

CHAPTER 1

The use of donkeys and mules among the ancient north Arabian nomads in the light of the epigraphic evidence

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Epigraphic materials – the inscriptions and the drawings, as well as the prehistoric rock carvings – are important records for studying the evolution of the environment and the population of the North Arabian basalt desert (Syro-Arabian steppe) through the ages. The materials, which will be used and discussed here, are well-known in the research as Safaitic inscriptions and drawings, and they can be found in the OCIANA digital database.

The Safaitic epigraphic materials (inscriptions and drawings) were carved by the Arab nomads of the north Arabian desert steppe (Syro-Arabian steppe) between ca. 200 BCE and 300 CE¹ (see the map at Fig. 1). These materials (known by some scholars as graffiti) are viewed as a cultural register that documents in word and drawing not only the daily life of the Arab nomadic tribes in all its aspects (social, religious, economic etc.), but also the domestic and wild animals of the area in that period.

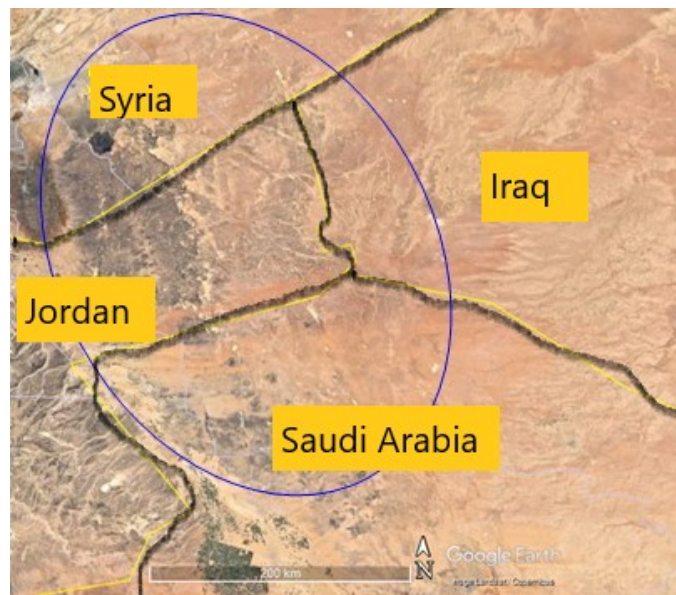


Figure 1: Map of the North Arabian desert steppe (Syro-Arabian steppe), showing the areas where the Safaitic inscriptions were found. Based on 2022 © Google Earth.

As evidenced by the inscriptions, the writers of the inscriptions were camel-breeding nomads. I have created statistics on the frequency of occurrence of representations of animals or animal names (in both drawings and inscriptions). This shows that the she-camel and the camel bull come first before other animals. The indication is that the majority of these tribes were very likely camel-herders / fully nomadic tribes in their heyday, although some of them also held sheep and goats. Thereafter, they became increasingly sedentary and began to practise simple farming, and raised sheep and goats.²

This paper aims to discuss the evidence relating to two species of equids: asses (both domestic and wild) and mules, as detailed in the Safaitic inscriptions and drawings, as well as the use of those animals among nomads. The equids are mostly mentioned in the inscriptions with the terms 'r, 'yr and 'm. In addition, the drawings of animals

accompanying the inscriptions have the distinctive features of donkeys and mules (hybrids), and some figures were drawn individually or within scenes using two techniques, schematic or hatched.³

In addition to what was stated by Macdonald (2019) and Brusgaard (2019) about the references on wild asses, as well as on wild ass hunting (Masseti 2015), Denzau and Denzau (1999), within their excellent and comprehensive work, mentioned the classical historical sources such as the Greek Xenophon (ca. 430-420 BC), as well as Arabic poems and reports of European travellers through to the mid-twentieth century.⁴ In this context, a brief overview of the equids in the region will be presented, as they can be found in other references.

In the prehistoric period of the area in which the Safaitic inscriptions were recorded (the Syro-Arabian steppe), there were many species of equids. In the al-Azraq Basin of eastern Jordan, wild equids were a very common species during the Epipalaeolithic period (Martin *et al.* 2016, 214 f.). In the region of Dhuweila in eastern Jordan, numerous carvings of animals were found deriving from the 7th millennium BC, which were identified by Alison Betts. A few of these representations show animals without horns and occasionally short manes. One of the animals presented has a long hairy tail. According to Betts, the form of the mane suggests that the animal might represent an onager or wild ass (Betts 1987: 221).

