# New Discoveries of Rock Art in Afghanistan's Wakhan Corridor and Pamir: A Preliminary Study

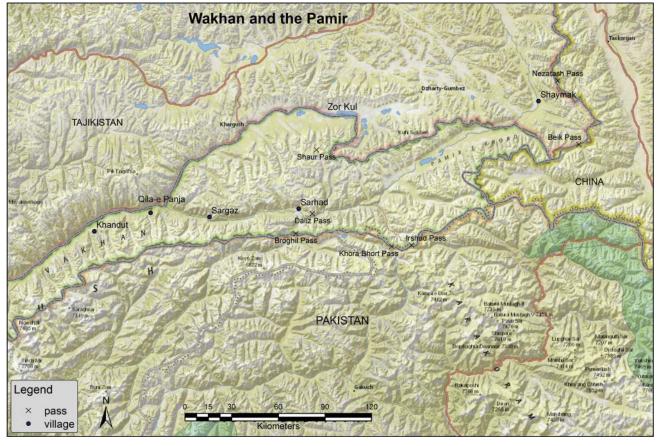
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rom at least the first century BCE when China's Han Dynasty became the predominant power in the Pamir, merchants, monks, travelers and occasionally armies passed through Wakhan and the Pamir along one of the main branches of the so-called "Silk Road" (Fig. 1). Their accounts provide a rich historical record of the kingdom of Wakhan<sup>1</sup> and of its strategic role in the great rivalries for control of routes through the Pamir.<sup>2</sup> Wakhan's archaeological record, in comparison, remains largely unknown. Our knowledge of the historical archaeology of Wakhan comes largely from Aurel Stein's brief visit in 1906. Stein, who sought to correlate on-the-ground reality with the textual record of the Tang Annals,<sup>3</sup> traveled through Wakhan in May 1906 on his way to Khotan.<sup>4</sup> He entered Wakhan from the south via the Broghil pass on May 19, followed the main trail along the true right (north) bank of the Wakhan river to the Pamir, and exited Wakhan via the Wakhjir pass on May 27. Although *The Geographical Journal* of 1939 proclaimed that "thorough excavation of the ancient sites in Wakhan must be perhaps the most important single item on any agenda of archaeological work in Central Asia" (Barger 1939, p. 389), the historical archaeology of Wakhan and the Afghan Pamir has received only one survey (Miller 2009) since Stein's 1906 visit.

## Prehistoric archaeology of Wakhan

The prehistoric and protohistoric archaeology of Wakhan has been briefly noted in reports by French,



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Fig. 1. Map of Wakhan and the Pamir.

Copyright © 2013 John Mock (including all images except as noted) Copyright © 2013 The Silkroad Foundation German and Austrian Pamir expeditions and a UNDP/FAO survey of wildlife, all between 1968 and 1974.<sup>5</sup> They reported numerous rock art depictions of ibex and hunters on foot, sometimes armed with bows and occasionally accompanied by what appear to be dogs. One well-executed panel depicts mounted archers hunting wild yaks (Naumann 1973; Dor 1974). The panel is on a boulder that sits on a small terrace slightly above and adjacent to the Wakhan River where the spring-fed Zang Kuk stream joins the glacier-fed Wakhan River at 3600m elevation. The river runs through a steep-walled gorge in this section and there is no area suitable for cultivation and settlement anywhere nearby. A small rock-wall roofless enclosure that travelers along the trail utilize is the only built structure. Naumann suggested that this location might have been a campsite for hunters who made the rock carvings depicting their wild yak hunt.

Figure 2 shows this rock art scene. The overall depiction is a yak hunt by two riders on horseback using bows. The two yaks appear to be fleeing the riders, with their heads raised as is typical of running yaks, as is the raised tail of the upper yak. The yaks have long curved horns, characteristic of wild yaks (Fig. 3). The yaks, although large, are in proportion with the horses. The skillful riders are aiming their bows, which appear to be composite bows and were the typical weapon of mounted hunters of the Inner Asian area. The Scythians in particular were noted for their use of such bows.<sup>6</sup> The lower hunter perhaps has a quiver on his back, but this is not certain. Nor is it possible to determine if the riders' feet are depicted in stirrups, which, according to the Soviet archaeologist Vadim Ranov, appeared in Central Asia in the 5th to 6<sup>th</sup> century CE (Ranov 2001, p. 127). The depictions

#### Fig. 2. Riders with bows hunting wild yaks. Zang Kuk, Wakhan.





Fig. 3. A wild yak, characterized by the long curved horns and shoulder hump. Photo copyright © Daniel Miller.

are quite life-like and lively, and appear to have been made with attention to detail. This hunting scene was composed by completely bruising the surface of the rock for each figure, rather than pecking only the outline of each figure, resulting in a silhouette depiction of the yaks, horses and riders. In 1972, when Naumann observed these depictions, he noted that the rock carvings are "only insignificantly deeper than the rough surface," which appears to be even more true now. The loss of detail, especially towards the center of the panel, may be due to gradual repatination and to erosion of the patina that may once have been more substantial on the rock surface. Such processes occur gradually over time.7 The erosion and repatination of this panel suggests considerable age, which would support attribution to hunters of the Iron Age, although a more recent dating to the Kushan period of the first millennium CE cannot be ruled out.

> Most of the rock art identified in Wakhan is in the lower elevation area, where Wakhi villages are located on alluvial fans formed by side streams flowing into the main Panj River. Some rock art was also identified in the high elevation Pamir regions of Wakhan.8 The wildlife biologist Ron Petocz, who studied Marco Polo sheep (argali) and prepared a draft management plan for a wildlife reserve in the Big Pamir, made the most detailed survey of the region and included a brief but interesting report on archaeology. Petocz photographed several scenes of ibex hunters using bows and a remarkable panel depicting "a line

of human figures holding three-pronged spears." He also reported "noticeable mounds" in the Little Pamir, where Kyrgyz "claim to have found bronze projectile points" (Petocz 1978, pp. 20-21). Soviet archaeologists working in the adjacent Pamir regions of what is now Tajikistan between 1946 and 1991 located numerous rock art sites and more than 260 Saka kurgans (Ranov 1984, p. 80; Ranov 2001, pp. 122-49; Yablonsky 1995, pp. 234-37). The proximity of the Tajikistan Pamir sites to the Afghanistan Little Pamir sites and the similarity of their rock art suggest a correlation between the Pamir sites. The Soviet archaeologists found daggers, arrowheads and zoomorphic plaques, all in bronze in "classical Saka form" (Yablonsky 1995, p. 235). Further archaeological investigation is needed to determine the extent and continuity of Saka sites in the greater Pamir region.

