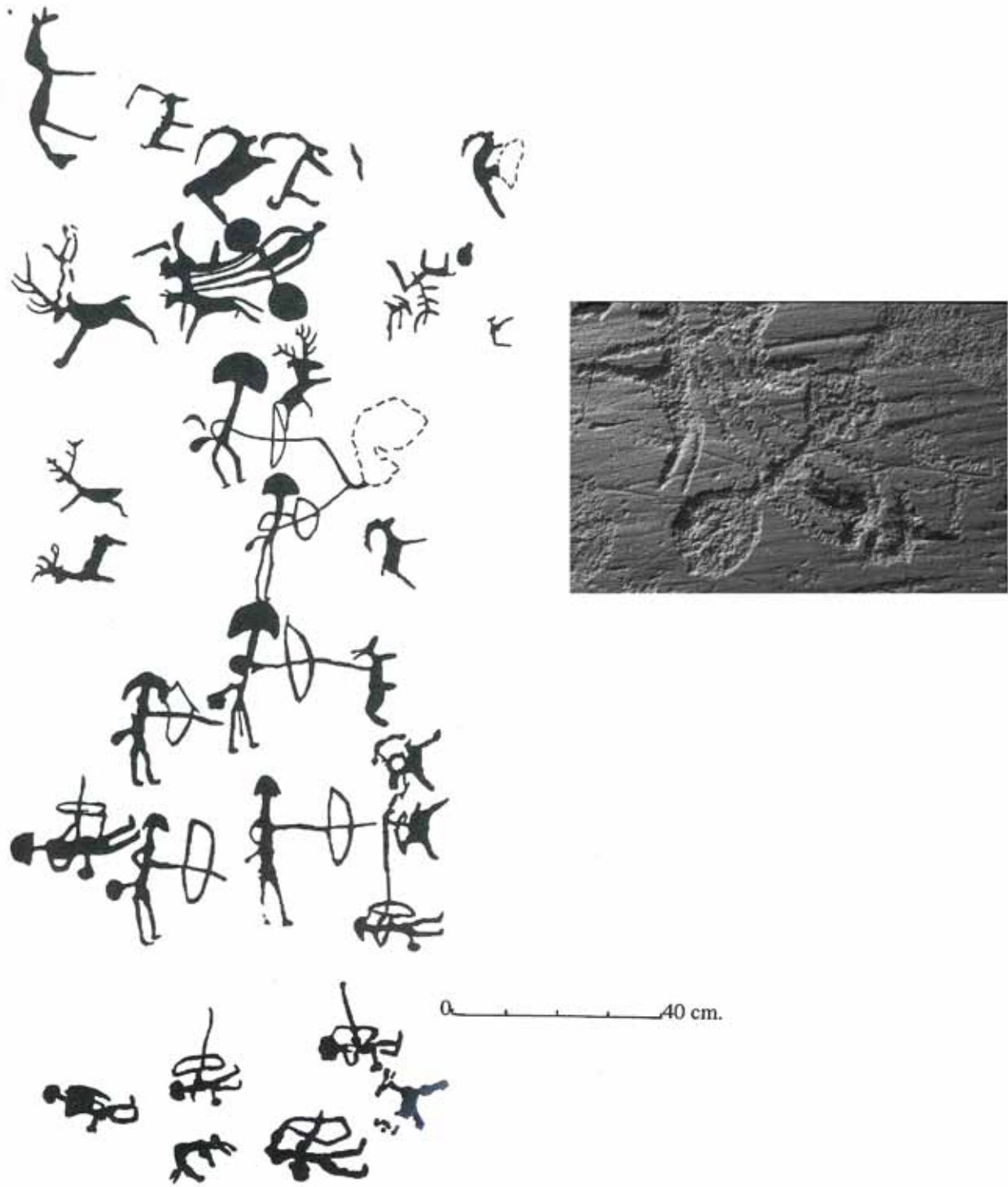


Fig. 16. Large hunting scene ("Great Hunt") with archers on foot shooting at wild animals. In the upper section (photo detail) is a vehicle with solid wheels, driver, and two fleet horses chasing an elk. Pecked on a finely scraped, dark horizontal surface of a large boulder. TS IV.