The wild ass was depicted in petroglyphs from various places in the Arabian Peninsula. It is recorded from north and central Saudi Arabia. The petroglyphs show the equids (donkeys) as individuals without content, and some of them have also been hunted. For example, the Neolithic petroglyph of a hunting scene from Shuwaymis in Saudi Arabia shows a hunter with bow and arrow and dogs preparing to hunt a wild ass (Khan 2013: 453, fig. 8), as well as a petroglyph of a large wild equid in Jubbah, which has been interpreted as representing the African wild ass (*Equus africanus*) (Guagnin 2018: 7-11).

The domesticated donkey in Arabia in the petroglyphs appeared only once in the Early Bronze Period, ca. 2000-3000 BC (Tchernov 1974: 212, 247 f.).

The first domestication of donkey was in El-Omari / Egypt dating to ca. 4600–4400 BC. In the Arabian Peninsula, with presumed native donkeys, domestication occurred later, dated to the third millennium BC and in the northern Levant and Mesopotamia. Moreover, there is evidence of early domesticated donkeys from the late Uruk period (ca. 3600–3100 BC) (Milevski and Horwitz 2019: 98, 99).⁵

In this context, an interesting article on the equids (horses, asses and hybrids), has been published by Macdonald (2019). The elaboration focused on a collection of rock art drawings depicting various images of equids from the Syro-Arabian desert, and presented valuable suggestions about the various species of equids shown in the drawings. Furthermore, Macdonald discussed linguistic explanations of terms related to equids, and additionally provided historical information. Moreover, he presented persuasive suggestions, even if there are matters on which other opinions can be held. In this context, one should also mention the work by Brusgaard, *Rock Art in the Nomadic Landscape of the Black Desert*, in which she presented constructive discussions about equids (Brusgaard 2019: 62 f.). There is also a brief reference to the donkey found in published works on Safaitic or rock art.⁶

The drawings represent a variety of examples with varying degrees of accuracy, showing the skills and ability of the persons who drew them, such as drawing the proportions correctly and representing the main details of the equid's bodily features, which are important in identifying the animals in question. There are also poorly accurate drawings, but they show the body in general, and sometimes the drawn presentation is overstated and disproportionate; however it has to be borne in mind that the inscribers⁷ were ordinary people, not artists drawing for a zoology book. Also in view of the fact that

occasionally, incomplete drawings or some fantasy drawings were found, the non-detailed nature of the representations is not unexpected. In drawings of animals of a common family, such as equids, some features appear rather similar while others are different, such as horse-like, donkey-like. Here it is important to consider the shape of the head (e.g. Fig. 2), the tail (e.g. Fig. 3), the neck, the ears, the mane, the genitals and extremities etc. All these observations are very important for distinguishing equids, especially when identifying an equid as purebred or hybrid. The issue is not trivial, and it is difficult to make a decision or hypothesis about it in view of the accompanying inscription describing the drawing with a term whose meaning is known.



Figure 2: A set of examples of Safaitic drawings of equid heads.



Figure 3: A set of examples of Safaitic drawings of equid tails

In the following, the terms, which depicts the equid (i.e. the donkey), will be explained as exactly as possible in the light of the Classical Arabic and Semitic languages and inscriptions, together with comments on the accompanying drawings, including a discussion of previous suggestions on this topic in general.

'tn

In general, almost all evidence in Safaitic presented the possession of *'tn* by the authors.⁸ It has been interpreted as “she-ass” (Al-Jallad and Jaworska 2019: 49). Macdonald pointed out that, as in Arabic, the term *'tn* represents the domestic donkey (jenny) (Macdonald 2019: 155, 157). About two-thirds of the evidence is accompanied by drawings of the donkeys, depicting their main features in both schematic/outline and hatched/infill drawings. The following details were particularly highlighted: the shape of the head, long ears, mane and long hairy tail with a tuft. Furthermore, the udder with two teats is sometimes clearly drawn. Most depictions show the donkey individually, not in scenes from daily life such as hunting or fighting scenes, see (Macdonald 2019: 155). This indicates its use for simple needs. In some depictions, no distinguishing features of the female donkey were drawn, there were only images representing an equid in general.

There are two images of equids from Jebel Qurma, described in the accompanying inscriptions as *'tn* “donkeys”, which showed donkey-like characteristics, with a heavy round hanging belly. This could be translated as a female donkey (Brusgaard 2019: 67, Fig. 4.39a,b). In image (b) it is depicted with an udder but no teats; therefore, the two donkeys seem to be fat, i.e. obese, or most likely pregnant.