The high altitude Pamir grasslands supported wildlife that attracted nomadic hunters from at least the Late Bronze Age.9 Rock art depictions of wild yaks, ibex, argali and possibly stags suggest game may have been abundant not only in the broad Pamir but also in the many smaller side valleys that feed the main Panj River. Recent research shows that in the early Holocene, "hunter-gatherer populations well adapted to high altitude life conditions in summer settled in the Pamir plateau, especially near the Kara Kul Lake" (Malassé and Gaillard 2011, p. 123). Although this research also indicates that hunter-gatherers abandoned the Pamir in the mid-Holocene, probably due to increasing aridity in the northern Pamir, the southern Pamir may have experienced monsoonal moisture and retained biodiversity that continued to draw hunters. Human presence in Wakhan, probably hunters, is attested (radiocarbon of charcoal) from the beginning of the 2<sup>nd</sup> millennium BCE (Raunig 1984).<sup>10</sup> Hunters undoubtedly came seasonally, when high elevation

meadows were accessible and relatively snow free, and some may have belonged to communities of agropastoralists that developed in the Amu Darya and Hindukush regions during the late Holocene Bronze Age (Malassé and Gaillard 2011, p. 129; Meihe et al. 2009a, p. 255). This seasonal usage likely contributed to the peopling of Wakhan, and the earliest dating (radiocarbon of pollen) for cultivation is the 1<sup>st</sup> century CE (Raunig 1984, p. 19). In addition to hunters on foot, hunting in the Pamir may have been carried out by horse-riding Central Asian steppe peoples who used a composite or double bow,<sup>11</sup> portrayed in rock art from Wakhan.

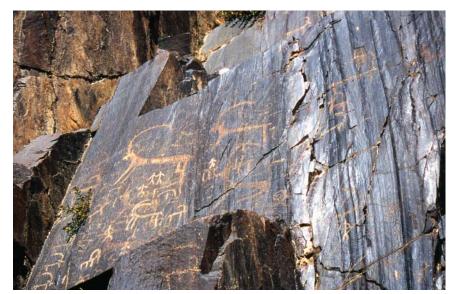
# Current work

Between 2004 and 2007, Kimberley O'Neil and I made five trips to Wakhan. Although the archaeology and cultural heritage of Wakhan were not the primary objectives of our visits, they were always in mind, and we took the opportunity to visit the sites described by Stein and to explore widely throughout Wakhan and the Afghan Pamir. These efforts have yielded remarkable rewards.<sup>12</sup> This article is a preliminary and general presentation of the rock art identified in Wakhan that is not directly linked through iconography or epigraphy with the era of Tibetan Imperial occupation of Wakhan.13 This newly discovered rock art offers valuable information on human presence in Wakhan from at least the Iron Age onward,<sup>14</sup> up to and including the Silk Route trade and travel across what Afghans call Bam-e Duniya, or the Roof of the World. The article is organized geographically by site and presents five newly discovered rock art galleries: Grass Place, Mud Place, Shrine Rock, Big Rock, and Rock Pile sites.<sup>15</sup>

# Grass Place gallery

This rock art gallery is located along the Wakhan River in the settled area of Wakhan. It is a compact site in an area occasionally flooded during high river flow. Hence, there are no terraces. A broken cliff face rises almost vertically and on the dark polished rock faces of the lower cliff are several rock art panels. Most of the art depicts ibex hunting, which is the most commonly observed composition in Wakhan. The panels are palimpsests, as indicated by the differing degrees of repatination of the compositions on the panels. This indicates that the compositions were

> Fig. 4. Ibex palimpsest, Grass Place gallery.



made at different times but is only a relative indicator of age.

The three very large ibex, shown in silhouette, are the most detailed and the most repatinated images in the panel shown in Fig. 4, preceding page (Color Plate IIIa). These ibex are depicted in full silhouette, with long curving horns. The large upper left ibex is depicted with knobbed horns and four legs. A long slender line under the body extending from the hindquarters appears to represent a penis, and the lower right large ibex also displays the same. On the upper right, a small ibex is also represented with penis and knobbed horns.

In the bottom center of the panel, below and right of the lower large ibex, is another ibex with very curled, spiral-like horns (Fig. 5). We can compare these ibex with similar ibex images from Alchi in Ladakh, published by



# Fig. 5. Detail of Fig. 4.

Henri-Paul Francfort (Francfort et al. 1990, Figs. 21, 22, 28). Overlaying these images are lighter images of ibex and humans. They are all depicted in stick-like form,

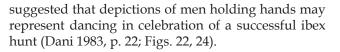
lacking the detail and silhouette composition of the older, more repatinated ibex images. Of interest are the two humans standing sideby-side, as though holding hands. A. H. Dani published similar images from the Ziarat I and II sites near Chilas in the Indus Valley and



Fig. 7. (above) Detail of Fig. 6 showing "flaming" antlers/horns.

*Fig. 6.(left) Panel showing several ibex and a human.* 

> *Fig. 8. (right) Human leading horse with rider.*



A separate panel in the same gallery has many small, heavily repatinated ibex images and one human image with outstretched arms (Fig. 6). The ibex at the lower left are depicted in silhouette. The upper ibex of the lower left group has a sinuously curved neck, which is suggestive of the 'S' style of steppe art. It is similar in style to rock art depictions of ibex from Langar, an extensive site in the Wakhi settled area of Tajikistan (Ranov 2001, Fig. 11). Below it are two ibex facing each other. In the center of the panel is an ibex or a deer with "flaming" horns or antlers (Fig. 7). Readers will immediately recognize these as a characteristic style associated with steppe nomads. This style has been reported from Ladakh (Francfort et al. 1990; Bruneau and Vernier 2010) and from the upper Indus (Dani 1983; Jettmar 1989). It is also attested, as previously mentioned, from the Pamir areas of Tajikistan that are adjacent to Wakhan. This Wakhan rock art is situated geographically between the Central Asian sites and the sites in the upper Indus and in Ladakh, which are south of the main Karakoram and Tian Shan mountain ranges that separate Central Asia from South Asia. These stylistic and geographic cor-

