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Was There a "Bedouinization of Arabia"?

In memory of Walter Dostal with happy recollections of our many friendly battles on this subject.

Abstract: In 1953, Werner Caskel produced a theory which he called "the Bedouinization of Arabia". In this, he maintained that around AD 100 Arabia was peaceful, dominated by settled states, with some non-tribal nomads who were simply "shepherds near the cities". He contrasted this with Arabia in the sixth and seventh centuries in which he claimed "the Bedouin form of society and ideology prevailed". The evidence he provided for this false dichotomy consisted of errors, misunderstandings and *argumenta ex silentio*, as was pointed out at the time, but his theory has nevertheless been widely accepted in the years which followed. In 1959, it was taken up and adapted by Walter Dostal who tried to explain the "Bedouinization" by producing a novel definition of the Bedouin as "camel-herders accustomed to fighting as rider warriors" and said that "Vollbeduinen" were only those who used the *shadād* or so-called "North-Arabian" camel saddle which, he imagined, gave them a secure seat from which to fight. In fact, however, there is no evidence at all that nomads in Arabia have ever fought from camel-back if they could possibly get off to fight on foot or on horseback. Nevertheless, in 1975, Richard Bulliet adopted Dostal's idea and took it further by claiming that the use of the *shadād* made camel-riders an almost invincible force and this produced "an alteration in the balance of political power in favour of the nomads". This gave apparent support to Caskel's idea that the North Arabian Bedouin were able to sweep to military and political domination of the sedentaries by the sixth century AD. The present examination of these theories shows that there is no basis to them and, in doing so, argues that what is known of nomadic life in Arabia between AD 100 and 500 suggests continuity both in its structures and in its relations with the sedentaries.

Keywords: Arabia, Bedouin, Bedouinization, nomads, saddles, warfare, pre-Islamic, early Islamic state

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Caskel and "the Bedouinization of Arabia"

Some sixty years ago, Werner CASKEL produced a theory which he called "the Bedouinization of Arabia". For a man who had devoted so much of his career to the study of pre-Islamic and early Islamic Arabia, it was based on a shockingly superficial, and often incorrect, view of a very limited amount of evidence and on a great many *argumenta ex silentio*. This was pointed out at the time by Martin NOTH, among others,[1] but despite this, it was adopted unquestioningly, and developed enthusiastically, by later writers such as DOSTAL, BULLIET, KNAUF, HÖGEMAN, etc., and is still with us. The most recent example of it I have noticed, dates from 2003.[2]

For CASKEL, "the social situation in northern Arabia" in the sixth/seventh centuries AD was one "in which the Bedouin form of society and ideology prevailed".[3] For him, this form of society was the "tribe", which he defined purely in terms of nomadic life,[4] even though he considered it was found "also with the settled Arabs".[5] However, his theory is undermined by his apparent ignorance, and/or misunderstanding, of some of the basic facts of nomadic life in northern and central Arabia.[6] Thus, for instance, he says correctly that the Bedouin of Arabia spend the spring in the desert pastures, and the summer near permanent water, but then claims that they spend the autumn and winter in oases.[7] In fact, of course, the Bedouin of north Arabia move to the inner desert with the first rains in October, and spend the winter, and the season of lesser rains (known as *as-smāk*, February to April), and the early summer (*ṣayf*) there. They will only move to permanent water sources in the desert in the dry season of *qayẓ* – roughly between June and October – after which the cycle begins again. They do not normally live for any part of the year in the oases. This is a pattern which is also described in the

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1 In: CASKEL 1953a, 25–27.

2 RETSÖ 2003, 276–277, 582–583 followed CASKEL's theory (despite a contradictory renunciation of the idea on pp. 589–590, note 65), giving it a full endorsement on 585–586.