In one of the unique hunting scenes accompanying the inscription (Ababneh 2005, 445) Fig. 4)⁹ two donkeys (female and male) are shown. The torso of the male image is depicted with a horizontal line in the middle of the torso, dividing the torso into a dorsal and a ventral half. A subdivision takes place by some vertical lines. In addition, the male genitals, a tail with a tuft and the head with ears are drawn. The torso of the female is depicted with a grid-like line structure that could represent a division into squares or rectangles, on the lower abdomen there is an extensive bulge with curved lines, which probably means that she is obese or pregnant. Furthermore, the bodily features are a large head with ears, mane, (the udder not drawn), but large teats and a tail with a tuft. The scene shows a female donkey being hunted by a man on foot with a bow and arrow. In this case *'tn* definitely indicates a female wild ass.



Figure 4: photo represents an inscription and drawings of two donkeys (female and male) (Ababneh 2005, 445). Photo: M. I. Ababneh

An image from Jebel Qurma depicts an equid being hunted by an archer; the equid is also described in the accompanying inscription as *'tn* “she-ass”. This suggests that this equid represents a female wild ass (Brusgaard 2019: 68, Fig. 4.40).

In Arabic *'atān* means “she-ass [domestic and wild]” (Lisān, *'tn*). It occurs in many Semitic languages with the same meaning as female donkey, Akkadian *atānu(m)* (AHw: 86), Hebrew אָתָנָה (Donner 1987: 116), Syriac *'atānā* (Smith 1903: 33), Official Aramaic *'tn* (DNWSI: 136), and Ugaritic *atn* (DULAT: 122).

It is possible to state that *'tn* in Safaitic represents both a female donkey “she-ass” (*Equus asinus*) and also a female wild ass, “wild she-ass” (*Equus hemippus*).¹⁰ In some examples in which the equid is mounted and has horse-like features and is identified as *'tn* (she-ass) in the accompanying inscription, it could be explained as a horse-donkey hybrid, see (Brusgaard 2019: 33, 114, Fig. 3.13, Fig. 5.12; Ababneh 2005, 685).

ḥmr

This animal is known in many Semitic languages as Arabic *ḥimār* “the male donkey, both domesticated and wild” (Lisān, *ḥmr*), cf. Hebrew מָמָר, מְמָר (Donner 1995: 364), in Syriac

ḥmār “ass” (Smith 1903: 147), cf. Akkadian *imēru(m)* “donkey” (AHw: 375), Ugaritic *ḥmr* “donkey” (DULAT: 363), in the Hebrew, Official Aramaic and Palmyrenean inscriptions *ḥmr* “male donkey, ass” (DNWSI: 383), as well as in Sabaic “ass, wild ass, onager” (Beeston *et al.* 1982: 68); according to Sima, the term *ḥmr* in Sabaic and Minaean inscriptions denotes both the domesticated *Equus africanus f. asinus* and also the wild *Equus africanus* that is hunted (Sima 2000: 96). In Safaitic, it has been translated as “donkey”, see (Al-Jallad and Jaworska 2019: 85), also “jackass” (Macdonald 2019: 155, 157).

It occurs in Safaitic in sparse evidence, some of which indicate that the author owned the donkey. Some of the inscriptions are accompanied by a drawing of an individual ass.¹¹ In the other example, the inscription is accompanied by a drawing of two asses. It seems that one is male while the other is female. Further differentiation criteria of them are the presence of a hairy tail, a neck that is a bit longer, average head size, forward-facing ears, and one is shown with male genitals, while the other animal appears with a large hanging belly; this indicates an obese female, or it may indicate a pregnancy.¹² In case of the inscription is not accompanied by a drawing, the context suggests that the author pastured (*r'y*), e.g. (CIS V 898, OCIANA ... *wr'y h-ḥmr*, which has been translated “and he pastured the donkeys”). The term *h-ḥmr* can be interpreted variously; the subsequent substantive after the verb *r'y* can be interpreted in three different ways: place name, animal name or grass name. In the present case, there are two ways of explaining *ḥmr*, either as a donkey or as a kind of grass. Both interpretations are meaningful and verifiable.

It appears that *ḥmr* in Safaitic represents a male donkey (*Equus asinus*). In the case of plural form, it refers to both genders, “the donkeys”.

ʿr

In Arabic, the term *ʿair* is used for both the wild and the domesticated male ass, (Lisān, *ʿyr*) It occurs in Hebrew as *עֵר* “male donkey” (Donner 2007: 960), Ugaritic *ʿr* “donkey, ass” (DULAT: 178), cf. Akkadian *ḥārum* “male donkey” (AHw: 328), donkey stallion” (ACDA: 109). In Safaitic and according to Littmann, the *ʿr* can only denote a domestic ass (Littmann 1943: 122), which means that *ʿr* represents a purebred donkey. It has been interpreted as “ass, donkey” e.g. (WH: 57; CSNS: 182; Ababneh 2005: 87, 88), as well as “onager” (CSNS: 259). It has been newly interpreted as “wild ass” (Al-Jallad and Jaworska 2019: 54). In OCIANA, it is interpreted as “hybrid” (i.e. hinny, mule).¹³ This interpretation was suggested depending on Macdonald's article (2019). The evidence of *ʿr* in Safaitic are the most frequently occurring in this study, where the majority of texts are accompanied by a drawing of an equid. The contexts indicate that the authors of the inscriptions owned the *ʿr*.