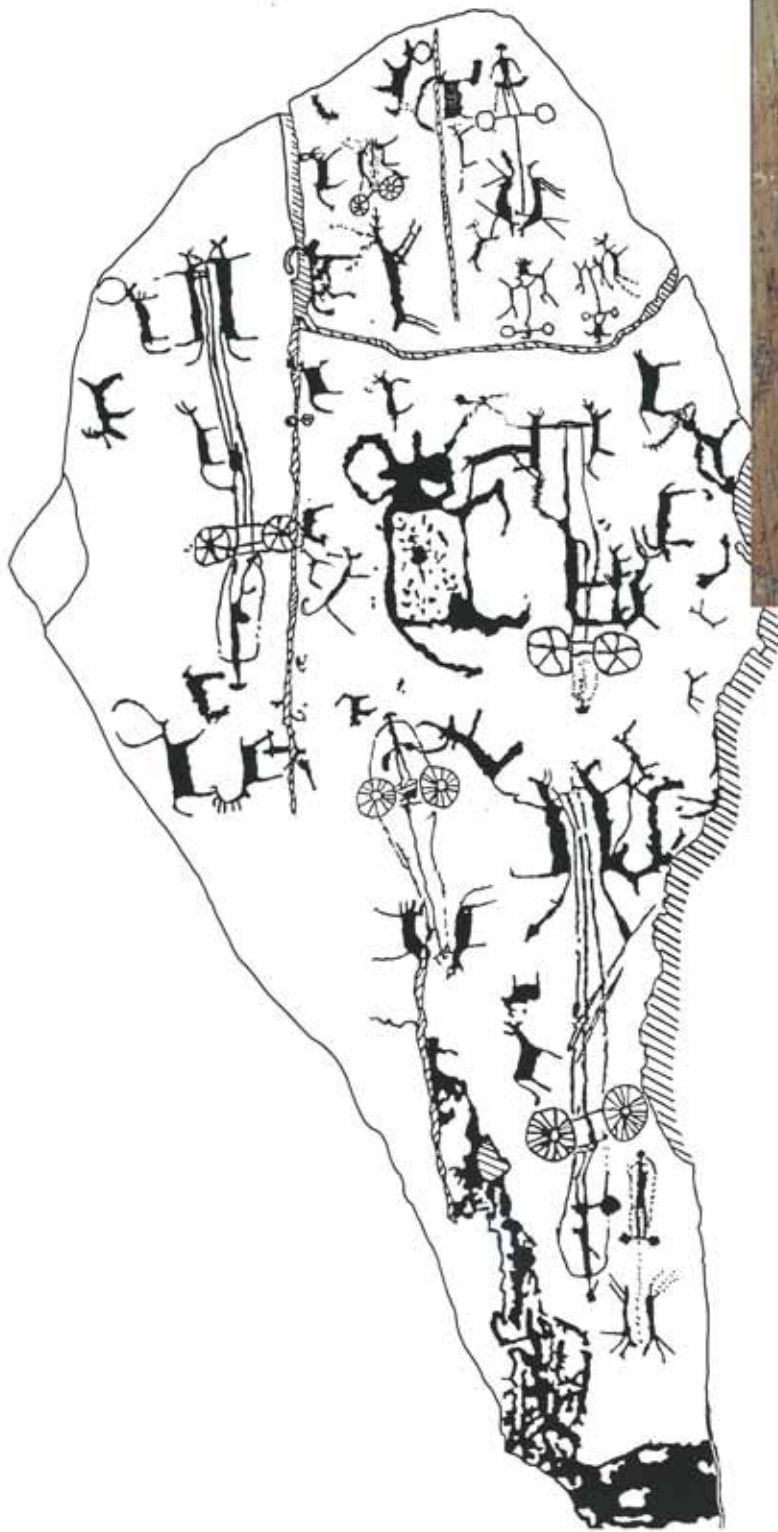


Fig. 17. Scene ("Vokzal") with ten vehicles, whole and partial, with variety of wheels, drivers and horses, all finely pecked on a reddish, vertical surface. On the right is a detail from the far right end of the stone. Upper Tsagaan Gol SK section.



Fig. 18. Upper section of the large composition including Figure 19, below. Here wild animals, walking birds, a man, a woman holding the lead of a loaded yak, and a vehicle with horses and, possibly, driver on the left. Figures finely pecked on a sloping outcrop. BO III.