3 CASKEL 1954a, 36; see also 1953b: *28*. In 1953a: 5–11 he describes this in more detail.

4 CASKEL 1954a, 36–37; for a slightly fuller definition see 1953a: 9–10.

5 CASKEL 1954a, 37–38: "This is due to the fact that all oases, except those in the northwest, were in the possession either of settled divisions of nomadic tribes or of settled tribes." Unfortunately, he does not make clear what period he is talking about, or why the oases of the north-west were an exception.

6 This is surprising, and rather shocking, since information recorded from the Bedouin themselves was easily available to him in the works of ethnographers such as MUSIL, JAUSSEN, VON OPPENHEIM, and anthropologists such as HENNINGER, etc.

7 See CASKEL 1953b, *28*. Note that the equivalent passage in CASKEL 1954a, 36, is a mistranslation of this passage.

Safaitic inscriptions carved by nomads in southern Syria, north-eastern Jordan, and northern Saudi Arabia, from the first century BC to the fourth century AD.[8]

Similarly, Caskel misinterprets other aspects of Bedouin life and society. For instance, he sees the *Benī al-ʿamm* – the only group in Bedouin society in which each member is totally responsible for each of the others – solely in terms of "blood vengeance", whereas, of course, the responsibilities affect all aspects of life. He also claims that the responsibility inherent in the *Benī al-ʿamm* "cuts across their socio-political organization, the tribal system",[9] whereas in fact, it forms the basis both of the ideology and the practical applications of the Bedouin tribal system.

At the heart of Caskel's thesis are four assumptions: (a) that the term "Bedouin" should be restricted to the nomadic groups distinguished by "tribal organization and its ideological superstructure,"[10] (b) that the "tribe" as a social organization is restricted to the Bedouin, and therefore to nomads or their settled relatives;[11] (c) that "tribal organization did not arise in Arabia proper" though he thinks it did exist among the authors of the Safaitic inscriptions;[12] and (d) that by the sixth century AD, all Arabian oases, except (for some unexplained reason) those in the north-west, were peopled by ex-nomadic Bedouin.[13]

Caskel's "pre-Bedouinized" Arabia

On this basis, he developed a theory in which he envisaged a "pre-Bedouinized" or "non-Bedouin" Arabia at around AD 100.[14] This he characterized as predominantly sedentary, peaceful and trading; an Arabia of states linked by trade routes, in which the nomads were simply "shepherds near the cities"[15] with a very limited range of migration and little or no ability to threaten the settled population.[16] Such a picture is, of course, a gross distortion of what little we know of the facts.

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8 See Macdonald 1992a.
9 Caskel 1953b, *29*; 1954a: 36.
10 Caskel 1954a, 37.
11 Caskel 1953b, *30*; 1954a, 38.
12 Caskel 1953a, 6–8; 1954a, 39–42. He did not apparently believe that it spread from the tribes which used the Safaitic script, but "circumstances necessitated it only later" in "Arabia proper" (1954a: 42).
13 Caskel 1953b, *30*; 1954a: 38.
14 See Caskel 1953b, *28*, *30*; 1954a 36, 38.
15 Caskel 1953b, *30*; 1954a: 39.
16 He adds that some of the nomads had "a larger range of migration", but from the example he gives he clearly considers even this to have been fairly limited. There is a discrepancy between

North of Yemen, Arabia was never primarily a sedentary area, nor, until the twentieth century, could it be dominated by the sedentaries to any real extent. The nature of the region inevitably gives to nomads an independence of external authority which can never be achieved by sedentaries, hence, of course, the periodic attempts of the sedentary governments to settle the nomads.[17] In these circumstances we have to be careful to define what we mean by such terms as "kingdom", "principality", "city-state" when used of an area where sedentary occupation is limited to oases separated from each other by large areas of desert which are home to nomadic groups who do not need to recognize external authority.