It is really difficult to distinguish all the drawings, because they differ according to the skills and abilities of the persons who engraved them. Some of the drawings show the animal with general donkey features, e.g. (Ababneh 2005, 443, 446). Some figures were drawn individually, unmounted, being hunted, or being mounted; some look much more ass-like, others more horse-like or in-between. In this matter, with regard to the mounted equids *ʿr*, I completely agree with Macdonald, as he discussed in detail many examples of those representations, concluding that most of the animals appear to have a combination of horse and ass characteristics, which would suggest that they are hybrids of both species and both sexes (although males predominant) (Macdonald 2019: 157, 165).

However, in the case of the equid being hunted and identified as *ʿr* in the accompanying inscription, it is reasonable to interpret it as a wild ass as in Arabic, and not as a hybrid. The best example is the hunting scene from Jebel Qurma, in which an equid (wild ass) is being hunted by an archer on foot, and this is described in the accompanying inscription as *ʿr* (Brusgaard and Ackermann 2021: 138, Fig. 9.4b = Brusgaard 2019: 33, Fig. 3.12). In this respect, there is another example, in which a male wild ass is being hunted by an archer (Brusgaard 2019: 66, Fig. 4.38), see (Fig. 5), in which a wild ass being hunted also

by two hunters on foot. Unfortunately, it is difficult to find indications about the animal in the accompanying inscription, especially in the last part, due to calcareous/lichen deformation on the stone. In this concern, I agree with Brusgaard as she has suggested a criteria in interpretation of 'r regarding the images from Jebel Qurma: (equids being hunted, "wild asses", equids being ridden "which could be horses, donkeys, or horse-donkey hybrids", and the associated inscription, if it refers to the equid as, for example, "an ass or a young equid") (Brusgaard 2019: 62 f.).



Figure 5: An unpublished scene of an inscription and drawing of a wild ass also being hunted by two hunters on foot. Photo: M. I. Ababneh

I concur with Macdonald's explanations and descriptions on the interesting drawing published by Harding (1969, known as the music scene), that the woman with a musical instrument (a lyre) is riding a domestic donkey or a mule. This also applies to his interpretation of the drawing accompanying the inscriptions (CIS V 2839, 2840). In those inscriptions the animal is identified as 'r (Macdonald 2019: 155). In addition to the suggestion of Macdonald, it should be noted that the necks of both animals (in both drawings) are very long and thin compared to the necks of the horse; moreover, the shape of the heads is different. It is only a hypothesis, but I would suggest that these wandering musicians are riding on particular animals, which could be some kind of hybrid (donkey and horse). Therefore these animals may not be local, but transboundary animals that came with these wanderers.

Cross-breeding can take place between wild asses and domestic asses, to increase the properties that are considered desirable. In this context it seems that the same method was used by the Şlouba (Şlayb) nomads regarding their famous donkeys, whose breeds have been considerably strengthened and enhanced by cross-breeding with wild asses. During their hunting journeys in Mesopotamia, they took a number of wild asses alive to mate with their domestic she-donkeys, as was documented by many travellers, mid-nineteenth and early twentieth century, such as Guarmani and Musil, as well as being reported by researchers, see (Denzau and Denzau 1999: 137). According to Jabbur, who wrote about the Şoluba: they claimed that when their she-donkeys are in heat in late winter, they let them graze on the steppe, where wild asses also graze, so that they can mate with their she-donkeys (Jabbur 1988: 350). This method of hybridisation has recently acquired genetic proofs. Recent genetic analysis has shown that the equid kunga (ANŞE.BARxAN) skeletons discovered at Umm el-Marra (2600-2200 BCE) were in fact

the earliest hybrids bred by humans, and the kunga were F1-hybrids between a female domestic donkey and a male Syrian wild ass (hemippe) (Bennett 2022 *et al.*: 1, 6 f.)