> relations suggest a circulation of people between the Pamir and the southern fringes of the Pamir-Karakoram-Hindukush mountain region.<sup>16</sup>

> Finally, at the same site, is an image depicting a human walking in stride, with arms bent, leading what appears to be a horse on which is seated another person (Fig. 8). The rider has two long lines angling downward from the crown of the head, which may represent hair and could indicate that the rider is female. Above the horse and rider is another human who may be holding a spear. Behind this human are other humans





with exaggeratedly long arms and torsos. These depictions are significantly repatinated and weathered. They do not seem to have been executed with a sharp edge, but rather to have been bruised into the rock surface with a more blunt tool. The humans and the horse are in stick-like style and may be of a similar age as the other stick-like images at this site. These depictions may be of less age than the ibex depictions previously discussed, based on comparative repatination. Perhaps they are from early human settlement in Wakhan or perhaps from as recent as medieval times. The weathering and repatination suggests that they are not more modern compositions, but it should be noted that even today, Wakhi and Kyrgyz women ride horses that are led by men walking on foot.

# Mud Place gallery

This site is also located along the Wakhan River in the settled area of Wakhan. It is an extensive site, with rock art depicted on small boulders that sit on a very long but narrow terrace above the present level of the river. The compositions are not palimpsests. Rather, a single image or small single composition of images is depicted on each individual dark varnished boulder surface.<sup>17</sup>

Figures 9 and 10 depict wild yaks, which are no longer present in Wakhan.<sup>18</sup> These images are located well outside of typical yak habitat,<sup>19</sup> at an elevation of



approximately 3200m, comparable to the elevation of the Langar site in Tajikistan Wakhan, which has been described by Ranov (2001). The images appear to depict wild yaks with long curved horns and bushy tails. Figure 9 shows the characteristic prominent shoulder hump of a wild yak. These two figures depict neither a hunting scene nor a group of yaks, which might suggest domesticated yaks. Instead, each figure occurs alone on the rock surface as a solitary depiction of a powerful wild animal.

The two figures were executed with different techniques. Figure 9 was composed in silhouette, and Fig. 10 was composed in outline, except for the large bushy tail, which is completely filled in. Figure 9 can be compared with a similar yak in silhouette from the Nubra Valley in Ladakh. Both Fig. 9 and the Ladakh depiction have similar body shapes, long, almost closed horns, and a round-shaped tail, which is a stylistic feature characteristic of Bronze Age yak depictions from Central Asia (Bruneau et al. 2011, p. 93). The body of the yak in Fig. 10 is rectangular with short legs; all four legs are not distinguishable. Figure 10 can be compared with a similar yak outline from Langar in nearby Tajikistan (Ranov 2001, Fig. 16). The two figures, despite their differences, share a significant stylistic attribute. Neither yak has long horns protruding forward, a characteristic they share with the yak depictions at Langar and Nubra and which sets them apart from yak depictions elsewhere in Central Asia (Ranov 2001, pp. 136, 143).

Figures 9 and 10, although composed in different styles, both depict the animal in a reduced, more stylized form, with prominent features (horns, tail) appearing in slightly exaggerated scale. Wild yaks were important animals that would have provided meat, hair, horns and burnable dung for people entering Wakhan. Yaks would have formed a vital component of a hunting economy and their depictions in rock art may have had symbolic significance. A fuller contextual study of the large rock art field where these two figures are located would be useful to analyzing the symbolic dimension. It is noteworthy that Fig. 9 appears to be more repatinated than Fig. 10, which could indicate greater age. The difference in technique (outline vs. silhouette) noted above may also be significant in attributing age.

Figure 11, next page (Color Plate IIIb) depicts an ibex hunt. Two ibex are depicted in outline and two hunters, also in outline, aim bows at the ibex. The uppermost hunter is drawing a long bow with curved bow tips, which appears to represent a composite bow. The second hunter, standing behind the ibex

Fig. 9 & Fig. 10. Wild yaks, lower Wakhan.

Fig. 11. Ibex and ibex hunters with dogs. The photo has been desaturated and the contrast enhanced to show the figures clearly. See also Color Plate IIIb.

on the right of the figure, is also drawing what appears to be a bow with curved tips. Between the two ibex and below the first hunter are two zoomorphs with long tails and short ears. They are depicted facing the second ibex, and may represent canids. Use of dogs for hunting ibex is widely depicted throughout Central Asia (Ranov 2001, p. 146) and is also known from Ladakh (Francfort et al. 1990, pp. 8, 11). These images were executed with some precision, suggesting that the entire composi-

tion was planned and executed at the same time. It would have taken several days to complete. It is substantially repatinated, which suggests considerable age. It is probably not a medieval composition, but rather an earlier composition by hunters who employed dogs and used composite bows.

Figure 12 also depicts an ibex hunt, with hunters on foot using bows. The hunter in the upper left has a long bow, but the hunter in the middle has a shorter bow. There is insufficient detail and clarity to ascertain if the bows depicted are simple or compound bows. The hunter in the middle appears to have something hanging between his legs, but the lack of detail makes is impossible to ascertain if it is clothing, a weapon, or even an exaggerated phallus.

The hunters are in silhouette, Fig. 12 (left). Ibex hunters on foot with with their heads completely filled in, and their arms and legs are articulated much more than stick-like figures. The upper



ibex is depicted in outline, with two curving horns. There appears to be a small zoomorph above the ibex, which could be a dog, but is not clear. The depictions are weathered and significantly repatinated, suggesting considerable age and are likely much older than medieval compositions. Although similar to Fig. 11 in composition, they are stylistically different.

Two other compositions depict mounted riders and accompanying men on foot. The panel shown in Fig. 13 depicts five riders; four on horses and one on a camel. Two of the horse riders and the camel rider appear to wear headgear, which could be hats or turbans. All the mounts appear to have reins and bridles, and each rider has one hand holding the reins and

- bows.
- Fig. 13. (right) Four equestrians and one camel rider.







the other hand curved back to touch the waist. The upper right horse shows the bridle most clearly, and the horse has what appears to be a round bag hanging from its neck. This may be an ornament, or perhaps a small feedbag. The feet of the riders appear to be horizontal, as though in stirrups. Ranov, citing Boris Litvinskij, notes that stirrups appeared in Central Asia in the 5<sup>th</sup> and 6<sup>th</sup> centuries CE (Ranov 2001, p. 127), which provides a *terminus post quem* for this panel. The execution of the panel is more precise and distinct than that of riders from Vybist-Dara, Tajikistan (Ranov 2001, Fig 19), which Ranov dated from the Kushano-Hephthalite period.