Moreover, CASKEL's characterization of the nomads in around AD 100 as non-tribal, and therefore "non-Bedouin" is based on a misunderstanding of the epigraphic evidence, particularly of what he calls the "thamûdenic" – i.e. "Thamudic" – inscriptions.[18] His view of the authors of these texts and the drawings which often accompany them changes – without any argument or discussion – in the course of his short article. At an early stage he says "These nomads [who

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CASKEL 1953a, 6 where these nomads are called "Beduinen", and 1953b, *30*–*31* (1954a: 38–39) where the point of the argument is surely that they were not "Bedouin" by CASKEL's definition.

17 See, for instance DONNER 1981, 251–267. On Muhammad's attempts to settle the Bedouin see ibid., 79–82; on government policies on settlement during the conquests see 265–267. Ibn Saʿūd's settlement of the Ikhwān and subsequent policies of sedentarization in Saudi Arabia and other parts of the Middle East are only the more recent bouts in the sedentaries' long struggle for control of the nomads.

18 "Thamudic" is a misnomer invented by modern scholars for texts in a number of different scripts which, for various reasons, have yet to be classified. The name was borrowed from that of the ancient tribe of Thamūd but does not imply that the members of this tribe necessarily used one of the scripts. "Thamudic" is a sort of "pending file" and it is nonsensical to refer to "the Thamudic script", since, by definition, there are several different scripts lumped to together under this rubric (see MACDONALD 2009a, text III, 33–35). CASKEL, however, followed VAN DEN BRANDEN's discredited view (1950, 17–23) that the various alphabets lumped together by modern scholars under the "hold-all" label "Thamudic" were in fact a single script at various stages of development, in which "the oldest [texts] … come from Taimâ, the younger ones from Tebûk" (CASKEL 1954a: 39). WINNETT had already demonstrated in 1937 that at least five different scripts could be roughly identified in the "Thamudic" pending file and showed that there are marked differences in the sorts of inscription found in each of them, as well as considerable difficulties in arranging them chronologically (WINNETT 1937, 53–54). By failing to distinguish between the various scripts lumped together as "Thamudic", CASKEL's argument becomes confused. For instance, one of the scripts which at that time was included under this rubric (WINNETT's "Thamudic A") has now been recognized as the script used by the settled inhabitants of the oasis of Taymāʾ and yet CASKEL lumps it with the other "Thamudic" scripts and assumes it was used by nomads (1954a, 39).

wrote the "thamûdenic" inscriptions] were able to write and draw …,"[19] whereas later he writes "the so-called "thamûdenic" inscriptions … were not composed by them [i.e. the nomadic tribe of Thamūd] but by men from the caravans.[20]

CASKEL claims that the "Thamudic" texts do not give tribal affiliations and concludes from this that "tribal organization did not arise in Arabia proper", even though he claims that the Safaitic inscriptions – which are scattered liberally throughout the deserts of southern Syria, north-eastern Jordan, and northern Saudi Arabia – show "a genuine Bedouin … milieu."[21] It is, in fact, impossible to say whether the authors of the Safaitic inscriptions were "Bedouin" by CASKEL's definition. They were certainly nomads and belonged to societies defined in terms of genealogically-based social groups. But that is as far as we can go. We do not know if something equivalent to the *Benī al-ʿamm* existed and we know nothing about their structures of leadership, the two other criteria which CASKEL uses to define "Bedouin".

Nor is it correct to say that the inscriptions in what I have called the "Thamudic pending-file" contain no tribal affiliations. Despite its shortcomings, the work of AL-RŪSĀN[22] has shown that there are a considerable number of "tribal" and "clan" names in these texts and that these are found in all five script types which, at the time CASKEL was writing, were included in the "Thamudic" category.[23] It is perfectly true that in all these categories affiliation to a social group is given much less often than in the Safaitic texts, but this has to do with the

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19 CASKEL 1953b, *31*; 1954a: 39.