In the light of there being no evidence in the rock art (drawing) of wild ass capture, it is only a suggestion or a hypothesis that possibly the nomads were taking/capturing young/newborn wild asses and raising them together with their domestic animals, and later, when they were adult, using them to mate with their she-donkeys to get a strong breeds.¹⁴

In the limited occurrence of the form *ʿyr*, some of these inscriptions are accompanied by a drawing of an ass. This *ʿyr* form has been interpreted by Winnett and Harding¹⁵ as a singular form with a diphthong instead of the usual *ʿr* and translated as “an ass” (WH: 90). There is also another interpretation, as a plural *ʿiyār* or *ʿuyūr* “asses”, like in Classical Arabic lexicons and also depending on the accompanying drawings¹⁶ (WH: 441; Ababneh 2005: 124). This was also interpreted as “small hybrid,¹⁷ hybrid”¹⁸ (OCIANA). Additional information in Arabic is offered by Ibn Al-ʿAʿrābī, that *al-ʿayyir* means “the energetic mare” (Lisān, *ʿyr*). It has been interpreted as dominative *ʿoyayr* “small ass” (Al-Jallad 2015: 61), and recently as “small wild ass, young wild ass” (Al-Jallad and Jaworska 2019: 57). Macdonald suggested that in Safaitic *ʿ(y)r* was used for mules and hinnies of both sexes (hybrid) (Macdonald 2019: 164).

It appears that *ʿ(y)r* in the Safaitic represents both the male donkey (*Equus asinus*) and the male wild ass (*Equus hemippus*), as well as in some cases probably a hybrid (*Equus asinus* x *Equus caballus*) or perhaps (*Equus asinus* x *Equus hemippus*).

In view of these varying interpretations, with due respect to the researchers, it is more reasonable to explain each case individually, depending on the content of the accompanying drawing, and regarding the context of the text as regards the linguistic meaning of *ʿ(y)r*.

bġl (?)

In Arabic *baġl* means “mule” (Lisān, *bġl*). The oldest mention of the mule in Arabic came in Muhalhal’s poetry (ca. 530 CE).¹⁹ For a parallel, the term *bġl* “mule” occurs once in Sabaic (Beeston *et al.* 1982: 27; Sima 2000: 40-42).²⁰

In Safaitic, in the first publication of the inscription WH 3548, the reading of the last two letters part of the word is uncertain, *l slm bn ʿbd ʿhb(ġl)* “the mule (?) is by Slm son of ʿbd”. The republication in OCIANA which is certainly correct, is as follows: *l slm bn ʿbd ʿh-b{t}* “{is this mule}”,²¹ the reading of the last letter is uncertain. (Problematic, it can therefore be concluded that the animal *bġl* is not identified in the inscription). The important thing here is that the inscription is accompanied by a drawing of an animal; it definitely shows an equid with a fat body, a long tail, a large head bent downwards, a thick neck with a short mane and rather small ears; moreover, genitalia are not drawn. The question here is whether this equid represents a donkey or a hybrid (a mule or a hinny). (A mule is the offspring of a male donkey (jack) and female horse (mare), or is the offspring of a male horse (stallion) and a female donkey (jenny). This is problematic as it cannot be deduced from the picture alone. Concerning the crossbreeding (hybrid) of equids among the ancient Arab Bedouins, see the discussions by Macdonald (2019: 157 f.).

frʿ

In Arabic *al-faraʿu* (*ḥimāru al-waḥṣī*) means “wild ass” (Lisān, *frʿ*). It is attested in Sabaic as *frʿ* “wild ass” (Sima 2000: 59 f.), cf. Akkadian as *parû(m)* “onager, mule” (AHw: 837), “mule” (ACDA: 267). It occurs also in Hebrew אַרְנָה and אֲרָנָה “wild ass, onager” (Donner 2007: 1074). In Safaitic, it occurs in one evidence without any accompanying drawing (Winnett 1957, 784, OCIANA) *l shbt bn dky w tẓr h-frʿ* “By Shbt son of Dky and he was on the look-out for wild asses”. The context of the inscription reports that the author watched the wild ass / asses and it has been interpreted *n.col.* and

furthermore, translated as “he lay in wait for the wild asses” “wild ass” (Al-Jallad and Jaworska 2019: 69). For discussions on the closer identification of this wild ass, and to which species it belongs, see (Sima 2000: 61).

According to Thesiger, who was travelling in the south-eastern part of the Empty Quarter in the mid-twentieth century, the term *farra* [*fara*] was still used by the Arabs for wild ass (“I was anxious to find specimens of the wild ass (*farra*), which the Arabs told me lived around Jabal Samaini”, Thesiger 1949: 42). On a small plain below Jabal Samaini Thesiger and his travelling companion Bin Ghabaisheh hunted two donkeys *farra*, which were identified as feral donkeys by the British Museum (Thesiger 1949: 43; Thesiger 1977: 274).²²

shly

In Arabic *al-miṣḥal* “wild ass” is a predominant epithet [because of its braying] (Lisān, *shl*). It occurs in two Safaitic inscriptions,²³ which are accompanied by hatched/infill drawings of an equid representing a wild ass. The contexts inform about the ownership of the authors of these animals. It has been suggested that *shly* refers to the drawings accompanying the texts, and by comparison with the Arabic lexicon, it could represent a wild ass.