The panel shown in Fig. 14 (Color Plate IVa) depicts a horse rider accompanied by two men on foot, one in front and one behind, as though they are escorts of the rider. The panel is an interesting palimpsest with a paler ibex depicted above the reddish-brown repatinated horse rider and escorts scene. The differing degrees of repatination offer comparative dating. Ranov has categorized repatination of Tajikistan rock art into three grades, P-1, P-2 and P-3 (Ranov 2001, p. 126). P-1 is almost completely repatinated, indicative of the oldest compositions. P-2 is reddish-brown in color and P-3 is lighter, almost white and indicative of more recent composition. The rider and escorts in this panel show P-2 repatination, and the ibex above shows P-3. As with the riders depicted in Fig. 13, bridle and reins are shown, as is the round bag or ball beneath the horse's neck. All the men are wearing headgear, which appear to be hats or thick turbans, and the two escorts are carrying objects. The lead escort may have an axe, and the rear escort has what at first glance may suggest a rifle with a stock, but the repatination and comparative dating mentioned above would rule out a firearm, although the object cannot be readily identified. This panel would seem to show a scene of travelers along the "Silk Road." Further investigation

## Fig. 14. Equestrian accompanied by pedestrians.

into the horse gear, such as the distinctive round ball or bag, and the headgear styles may reveal more information about the identity of these travelers and help to establish a more accurate chronology.

# Shrine Rock gallery

Shrine Rock is also located in the settled area of Wakhan along the Wakhan River. The rock sits on a low terrace that appears to have once been a lake bed. The rock art at this site is a single large panel, here shown in a composite from three separate photos (Fig. 15, next page). The panel depicts eleven horse riders, two of whom

are leading horses. The degree of repatination, using Ranov's scale (discussed above), is between P-2 and P-1. That is, the depictions show only light reddishbrown color. Stylistically, they are comparable with the riders from the Mud Place gallery (Figs. 13, 14). Most of the riders wear headgear, which appears more turban-like than hat-like. The horses all have bridles and the riders hold reins. The horses also have the small round ball or bag under their necks, which is linked into the horse tack. The two horses being led by riders on the left reveal the most detail and definitely appear to have saddles on their backs.

Interspersed among the riders are ibex, which have the same degree of repatination as the riders and horses, indicating they were composed at about the same time. However one horse and rider, right of center, is clearly composed over an ibex, indicating that the ibex depiction antedates the horse and rider. Three riders have one hand raised behind them and two of them are holding something in that hand. It is not clearly depicted, but brings to mind Kyrgyz hunters who use eagles and hold them in a similar way. However, this is only speculation at this preliminary stage. Two men on foot are shown in the panel. One is at the far right of the panel and holds a bow. The other human, more crudely drawn with an oval head and holding a bow, is above the left side of the panel. Also noteworthy is the long-tailed zoomorph at the upper right of the panel, which can probably be identified as a snow leopard, indigenous to Wakhan.

At the top center of the panel is a shield-like device, divided into quadrants, with a dot in each quadrant. In discussing similar circles from Langar in Tajikistan, Ranov mentions that although their symbolic significance is obscure, perhaps linked to Buddhist *cakra* or perhaps to anti-Buddhist solar symbolism, their dating is undoubtedly the 8<sup>th</sup> through 10<sup>th</sup> centuries CE (Ranov 2001, pp. 145–46).

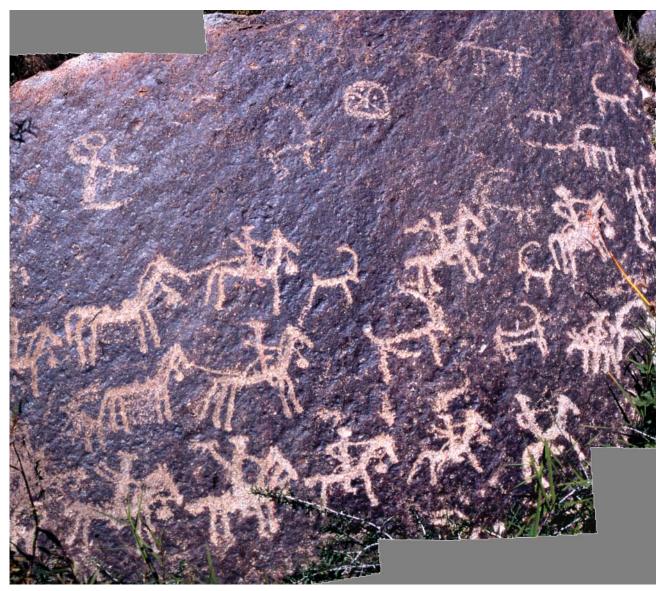


Fig. 15. The Shrine Rock panel.

# **Big Rock gallery**

The Big Rock site is located at an elevation of 4000m, well above and beyond the settled areas of Wakhan and near summer pasture areas used by Wakhi herders. The site shows evidence of Tibetan usage (Mock 2013a) that dates to the Tibetan Imperial period, most likely to the latter half of the 8<sup>th</sup> century CE. Older rock art at the site depicts ibex, yaks and a hunter with a spear (Fig. 16). Rock carvings that depict ibex, argali sheep, yaks, and humans holding spears or bows are among the earliest rock art of Central Asia. Such rock art hunting

Fig. 16. Hunter, ibex, swastika, lunar crescent; Color Plate IVb.





Fig. 17. Wild yak, Big Rock site, Wakhan District.

scenes are widely found throughout Central Asia and probably were related to ritual practices that ensured hunting success (Dodykhudoeva 2004, pp. 151–52; Hauptmann 2007, pp. 24–25; Bellezza 2008, p. 173).