20 CASKEL 1953b, *34*; 1954a: 43.

21 CASKEL 1953, *33*; 1954a: 42. He lists the criteria for "a genuine Bedouin … milieu" as "tribes, sub-tribes, long genealogies, no official leader, blood revenge, raids, and wars". He explains this situation as follows: "Because of the constant insecurity in the Syrian desert, caused by the periodic immigration from the south, Bedouin life developed earlier in the north than in Arabia proper, where circumstances necessitated it only later". However, this, of course, begs the question: what were the circumstances in Arabia that brought about periodic immigration into Syria, causing the "Bedouinization" of the Syrian Desert, but which did not have the same effect within Arabia? On the supposed "periodic immigration from the south" see MACDONALD 2009a, text VI.

22 AL-RŪSĀN, 1986

23 That is Thamudic A (now Taymanitic), B, C, D and E (now Hismaic), see MACDONALD 2009a, text III:33–35, 42–45. These group names are marked in different ways in the different types. Thus in Taymanitic (formerly 'Thamudic A') they are preceded by ʾl or ʾš (see MACDONALD 1992b, 30–31); in Thamudic B generally by ʾhl, or else the *nisba* is used; in C and D by ḏ; and in Hismaic (formerly 'Thamudic E') by ḏ ʾl. It is odd that CASKEL, who includes the Hismaic texts in his statement should have overlooked such inscriptions as *JSTham* 607, 622, 696 + 695 *HU* 262, 498, Doughty 16,3, and the Meek inscription, all of which give affiliation to a social group marked by ḏ ʾl.

nature of the texts themselves, which are generally shorter and more direct,[24] rather than regularly starting by introducing the author, as is the case with almost all Safaitic inscriptions. However, while some of the inscriptions CASKEL called "thamûdenic" give the author's affiliation to a social group, none give affiliation to other entities, such as to a town or geographical area, as is found in some of the Nabataean texts,[25] or to some non-tribal group, however that would be expressed.[26] It is anyway extremely difficult to see how CASKEL, or anyone else, could distinguish between the structure of one type of social group mentioned in these texts as against another. Thus he assumes that in Safaitic ʾl means "tribe" in the same sense as the *qabīla* of the *Ayyām al-ʿArab*, or Bedouin tribes described by modern anthropologists.[27] But there is simply no way of knowing the internal structure of the ʾl in the Safaitic texts, beyond the fact that the term was, to our minds, used extremely loosely and could describe any social grouping from a family to a people (e.g. the Romans or the Jews),[28] just as the modern Bedouin appear to the outsider to be very imprecise in their use of such terms as *qabīla*, *fakhdh*, *ʿashīra*, etc., though they themselves do not see this as a problem.[29] It is simply not possible to say whether or not the social groups mentioned by the authors of what CASKEL classed as the "thamûdenic" texts were "tribal" in the "Bedouin" sense, however the latter is defined.

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24 Thus, for instance, the first and second persons are almost unheard of in Safaitic but are relatively common in those types of Thamudic (B, C, and D) which, when CASKEL was writing, made up the majority of the published texts.

25 See, for instance, *JSNab* 189 N *dy mn ʾyl*{ʾ} "N who is from Aila [modern ʿAqabah]", and *JSNab* 226 N *dy mn ṣlḥdw* "N who is from Salkhad [in the Ḥawrān].

26 Note, for instance, that at Palmyra even professional groups appear to have been expressed as "tribes", see MILIK 1972, 55–62, and the same may well have been the case in South Arabia, see Beeston 1979: 117–118.

27 CASKEL, 1953b: *33*; 1954a: 42.

28 See, for instance, *C* 4448, *WH* 2815, *CSNS* 424 for ʾl *rm,* and *SIJ* 688 for ʾl *yhd.* On the question of Safaitic ʾl see MACDONALD 2009a, text II, 346–366. In pressing his claim that there was no "tribal organization" in Arabia at this time, CASKEL (1954a, 42) says that the Tanūkh, the Asad and the Nizār were not "tribes" but "peoples". However, one wonders what "a people" means in this context. Is he using the term to designate any society which was not "tribal", in the specific "Bedouin" sense in which he has defined it? A confederation of tribes, after all, is still tribal. In view of the way the terms for various social groups are used in Safaitic and among the modern Bedouin one may wonder whether such a distinction would have had much meaning among those to whom he was applying it. This does not necessarily invalidate CASKEL's attempt to isolate a particular form of social organization which he chooses to designate as "tribe". But whether it is then valid, on this basis, to distinguish between one ancient, poorly documented, society and another is much more questionable.