It should be noted that in ancient Arabic poetry the wild asses were sometimes referred to by their features, names and/or predominant epithets, and are sometimes directly mentioned as wild ass.²⁴ In this context, *shly* may represent a wild ass (*Equus hemippus*).

rd

This term occurs in Safaitic inscriptions as *rd*, *rdt*,²⁵ as well as the plural *rd*,²⁶ and also as the diminutive *ryd*,²⁷ “small wild ass”. It has been interpreted as wild ass (Al-Jallad and Jaworska 2019: 54, 55), “wild ass”, as well as *rdt* “female wild ass” *Equus hemippus*, the Syrian wild ass (Macdonald 2019: 156, 157; OCIANA).

First of all, a correction is necessary with regard to the inscription (Ababneh 2005, 327). At the time of publication, a hand copy was inadvertently used for interpretation. Here the appropriate term was wrongly illustrated and accordingly wrongly read, since the last character within the term was only indistinctly engraved. The thus interpreted word does not correspond to *rd*, but to *r*. Therefore, I offer this as a correction. See (Fig. 6).



Figure 6: Photo representing the inscription Ababneh 2005, No. 327.
Photo: M. I. Ababneh

The drawing accompanying the inscription (Ababneh 2005, 1032) (Fig. 7) represents a wild ass being hunted by a man on foot with a bow and arrow. Here I concur with Macdonald's explanation, that 'rd represents the Syrian wild ass *Equus hemippus* (Macdonald 2019, 156, 157).



Figure. 7: Photo representing the inscription Ababneh 2005, No. 1032.
Photo: M. I. Ababneh

The inscriptions. (Ababneh 2005, 944, 689) are accompanied by drawings of large animals, generally (i.e. equids); two animals seem to have been ridden, the genitals are clearly drawn. In image No. 944 (Fig. 8) represents a male 'rd and in the other image No. 689 (Fig. 9) a female 'rdt which is shown with an udder; the neck is quite long and the tail ends with a tuft. It is difficult to say whether it is wild or domestic, but in general a mounted animal is logically a domesticated animal. This agrees with the narration of Al-Jāhīz that 'ard was ridden. Or it could be a hybrid.



Figure 8: Photo representing the inscription Ababneh 2005, No. 944.
Photo: M. I. Ababneh



Figure 9: Photo representing the inscription Ababneh 2005, No. 689.
Photo: M. I. Ababneh

This term *ʿrd* is also found in many Semitic languages, as in Hebrew פָּרוֹד a loan word from Aramaic “wild ass” (Donner 2007: 1012), Official Aramaic *ʿrd* “wild ass” (DNWSI: 887), Syriac *ʿrādā* “wild ass” (Smith 1903: 427), in Akkadian as *ḥarādu* “wild ass” (AHw: 322), and also *araddu* “wild ass” (ACDA: 219). Nöldeke hypothesised that פָּרוֹד might be a synonym for פָּרָה and he compared it with Arabic *ʿard* “donkey” (Nöldeke 1903: 413). This term *ʿard* “donkey” is mentioned by Al-Jāhīz (1998: 339),²⁸ and is not found in Ibn Manẓūr's Arabic lexicon.

It appears that 'rd represents the Syrian wild ass (*Equus hemippus*), and in another case it may represent a domestic purebred i.e. a donkey (*Equus asinus*) or probably a hybrid.

Overview on the use of donkeys²⁹

In general, based on the epigraphic evidence, the use of donkeys and hybrids by the Safaitic nomads came in third place after the camel and the horse, which does not exceed the normal daily uses. In some hunting scenes equids were shown (i.e. donkeys or mules) being mounted by hunters, although they used horses and camels in fighting and hunting. The donkeys and mules were used for simple purposes, for example, to carry objects of herders and for the transportation of water etc. In more than 30 years of field work in the desert, we have observed that donkeys (*Equus asinus*) are used by shepherds in the region for their simple services. Unfortunately, when the donkey becomes old or sick and can no longer serve, it is abandoned in the desert. In 2008, we came across such a case: a donkey with an injured hoof (probably laminitis) has been abandoned to live in the wild (Fig. 10).

The use of donkeys by the contemporary Bedouins is related to their lifestyle. Those Bedouins who raise sheep and goats and do not migrate far into the desert often keep donkeys for their shepherds to load their supplies and ride move around. (Jabbur 1988: 148). These uses among contemporary Bedouins are largely consistent with those found in ancient Mesopotamia, where the asses were used as pack or draft animals, a conclusion derived from a small copper model found in Tall Agrab, of a group of four asses harnessed to a chariot; likewise the donkey as a pack animal is shown in a seal found in Ur (van Buren 1939: 34).