The panel at the Big Rock site (Fig. 16) shows a hunter holding a spear, several ibex, a yak, and a large ibex with exaggeratedly long curving horns and clearly depicted hooves. The excessively large size of this ibex suggests a ritual function for the art, which is further indicated by a reverse (counter-clockwise) swastika above the ibex and a crescent moon beneath it, both symbols closely associated with pre-Buddhist traditions.<sup>20</sup>

Figure 17 depicts a large wild yak, with four legs, a massive body, a bushy tail, and a raised head with curved horns extending upward, not a lowered head with horns protruding forward. The yak is depicted in silhouette. It is pecked into the glacially polished surface of a large boulder. The yak is not being hunted. Rather, like Figs. 9 and 10, it may be a symbolic depiction of a wild yak.

Figure 18, from the same boulder as Fig. 17, depicts a rider on horseback aiming a bow and is a depiction

Fig. 18. Equestrian shooting from a bow, Big Rock site.



of skillful riding. The depiction is mostly in outline. The edges of the pecking appear sharper and better defined than those of Fig. 17, indicating a different and possibly more recent composition. The rider uses a long single bow rather than a composite bow. The rider appears to wear a headdress or hat, perhaps a helmet. The horse has a bridle and a saddle. The foot position of the rider suggests stirrups although they are not depicted, which, as previously noted, is significant for dating. The trapezoidal figure on which the rider sits on the back of the horse is suggestive of the shape of a saddle carpet or felt. These elements<sup>21</sup> suggest that this depiction may be a more recent composition than the yak in Fig. 17.



# **Rock Pile gallery**

The Rock Pile site is located in the Pamir region at an altitude of 4000 meters. The site is on a terrace high above the Wakhan River, where a large outcrop of dark polished rock is exposed. The rock outcrop is broken into smaller boulders and most display rock art. Many of the carvings depict ibex, which, as previously noted, is the most common subject of rock art throughout Wakhan. Figures 19 and 20 depict ibex, but in notably different styles. The panel shown in Fig. 19 depicts three ibex in silhouette. The top ibex has two legs, a short tail, a long neck, curved horns and outstretched legs, as though running or leaping. Below it is another ibex whose horns, depicted as a single horn, seem to fit into the space between the front and rear legs of the upper ibex. This middle ibex also has two legs, a short tail, a long neck, and appears to show a slight beard. It is unclear if the upper ibex is depicted with a beard or not. Below the middle ibex is a small ibex that is not as well defined as the upper two ibex. The front legs of the lower ibex are shorter than its

rear legs, perhaps as though leaping. All three seem to form a unified composition with the same style of execution, form of depiction and degree of repatination. The whole composition and spacing of the three ibex suggests a group of ibex running or jumping together and can be compared to similar ibex depictions from the Aq Jilga site in the Tajikistan Pamir (Ranov 2001, pp. 132–38).

The panel shown in Fig. 20 depicts three ibex. The top left ibex is depicted in outline, with four legs and large curved horns that appear to join at the end. It is facing another ibex that is depicted in silhouette (partially cut off in the figure). The horns of both ibex are exaggeratedly long, and those of the top left ibex are very exaggerated as though emphasizing this aspect of the animal. Ibex horns are associated with spirituality and even today are often placed at religious shrines.<sup>22</sup> Below the top left ibex is a small stick-figure ibex showing two straight legs and a downward-curving tail. Its head merges with the front legs of the upper ibex. The degree of repatination of all three ibex is similar, suggesting they were composed at about the same time, although they are all in different styles.



Fig. 21. Two yaks, Afghan Pamir site.

Figures 21–23 depict yaks in silhouette, with the body fully inscribed. They share the stylistic motif of massive depiction of the animals, seemingly emphasizing strength and power. The two yak depictions shown in Fig. 21 are similar in style and composition.<sup>23</sup> Both depict a yak in silhouette, with head lowered and curved horns prominent in front, a similarity they share with wild yak depictions from southern Siberia, Mongolia and Kazakhstan (Ranov 2001, p. 143). Both show the characteristic bushy tail

and the large shoulder hump of the powerful animal. The upper figure shows four legs, but the lower figure shows only two legs. The lower figure has a darker color, closer to that of the surrounding rock, suggesting more repatination than the upper figure. Hence, although the depictions are stylistically similar, the lower figure, due to the degree of repatination, appears to be older than the upper figure. Below the upper yak and in front of the lower yak is a depiction of another animal. It is lighter in color than either yak, showing less repatination. The long tail is not typical of an ungulate, nor is the elongated muzzle. It may be a wolf, which is a common animal on the Pamir. Behind the upper yak is a rider on horseback. The depiction is not detailed and the execution is less precise than that of the yak, suggesting that it may have been composed separately rather than being a unified, contemporaneous hunting scene depiction.

The panel shown in Fig. 22 depicts two yaks in profile silhouette. The lower yak is several times larger than the upper yak, although both yaks are stylistically and compositionally similar. Both yaks show four legs. Their bushy tails are not exaggerated in size,

and are not raised high, but rather extend rearward. Their heads are lowered and their horns extend forward. The horns of the lower yak appear in a full circle and those of the upper yak may also be in a full circle, but a fracture line in the rock surface makes this difficult to discern. A large fracture line runs through the rear portion of both figures and shows lichen growth, indicating that the depictions were made before the fracturing occurred. Fracturing is a feature of weathering, especially in a

Fig. 22. Two yaks, Afghan Pamir site.





Fig. 23. Yak, Afghan Pamir site.

high altitude environment subject to extremes of heat and cold. Above the horn of the lower yak are several outline drawings of what appear to be ungulates – perhaps big horn sheep, which are resident in the Pamir. The massive stylistic quality of both yaks is remarkable and seems to emphasize the power and strength of the animals.

The panel shown in Fig. 23 depicts a large yak in profile silhouette. The yak has its head lowered and its large curved horns forward, as though in a defensive or aggressive posture. The horns, like those in Fig. 22, appear to be in a full circle. The depiction shows only two legs. The characteristic bushy tail extends rearward, and a fracture line obscures the final portion of the tail. The depiction appears to be heavily repatinated, but clearly shows the pecking technique which was employed. Several other symbols appear on the panel, but they have no obvious significance or relation to the yak. The massive quality of this yak figure emphasizes the strength of the animal.