29 See LANCASTER and LANCASTER 1988, 55–56.

CASKEL also says of the Thamudic inscriptions "occasionally booty is mentioned: on the whole, the milieu seems to have been much more peaceful than in later times".[30] However, unlike the Safaitic, the Thamudic texts rarely contain narrative statements,[31] and it is extremely difficult to gain from them any detailed picture of their authors' 'milieu'. It is therefore particularly risky to base arguments *ex silentio* on them, especially since the term "Thamudic" clearly does not refer to the products of one society or of one time. In the absence of the basic materials for a palaeography, the relationship of the different types of Thamudic to each other remains a matter of guess-work, as does the relationship of the authors of one type to those of another, and to those using other scripts or none. The vast majority of "Thamudic" texts are known only from hand-copies, mostly of dubious accuracy,[32] and the interpretation of large numbers of them is still disputed. In these circumstances it is quite unsafe to attempt, as CASKEL does, to draw weighty conclusions from what they, apparently, do *not* say.[33]

It is also difficult to understand why he regards their ability to write and draw and their "genuine religiosity"[34] as "remnants of ancient civilizations."[35] It is as if he is assuming that they were once 'civilized townsmen' who had descended into 'barbaric nomadism' retaining only fragments of their former culture: in fact a previous cycle of the process of "Bedouinization" as he imagines it later.[36] It is hardly necessary to state that there is not a shred of evidence for such a picture. There is absolutely no stylistic connection between the Thamudic rock-drawings and the Minaean reliefs of Dedan on which he claims they were based.[37] There

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30 CASKEL 1953b, *31*; 1954a, 39. As so often, he cites no supporting references for this statement.

31 Some of the Hismaic inscriptions of southern Jordan are more informative, but they are still very much a minority.

32 I would only except the copies of Jaussen and Savignac which, on the occasions on which it has been possible to check them, have been shown generally to be of a high standard of accuracy (see HARDING 1971, 39). But these form only a small proportion of the published texts.

33 Professor Martin NOTH made this point in the discussion at the end of CASKEL 1953a. Commenting on CASKEL's statement "die Beduinen unterscheiden sich von ihren Vorgängern durch die oben gekennzeichnete Stammesorganisation" (1953a, 26), he said, "diese Unterscheidung arbeitet – auch hinsichtlich der Stammesorganisation – mit einem argumentum e silentio. Da unsere Kenntnis älterer Zeiten sehr mangelhaft ist, bleibt die Beweiskraft eines argumentum e silentio unsicher. Sollte es nicht auch schon in älteren Zeiten eine Stammesorganisation gegeben haben?".

34 Does he mean by this that only the religiosity of the "civilized" is "genuine", and how, one might ask, would one distinguish genuine from non-genuine religiosity in the brief prayers found in these texts?

35 CASKEL 1953b,*31*; 1954a: 39.

36 CASKEL 1953b, *31*–*32*; 1954a: 40–41.

37 CASKEL 1953b, *31*; 1954a, 39.

is also no proof as to where their deities – only some of which they shared with the sedentaries – originated, despite Caskel's claim that they were "borrowed from the city dwellers".[38] The statement which follows: that this "is exactly the opposite of what prevailed in later, 'Bedouinized' Arabia" is, to me, incomprehensible. Is he suggesting that in later "'Bedouinized' Arabia" it was the *Bedouin* who brought the pagan cults to pre-Islamic Mecca, and Judaism, Christianity, and Islam, to the town-dwellers?