Figure 10: A donkey with an injured hoof, abandoned in the wilderness. Jordan Badiyah 2008. Photo: M. I. Ababneh

Regarding the use of donkeys among the contemporary nomads, the Şlouba (Şulayb) seem the best case as a comparison model. Their donkeys are special donkeys, the most famous of which are white, graceful, energetic, strong and fast, and with a high carrying capacity. This information was noted and transmitted by travellers and can be found in their reports, later cited by researchers. The Şlouba rely on donkeys for the loading of their goods and for travel (Jabbur 1988: 350, 351). Furthermore, they even ride the donkeys during hunting (Doughty 1936: 325).

That donkeys were used as draught animals is shown in a single remarkable drawing, which depicts a man ploughing with the use of two equids (most likely donkeys) (Alolow 1996, 153, OCIANA), see (Fig. 11). This way of using two donkeys coupled together as draft animals still exists in the region up to the present day.



Figure 11: A drawing depicting a man ploughing, using two equids (most likely donkeys) (Alolow 1996, 153).

Generally, like other animals such as oryx and antelope etc., these wild asses were hunted for their meat and possibly also for their hides.

Conclusion

It can be concluded that the equids mentioned in Safaitic inscriptions and drawings were divided between domesticated and wild animals, purebred animals and hybrids.

According to the content of the drawings in which donkeys are depicted, they can be summarised as follows. Some donkeys are depicted individually without content, which can be considered as wild or domesticated, depending on the accompanying inscriptions, while some domestic animals are depicted mounted, and the wild donkey is shown being hunted. In some drawings where equids have horse-like or donkey-like characteristics, and the accompanying inscriptions describe the equids as 'r, it is very likely that the drawing depicts a hybrid (cross-breeding).

The inscriptions contain few terms referring to donkeys, which occur in various forms in the singular and plural. The terms refer to wild and/or domesticated donkeys. Some terms denote gender, such as the word 'tn, a female donkey, while hmr denotes a male donkey (plural for both male and female). The term 'r, which is more common, refers to a donkey and, in some cases, to a hybrid (i.e. mule or hinny).

Undoubtedly, the subject is not simple and discussions on some unclear issues are ongoing. In this context, I would register my appreciation for the efforts of colleagues who have carried out research on this topic and who have made suggestions regarding the equids in Safaitic drawings and inscriptions. I hope that this paper has made a valuable contribution, on the basis of the available evidence, to what those colleagues have done.

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Abbreviations

ACDA	Black, George, and Postgate 2000
AHw	von Soden 1965-1981
CEDS	Inscriptions collected by Vincent Clark during Eastern Desert Survey, and published in OCIANA
CIS V	Ryckmans 1950-1
CSNS	Clark, V. A. 1979

DNWSI	Hoftijzer and Jongeling 1995
DULAT	Del Olmo Lete and Sanmartín 2003
OCIANA	Online Corpus of the Inscriptions of Ancient North Arabia http://krcfm.orient.ox.ac.uk/fmi/webd/ociana
KWQ	Safaitic inscriptions and drawings recorded by Geraldine King in Wādī Qaṭṭafī, north-eastern Jordan, and published in OCIANA
Lisān	Ibn Manzūr 1955-1966
WH	Winnett and Harding 1978

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NOTES

1. There is no consensus among scholars on the dating of the inscriptions, e.g. according to Al-Jallad, who mentioned that the most estimates in the literature place the inscriptions somewhere between the 1st c. BCE and the 4th c. CE. (Al-Jallad 2015: 17; Macdonald 2019: 149), also as in the late first millennium BC and early first millennium AD (Brusgaard and Akkermans 2021: 134,135).
2. Drawings of plowing scenes depicting unusual activities of the nomads were found on the stones near the water sources. See e.g. (Al-Khraysheh 1997; Ababneh 2017).
3. See. e.g. (Ababneh 2005: 65), OCIANA.
4. E.g. about the Syrian wild ass and a chapter on the cultural history of the wild ass in general (Denzau and Denzau 1999: 135 f., 181 f.).
5. In this constructive publication on the domestication of donkeys (*Equus asinus*) in the southern Levant, the topic is discussed at length according to the archaeological record of the region.
6. See e.g. (Ababneh 2005: 65, 66; Harahsheh 2019: 40 f.).
7. Some colleagues called them as artists, the question is whether there is a collection of drawings of a person so that he or she can be called an artist?
8. See OCIANA, e.g. WH 1648: *l 'wsd bn 'gsm h-'tn* "By 'wsd son of 'gsm is the she-ass".
WH 3423+3424 *l 'rz' bn zgr h-'tn w qyz brkt w l- -h [h-] 'tn* "The she-ass is by 'rz' son of Zgr and he spent the dry season at Brkt and by him is the she-ass".
CSNS 1159 *l [...] mn bn b'mh h'r wh-'tn* "This hybrid and this female ass belong to [...]mn son of B'mh".
9. The drawing style is similar to the square grid-like layout of the body of Fig. 2e in (Macdonald 2019: 150).
10. For the classification and description of the domestic donkeys and the Syrian wild ass, see (Groves and Grubb 2011: 8, 15).
11. See OCIANA, e.g. (WH 2311- 2310- 2312), The inscription is accompanied by an individual drawing of a donkey *l ghfl bn 'slm bn 'dm bn 'mz h-ħmr* "By Ghfl son of 'slm son of 'dm son of 'mz is the {drawing of the} donkey".