The panel shown in Fig. 24 is a palimpsest and depicts two large vaks in profile. They are composed in silhouette. Both depictions show four legs, lowered heads with horns thrust forward and raised bushy tails. Although they are in silhouette, with the interior pecked, the outer edge of each figure appears to be more strongly pecked than the interior. This is especially true of the upper yak, which has a fully defined silhouette head and horns. The tail is also strongly defined, but shows some repatination. This style of composition is comparable to that found at the Aq-Jilga site (3800m) in the Pamir region of Tajikistan. Ranov (2001, p. 126) described the technique as "first the contour of the drawing was carved with a sharp object, then its inner side became shaded ... and then sometimes ground down ... [so that] their color didn't differ from that of the surface." Ranov noted that this technique appeared unique for the Pamirs. Ranov (2001, p. 137) commented that the manner of representing a yak, in which "a massive body presents a contrast to a small head and thin legs," is unique and



Fig. 24. Wild yak palimpsest, Afghan Pamir.

is not found elsewhere in Central Asia. The yaks in Fig. 24 best exemplify these Pamir characteristics and so can be linked to the Aq-Jilga site in adjacent Tajikistan, which Ranov tentatively dates to the "very beginning of the first millennium BC."

In the center of the upper yak is an ibex figure, with exaggeratedly large curving horns. Above the back and head of the upper yak and above the head of the lower yak are thinly inscribed smaller ibex figures. Below the lower yak is another animal, difficult to identify. It may be an ungulate, as there is a suggestion of curving horns, but the repatination makes it obscure. The repatination of the main animal figures appears equal. The overlay of a stylized ibex on the body of the massive yak is an intriguing palimpsest, showing important game animals of the Pamir.

The panel shown in Fig. 25 depicts two argali heads, head on, which are readily identified by the distinctive shape of the horns. Argali, commonly known as Mar-





co Polo sheep, are big horn sheep indigenous to the Pamir and were described in the account of Polo's 13th century travels through the Pamir (Polo 1871). The depiction of argali is less common in Wakhan than that of ibex, and this head-on depiction is unusual. Argali horns also decorate shrines in Wakhan, and argali are associated with the spiritual world. The argali in this panel are depicted with ears and have central "antennalike" protrusions from the middle of their heads and a single dot on their foreheads. These last two elements make them seem "tamgha-like"24 and suggest a symbolic or spiritual significance to the depictions.

The panel also has an ibex in silhouette at the lower left, and below the upper argali head is an anthropomorph, with arms outstretched. It is weathered and difficult to see clearly. To the right of the anthropomorph is an unidentifiable figure,

almost like a torso, but not recognizable. All of the rock art in this panel is very weathered and repatinated, suggesting considerable age.

The panel shown in Fig. 26 depicts an unusual and stylized anthropomorph, whose round outline head has two eyes. From the body-right side of the head is a zig-zag line. The rock panel is broken on bodyleft side of the head, and if there was a corresponding zig-zag line, it is now gone.<sup>25</sup> The anthropomorph has a longish neck and two arms that are bilaterally symmetrical and have zig-zag angular bends that parallel the line coming from the head. The part that would be the hands is very long, and neither hands nor fingers are depicted. The body or torso is depicted in silhouette with a tapered waist. The legs extend to the knees, but the knees bend backwards, almost as though squatting, or sitting with legs spread. Such a posture cannot readily be depicted on a two-dimensional rock surface. From the waist (body left) is a line extending out, with a thick part at its end, but the rock is broken, and whatever may have existed beyond is lost.<sup>26</sup> Extending down between the legs is a line, but it bifurcates to form an oval, open (uncarved) in the center. The oval connects with an unusual design of two circle outlines, with a dot in the middle of one and a swirl or half circle in the middle of the other. These are connected by a horizontal line that joins the oval shape mid-line, with a vertical line descending down from the center of this horizontal line. The inner part of each circle design descends as though forming legs.



Fig. 26. Anthropomorph with rays from head.

Although this lower figure displays bilateral symmetry, it is not identifiable as either an anthropomorph or a zoomorph. One could ascribe sexual symbolism to a phallus connecting to the oval shape, but the odd angularity of the upper human design suggests a ritual or possibly shamanic function.

## Conclusion

Afghanistan's remote, high altitude Wakhan District has retained numerous rock art sites. The sites have remained largely unknown and undisturbed due in large part to the difficulty of visiting the area. On the basis of stylistic and content comparison with other, more well-studied high mountain sites in Central Asia and South Asia, the sites appear to date from the Bronze Age through the Iron Age and into the modern historical era. The rock carvings range in altitude from

areas that are now permanently settled to areas that, due to high altitude, could only be used seasonally. The human usage depicted evidences hunting of wild game (ibex, argali, yaks) and trans-regional trade that followed what has become known as the Silk Road. These depictions portray the progression of human usage of Wakhan.

The rock art also provides data on the symbolic concepts of the high mountain Pamir-Hindukush regions. From early visitors to current residents, continuing concepts of the spiritual world are evidenced in the rock art and shrines of Wakhan. This continuing dynamic concept is characteristic of the Pamir-Hindukush-Karakoram region and demonstrates linkages to concepts of shamanic people of the steppes of Central Asia.

The people who left rock art records in Afghanistan's Wakhan and Pamir, by comparison of their rock art, may be linked to hunters of the Eurasian steppe and subsequent Scythian/Saka nomads. Were some compositions made by the early nomadic huntergatherer groups that moved into the Pamir following the Last Glacial Maximum (LGM), 14,000-10,000 years ago, that is, at the start of the Holocene? At this point, without any excavation that might reveal tools or a faunal record, it is impossible to say. Malassé and Gaillard (2011) show that the early mountainous hunters disappeared from the Pamir region 5000-4000 years ago, as the region grew more arid and the bio-