It is particularly odd that while seeking to deny that the authors of the Thamudic texts were "Bedouin", he should emphasize the similarities "between the objects of "thamûdenic" drawings and inscriptions and the motifs of later Arabic poetry: camels, horses, ibexes, antelopes, gazelles, hyenas, wolves, dogs, bees[39] presented in the former in writing and pictures, in the latter described in words of poetry".[40] Surely this similarity of subject matter is most easily explained by the fact that their authors had a similar way of life in similar regions. These inscriptions and drawings are found throughout the deser and such a distribution would surely suggest that those who carved these inscriptions and drawings were nomads with the same range of movement as the groups he calls "Bedouin" in Late Antiquity, members of which composed some of the pre-Islamic poetry. Yet Caskel believed that "the so-called 'thamûdenic' inscriptions ... were ... composed by men from the caravans",[41] not by nomads.

Thus, the picture Caskel has painted of "pre-Bedouinized" Arabia is based entirely on misunderstood or non-existent evidence.

Caskel's "Bedouinized" Arabia

The only 'evidence' he produces in support of his other claim, i.e. that, in "the sixth and the beginning of the seventh centuries", the "Bedouin form of society and ideology prevailed"[42] throughout Arabia, appears to be his assertion that at this time "all oases, except those in the north-west, were in the possession either of settled divisions of nomadic tribes or of settled tribes".[43] Nor does he

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38 Caskel 1953b, *31*; 1954a, 39.

39 I know of no rock drawings in Arabia showing bees.

40 Caskel 1953b, *32*;1954a, 41.

41 Caskel 1953b, *34*; 1954a, 43.

42 Caskel 1953b, *28*; 1954a, 36.

43 Caskel 1953b, *30*; 1954a, 38. Nowhere does he explain why he excepted the oases of the northwest, nor what kind of society he envisaged in them.

ever attempt to demonstrate that the tribal system of the settled tribes in sixth/seventh centuries AD was identical to that among the Bedouin, let alone how their supposed "Bedouin ... ideology" manifested itself. He appears to have based his claim simply on the *existence* of "tribes" among the sedentaries and (presumably) on the 'genealogical' relationship of these to Bedouin tribes in the grand family-tree of the Arabs systematized in the Umayyad period. He never explains how this supposed adoption by sedentaries of the "Bedouin form of society and ideology" came about.

However, as is well known, a genealogically-based social system – the basis of what CASKEL defines as a "tribe" – is not limited to Bedouin, and here, I think we come to the nub of the problem. CASKEL seems to have assumed that any genealogically-based society in Arabia north of Yemen must have been "Bedouin". So wherever he finds social groups called "tribes" (however these are, or are not, defined) he assumes that they must represent the "Bedouin form of society". In order to create the conditions for his supposed change in "pan-Arabian" society – itself a curious concept – he has to play down the existence of social groups which could be described as "tribes" before the sixth century AD, so that the presence of such groups at a later date could be ascribed to his supposed "Bedouinization".

Caskel's Process of "Bedouinization"

His brief description of the *process* of "Bedouinization" is confined to four sentences, and the details of the process are not explained at all. He says "as a result of the dropping out and the collapse of the border states,[44] the caravan roads and, with them, the settlements in the interior began to be deserted ... What became

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44 In passing, it should be noted that the inscription which he uses to show what he calls "the signs of decline" in his "pre-Bedouin", urban Arabia, *JSLih* 71, has since been re-read as pre-Islamic Arabic by Professor A. F.L. BEESTON (see BEESTON et al. 1973, 69–70). In BEESTON's interpretation, which I find wholly convincing, the text does not show the "signs of decline" identified by CASKEL. The latter's reading was anyway faulty even as Dadanitic (see BEESTON *et al*. 1973: 69), something of which BULLIET (1975, 101 and 295, note 31) seems to have been unaware. As another sign of decline, CASKEL quotes a Nabataean graffito from Sinai (EUTING 1891, 463) as being dated to the (85th) "year of the eparchy [i.e. AD 189 (sic, actually AD 190/1] in which the ʿ*Arabâyê* [i.e. the Arab nomads] devastated the country". But, in fact, this reading is impossible, as can be seen from EUTING's own squeeze, reproduced on *CIS* 2, pl. 75, no. 964a. As the commentary to *CIS* 2:964 (published more than 50 years before CASKEL was writing) points out, the reading of the whole of the last line is doubtful and the lacuna in the word which EUTING restores as ʿ[*rb*]*yʾ* is too small to accommodate both signs. The reading of the second and last words in the line is