12. CEDS 27 *l rf't bn whd bn 'mr h-hmr* "The asses belong to Rf't son of Whd son of 'mr". The inscription is accompanied by drawing of two asses and a small animal, it might be a dog.
13. E.g. (Ababneh 2005, 53) *l 'm bn qdm h- 'r* "By 'm son of Qdm is the hybrid".
CSNS 59 *l hbrt bn khl bn 'll h- 'r* "By Hbrt son of Khl son of 'll is the hybrid".
WH 125 *l brt h- 'r* "The hybrid is by Brt".
14. Concerning the capture of young animals, it is worth mentioning a remark of Layard during his excavation in Ninaveh, that the Arabs in the desert in spring sometimes catch young foals (young wild asses), and raise them with milk in their tents (Layard 1852: 140).
15. It occurs in the inscription WH 284 as 'yr, and the accompanying drawing show an individual equid (ass).
16. The scene shows three equids (asses), which are described as 'yr in the accompanying inscription (Ababneh 2005, 96); it is logical that it represents a plural form.
17. E.g. WH 284 *l wsm 'l h- 'yr bn y 'mr* "The small hybrid is by Wsm'l son of Y'mr".
18. E.g. (Ababneh 2005, 96) *l 'qmr bn lb' h- 'yr* "By 'qmr son of Lb' are the hybrids".
19. (Al-Qawwāl 1995: 68).
20. Some scholars considered it as a loan word from Ethiopian. (There is unclear linguistic derivation on the term *bgl*, the origin and linguistic interpretation; see Sima 2000: 41, Macdonald 2019: 127, fn. 23).
21. It is also problematic for the OCIANA editors: "However while this would suit the drawing it is very difficult to see how this reading can be obtained from the photograph".
22. For more information and photos of the feral donkeys, see http://photographs.prm.ox.ac.uk/pages/2004_130_17330_1.html
23. (Ababneh 2005, 703, 729) ... *h-shly* "wild ass / mule". It is not translated in OCIANA.
24. On the names, dominant epithets, and nicknames of donkey (wild and domesticated), see (Al-Labābīdī 1997: 88 f.)
25. It occurs in the inscriptions (Ababneh 2005, 944, 1032 'rd, and 689 'rdt). The contexts indicate the possession of the animals to the authors of the inscriptions. According to the Classical Arabic dictionary by Ibn Manẓūr, donkeys or any kind of equids are not mentioned under the root 'rd except 'arādat a name of a mare of al-Jāhiliyyah horses (Lisān, 'rd). When I published the inscriptions, at that time, I suggested to interpret the term as a mare, a mule.
26. KWQ 88 *l glhn bn mqm 'l h- 'rd* "By Glhn son of Mqm'l are the wild asses" (OCIANA).
The inscription is accompanied by a drawing of wild asses hunting scene, represents a group of five adults and one foal being hunted by men on foot with bows. It is described by Macdonald, particularly the body features, and the shape. He is accurate in the description and he is right in his suggestion that the images represent wild asses *Equus hemippus* (Macdonald 2019: 156).
27. CEDS 115, OCIANA *l m 'ln bn ...s{ ' } bn šdd h- 'ryd* "By M'jn son of ...S{ ' } son of Šdd h'ryd". After Al-Jallad and Jaworska "The image accompanying this text is of what seems to be a disfigured camel" (2019: 55). This is true, but the characteristics of the neck and head do not exactly correspond to a camel, it may be a laden equid, this is just a suggestion.
28. According to Al-Jāhīz in his writing on the speech of Khālid bin Šafwān al-'Ahtamī ("And what may I say to the people; among them was a weaver of clothes, tanner of hides, monkey trainer and ('ard rider) donkey rider").
29. The use of equids has been discussed in depth by Macdonald 2019.