Fig. 19. Lower section of a large composition including Figure 18, above, with wild and domesticated animals, flying birds, two frontal female figures, and a vehicle (photo detail, lower left) with two horses and, possibly, a driver. Figures finely pecked on a sloping outcrop. BO III.



a

b



Fig. 20. Drawing (a) and photograph (b) of a composition including an enclosure on the left with crouching figure and paired horses. To the right of the enclosure stands a frontal woman, two bird figures leading horses on a trail, and, below, a horned figure leading another horse. Figures finely pecked on a large outcrop. BO III.

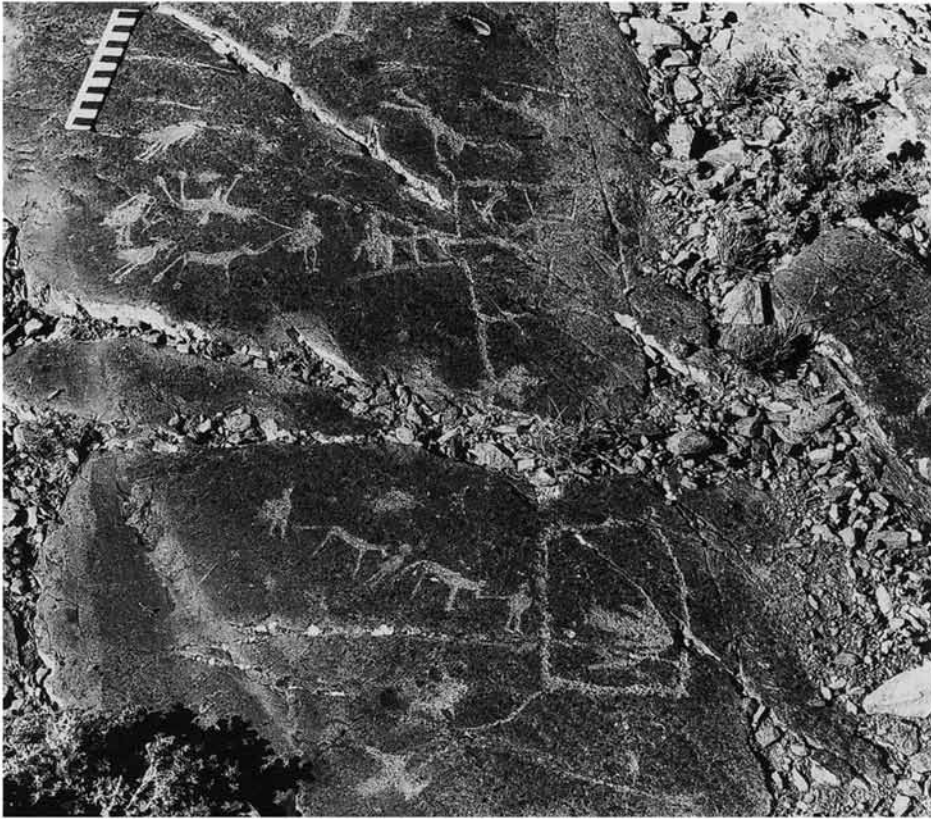


Fig. 21. Two compositions with enclosures, frontal figures, bird men, and horses, all finely pecked on broad, horizontal outcrop. BO III.



Fig. 22. Lower composition in Figure 21: bird men leading horses to an enclosure in which stands a large, frontal woman with long hair. BO III.



Fig. 23. Drawing (a) and photograph (b) of details of upper composition in Figure 21: bird men leading paired horses to a narrow opening guarded by a frontal figure. Within the enclosure to the right is a crouching figure holding paired horses. BO III.



Fig. 24. Whole scene with horses, bird men and enclosure with crouching figures, seen in upper section of Figure 21. BO III.



Fig. 25. Paired horses, possibly with an obscure chariot pole between them, and several other horses. Deeply pecked images on a small boulder. Upper Tsagaan Gol_TG section.



Fig. 26. Paired horses without any sign of a vehicle, on a horizontal surface of bedrock high above the valley floor. Upper Tsagaan Gol_TG section.



Fig. 27. Man leading two horses toward a vehicle. Yelangash Valley, Altai Republic. After: Okladnikov 1979.



Fig. 28. Vehicle drawn by two horses and a man lying in the basket in inverse position; at the side of the vehicle, a stag. Wulanchabu, North China. After: Gai 1989.



Fig. 29. Vehicles from different sites along the Chuluutyn Gol, northern Mongolia. After: Novgorodova 1984.



Fig. 30. Composition with two stags, a vehicle drawn by two horses, and a man lying in the basket. Said to be from Bichigtin-am, Mongolia. After: Novgorodova 1984: 60.