of the population of the border towns? The liḥyânic traders from Dedân seem to have settled in Ḥîra. Elsewhere, the majority took to the nomad life".[45]

Quite apart from the fact that there is not a shred of evidence for it, such a process is hardly credible. As DOSTAL points out,[46] the practical difficulties of such a change would be enormous: the acquisition by urban traders of sufficient herds, let alone the expertise in managing them, would be difficult enough and would, one might imagine, result in a very high casualty rate among both the herds and the ex-traders. But in a desert which, as CASKEL admits, was already populated with nomads it is difficult to see how large numbers of ex-sedentaries would secure sufficient access to pasturage, even if they were not attacked and dispossessed by the existing nomads. Moreover, as DOSTAL pointed out, there is "a very important difference in the way of thinking between settled persons and nomadic shepherds".[47] The knowledge required to survive as a nomadic pastoralist, the deep knowledge of the desert, the distribution, uses and dangers, of its flora and fauna; its water resources, weather signs, etc., is only learned over a lifetime spent working in that environment. It cannot be picked up overnight by a sedentary whose life has been spent acquiring very different skills, in very different circumstances.[48]

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also in doubt. Thus, the whole passage which CASKEL is using as evidence is uncertain and the key word an impossible restoration.

45 CASKEL 1953b, *32*; 1954a, 40–41. He gives no evidence for his claim that "the liḥyânic traders from Dedân seem to have settled in Ḥîra". As part of the supposed decline, for which he uses the Dadanitic inscription *JSLih* 71 as evidence (see the previous note), he writes "Notice the signs of decline. There was no longer a kingdom, as indicated by the fact that the [Roman] era of Bosra formerly used in Dedan is no longer in use" (1954a, 40). This is extraordinarily muddled. The era of Bosra was not used in the Lihyanite kingdom, and not a single Dadanitic inscription is dated by it (*contra* CASKEL 1954b, 36, see MACDONALD forthcoming). Nor was it used in the Nabataean kingdom, but was introduced when the Romans annexed the latter, and brought it to an end, in AD 106. There is not a single inscription in Dedan/al-ʿUlā dated by the era of Bosra. In fact, *JSLih* 71 is not dated at all, though CASKEL's incorrect interpretation included a date by an event.

46 DOSTAL 1959, 23–24. He calls the process "re-Bedouinization" but as far as I can make out this is CASKEL's explanation of the original "Bedouinization" of Arabia, since he regards Arabia before this happened as "pre-Bedouinized" (1954a, 36) or "non-Bedouin" (1954a, 38).

47 DOSTAL 1959, 23. CASKEL implicitly accepts such a difference in "pre-Bedouinized" Arabia when he claims that the Bedouin ideology of the oasis dwellers was one of the distinctive marks of "bedouinized" Arabia.