diversity necessary for their lifestyle decreased. They also note a concurrent rise in a pastoralist lifestyle. Did the nomadic hunters begin to settle and adopt a transhumant lifestyle? Did Wakhan have more extensive forest cover in the first half of the Holocene that was burned to establish rangelands, as Miehe et. al. have proposed for the southern flanks of the Hindukush-Himalaya and the Tibetan plateau (Miehe et al. 2009a; 2009b)? Without pollen and charcoal studies we cannot know. Were some of the compositions made by Bronze Age people that were part of the "mobile pastoralist network" moving within the "Inner Asian Mountain Corridor" (Frachetti 2012) or more specifically, Andronovo people utilizing transhumant herding to exploit the Pamir ecological niche (Kuzmina 2008, pp. 63-64)? Again, without excavation to reveal a faunal record or lithic or metal industries that can be associated with known cultural periodization, we cannot know. In the adjacent Pamir region of Tajikistan, chariots depicted in the "from above" perspective have been described from the Aq-Jilga site (Ranov) and linked to Andronovo people (Kuzmina 2008, p. 57). Despite the proximity and similarity of landscape, so far we have found no chariot depictions in Wakhan. Such depictions are unknown after the early Iron Age (Jacobson-Tepfer 2012), and suggest the Aq-Jilga depictions were made by Saka people at the beginning of the first millennium BCE (Ranov 2001). The presence of Saka people in Wakhan seems probable, based on stylistic elements of the rock art that suggest composition by Scythian/Saka people venturing into the Pamir for hunting. Depictions of skillful horse riding and archery, i.e., shooting a composite bow while riding at full gallop, strongly suggest Saka/Scythian presence. Although the evidence of Saka culture is widespread in the Tajikistan Pamir region, specific archaeological evidence to support this attribution of stylistic elements of the rock art has not been located in Wakhan. Even so, the rock art evidence from Wakhan and the Pamir supports the hypothesis of a circulation of Scythian/Saka people from Eurasia into the upper Indus regions of present-day Pakistan (Gilgit-Baltistan) and India (Ladakh).

We would also like to know when wild yaks became extinct in Wakhan and to what extent improved weaponry and horsemanship contributed to their extinction. Faunal remains at old hunting camps would help answer this ecological question. The realization that Bronze Age hunters and herders utilized the same routes, water sources and mountain passes that were used by travelers along the historical Silk Roads (Kuzmina 2008, pp. 64, 108) leads us to suppose that historical sites in Wakhan may overlay prehistoric and proto-historic sites. The rock art record at several Pamir sites indicates a long period of human usage. In Wakhan, the historical Tibetan material can be dated with a relative degree of accuracy to the midseventh through mid-eighth centuries CE with the numerous depictions of riders on horses equipped with saddles and bridles following in sequence after the Tibetan period. Lichenometric comparative studies might help ascertain the chronology of the historical art.

The rock art and other archaeological material of Afghanistan's Wakhan and Pamir has neither been thoroughly studied nor documented. On-site research, including pollen and radiocarbon studies, would contribute greatly to the important theoretical questions mentioned above. This article presents a preliminary survey of the prehistoric and protohistoric rock art of Wakhan and the Pamir. Altogether, this preliminary study indicates that Afghanistan's Wakhan and Pamir regions would richly reward further research to reveal the ecological and cultural heritage of the Roof of the World.

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## Notes

1. Wakhan was the last settled region before crossing the Pamir from west to east, and the first settled region reached when crossing from east to west. Villages in Wakhan today range from 2600 to 3270 meters in altitude and are located along side streams flowing into the main Panj River. This article addresses the part of Wakhan within Afghanistan, where it constitutes the district (*woluswoli*) of Wakhan.

2. For more on the history of the Silk Road and routes through the Pamir, see Barfield 1989, Beckwith 2009, Grousset 1970, Waugh 2010, Whitfield 2004, Zelinsky 1965. For a summary of exploration in the Pamir, with useful maps, see Middleton and Thomas 2008.

3. The Tang Annals were translated into French by Édouard Chavannes and first published in 1903. The Old Tibetan Annals (OTA), interestingly, were obtained by Stein on this expedition. Subsequent scholarship utilizing these and other sources has produced more detailed analysis. See Beckwith 1987 and Denwood 2009. See Dotson 2009 for an annotated new translation of the OTA.

4. This was Stein's second Central Asian journey, recounted in Stein 1912, pp. 63–88, and Stein 1921, pp. 60-72. His conclusions regarding the famous 747 CE battle between the Tibetans and the Chinese are in Stein 1922.

5. See Ferrandi 2010 for an overview of rock art in Afghanistan and the Hindukush, in which he notes the research lacunae for Wakhan and the Pamir. Research expeditions in the 1970s largely focused on geology and natural history, with brief mentions of rock art and cultural heritage. See Agresti 1970; Naumann 1973; Dor 1974; Gratzl et al. 1978; Petocz 1978.

6. For more on Scythian/Saka mastery of horse riding, see Davis-Kimball et al. 1995, pp. 193–95. A 'Scythian' bow is depicted in Artamonov 1974, Pl. 44. Scythian/Saka presence in the Pamir in the 8<sup>th</sup>-6<sup>th</sup> c. BCE is discussed in Davis-Kimball et al. 1995, p. 235, and Litvinskij 2002. Jettmar (2002, pp. 96–101) and Hauptmann (2007, pp. 26–28) provide a chronology placing Saka/Scythians in the Gilgit and Pamir regions in the 1<sup>st</sup> millennium BCE.

7. Repatination of rock art, that is, the gradual return of the weather-induced patina, is a physical indicator of age. The more the art is repatinated, the older it is. Stylistic elements are also useful indicators of age. For a thorough discussion of Central Asian rock art see Tashbayeva 2001, especially the section on petroglyphs of Tajikistan by Vadim A. Ranov (Tashbayeva 2001, pp. 122–48), which includes the Langar

site on the north (right) bank of the Panj river in Wakhan.

8. Pamirs are high-elevation U-shaped valleys, distinctive to Central Asia.

9. Initial human foraging in the comparable high altitude Tibetan Plateau is attested from at least the Late Paleolithic (13,000 calendar years BCE) (Madsen et al. 2006; Rhode et al. 2007; Aldenderfer 2011).

10. Although Paleolithic tools dating to about 800,000 BCE have been found in loess deposits in southern Tajikistan, "the region may have been largely uninhabited during the Last Glacial Maximum and sites dating from 34,000 – 14,000 BCE are virtually unknown" (Davis and Ranov 1999, p. 186).

11. Composite bows are often termed Scythian bows (Reisinger 2010). The Scythians were masters of mounted archery and dominated the central Eurasian steppe region for much of the first millennium BCE (Barfield 1989, pp. 46–51; Beckwith 2009, pp. 58–70; Davis-Kimball et al. 1995, pp. 193–95). Access to the Pamir grasslands and wild game was undoubtedly made easier by horse riding and yak hunting made easier by the compact, powerful compound bow. For more on horses and the development of riding by steppe people, see Anthony 2007, Di Cosmo 2002 and Drews 2004.

12. See Mock and O'Neil 2004 for a report on 2004; Mock and O'Neil 2005, 2006a, 2006b, 2007a for results of 2005; Mock and O'Neil 2007b and Mock 2011b for results from 2006 and 2007; and Mock 2011a for results from 2006–10.

13. For studies of the archaeology of the Tibetan Empire in Wakhan see Mock 2013a, 2013b, 2013c.

14. No chronology has been established for Wakhan. Rock art may date to the Bronze Age, or even earlier to the beginning of the Holocene. See the discussion at the conclusion of this article.

15. Wakhan, like the rest of Afghanistan, is subject to iconoclasm, digging and looting. The sites discussed in this article have not been fully documented or studied and no excavation has been done. Until and when such work is complete, I have chosen not to reveal publicly the actual locations and instead have used English translations of the Wakhi and Kyrgyz toponyms. I am happy to communicate more specifically with interested scholars and welcome collaboration.

16. The Indus river system links Ladakh with the Gilgit-Baltistan region of modern Pakistan, where the joint Pakistani-German project begun by Karl Jettmar and continued by Harald Hauptmann has identified over 30 sites, 30,000 petroglyphs and 5,000 inscriptions. This is documented in two series: *Antiquities of Northern Pakistan* (ANP, five volumes), providing selected specialized articles on the subject, and *Materialien zur Archäologie der Nordgebiete Pakistans* (Materials for the Archaeology of the Northern Regions of Pakistan – MANP, nine volumes) which is devoted to the publication of complete rock art sites in monographs. For more information see <htp://www.rzuser.uni-heidelberg.de/~u71/kara/intro.html>.

17. This dark patination can be correlated with strongly varnished boulders typical of the nearby Batura (Hunza Valley) glacier advance period of the early Holocene, 10.8–9.0 ka BPE (Owen et al. 2002).

18. Currently, wild yaks (*bos mutus*) are found only in a small part of Ladakh and in the Chinese provinces of Tibet, Qinghai and Xinjiang (Buzzard et al. 2010; Fox et al. 2004; Harris and Leslie 2008; Schaller 1998). Domesticated yaks (*bos grunniens*), however, are kept by both Wakhi and Kyrgyz residents of Wakhan (Shahrani 1979).

19. An early European description typifies their habitat: "The wild yak occurs on the Tibetan Plateau at elevations of 3,000–5,500 m, where it inhabits the coldest, wildest, and most desolate mountains" (Blanford 1888, p. 491).

20. See John Bellezza's website <http://www. tibetarchaeology.com/september-2010/> for images and additional discussion of the pre-Buddhist significance of these symbols. I am grateful to John for reading several drafts of this article and offering useful comments and expert advice.

21. The "Ambassadors' Painting," a Samarkand mural painting from an aristocratic house in the ancient city of Afrasiab, dated to the mid–7<sup>th</sup> century CE, attests to these elements of horse gear in Central Asia. See Whitfield 2004, pp. 110–11.

22. See Mock 2011a, p. 122, for specific discussion of ibex horns at shrines. See also Mock 1998, pp. 45–46, for a broader discussion of the association of wild ungulates with the spiritual world throughout the Pamir-Hindukush region.

Shatskiy 1966, p. 112, discusses the sacred significance of wild ungulate horns in ancient Central Asia.

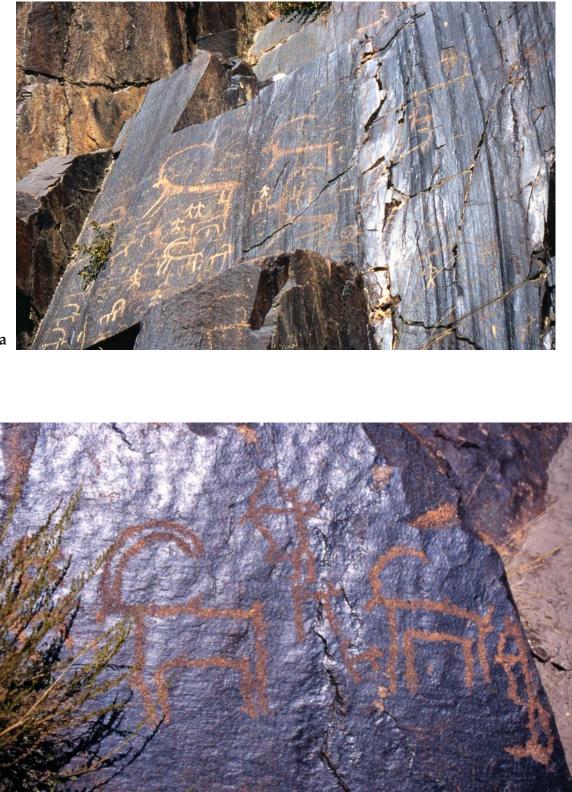
23. Ronald Petocz published a photograph of a similar yak depiction from the Waghjir (Wakhjir) valley of Afghanistan's Little Pamir (Petocz 1978, p. 21).

24. Tamgha and tamgha-like rock art found in the Pamir and upper Indus have been ascribed to Sogdians. See Passarelli 2010, pp. 74–75, for discussion. Tamgha are wellknown as clan symbols and carpet motifs among Turkmen and Mongol people.

25. "Schematic, anthropomorphic figures with rays on their heads are a particular feature of Siberian and Central Asian rock art. Their bodies may be curvilinear, and some of them are missing legs or hands, but they are always depicted with rays either on the head or even replacing it" (Devlet 2001, p. 50). Devlet suggests such figures represent shamanic or supernatural beings.

26. Human figures with a rod extending from the waist and ending in a ball, identified as a mace, have been studied in the Altai, Xinjiang and Ladakh (Francfort et al. 1990, pp. 3–5) and ascribed to the Bronze Age. Jacobson-Tepfer (2012, pp. 4 and 12), however, identifies the Altai rock-art depictions of these objects as daluur, "usually made of yak hair or foxtail mounted on a stick and used in hunting small animals to distract the intended prey."

Plate III



a

b

Plate IV



b