48 In the extremely confused linguistic discussion in the last paragraphs of his paper (1953b, *33*–*34*; 1954a, 42–43) CASKEL suggests that "the early Arabic dialects" (1954a, 42; "den früharabischen Dialekten", 1953b, *33*) as opposed to "Ancient Arabic" ("Altarabische" = Ancient North Arabian) originated in the towns ("al-Ḥijr and Dedan"). Thus, he appears to be saying that the "Bedouinization of Arabia" was achieved by townsmen (rather than nomads) and

But even more extraordinary than his idea that the townsmen became nomads, is his attribution of the "*Bedouinization* of Arabia" (my italics), not to existing nomads – not even to the authors of the Safaitic inscriptions whom he thought were already "Bedouin" – but to these groups of urban traders who, according to him, came from a society which was hierarchical (i.e. organized in "kingdoms") and non-tribal. CASKEL provides absolutely no evidence to support this central part of his thesis and it was clear even when he was writing that his claim that the nomads of Arabia before the fourth century AD were very different from the later "Bedouin" is simply an assertion based on no reliable evidence. In fact, of course, we know far too little of the details of nomadic life in ancient Arabia to make such sweeping distinctions. While it is possible that those authors of the "Thamudic" texts who were nomads had different ways-of-life from those of the later Bedouin, we cannot at present demonstrate this, let alone identify the differences.

We also know that the oases of Arabia do not seem to have been depopulated in Late Antiquity, as CASKEL assumed, indeed it would be very odd if they had been. Short of a climatic disaster – which would anyway have hit the nomads in the marginal areas far harder than the oasis-dwellers, so that taking to the nomadic life would be the last thing the latter would have wanted to do – a decline, or even a total breakdown in trade would have reduced their prosperity but not made them destitute. The primary resources and activities of the oases – water, horticulture, agriculture, artisanal crafts, etc. – would still have remained, with or without long distance commerce; and trade with the nomads would still have been a necessary part of the life of both communities. Everything we know of the history of the oases of Arabia in late antiquity suggests that they continued to be occupied and cultivated throughout this period.

Moreover, there is a fundamental contradiction in CASKEL's theory since at one point he says that by the sixth century AD, all Arabian oases, except (for some unexplained reason) those in the north-west, were peopled by ex-nomadic Bedouin,[49] but, at another, claims that it was the settled inhabitants of these oases who became nomads and produced the "Bedouinization of Arabia".[50] The only evidence he cites for his claim that, in "the sixth and the beginning of the seventh centuries" Arabia had been "Bedouinized" (i.e. the "Bedouin form of

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the pre-Islamic poetry (with all its nomadic themes) was composed in the language of the towns, not that of the nomads.

49 CASKEL 1953b, *30*; 1954a, 38. As we shall see later this would appear to be in direct contradiction to his explanation of the process of "Bedouinization".

50 CASKEL 1953b, *32*; 1954a, 40–41.

society and ideology prevailed")[51] appears to be that both nomads and sedentaries were organized in groups which he calls "tribes".

Tribes, Nomads, and Sedentaries

If we try to discover what CASKEL understood by a Bedouin "tribe" we find only the vaguest definition, i.e. that it "depends on real or fictitious blood relationship" and has a leader who is simply *primus inter pares*.[52] As I have said, he then assumes that wherever the term "tribe" occurs, it must mean the presence of Bedouin. However, as is well known, there are numerous different types of social organization in Arabia which have been, and still are, called "tribes". In antiquity, it is usually very difficult to reconstruct the details of the social groups designated by terms we translate as "tribes". Thus, for instance, we know that the Safaitic ʾl was genealogically based within the nomadic societies whose members carved the Safaitic graffiti, but we can have no idea whether when they referred to the Romans as the ʾl rm they perceived the Romans as also being a genealogically-based group. It is possible, as is suggested by William LANCASTER's story that the Rwala Bedouin explained both World Wars by the assumption that the British and French were genealogically more closely related to each other and to the Arabs than they were to the Germans.[53] But, we simply have no way of knowing.

Yet, we know a fair amount about the tribal system in ancient Yemen,[54] which was quite different from the Bedouin one, as it also is today.[55] Here, societies were and are organized on a genealogical basis combined with a strong territorial element. We have echoes of similar arrangements in Roman and Byzantine Syria, in inscriptions and graffiti in which people identify themselves as so-and-so son of so-and-so, of such-and-such a village [κώμη], of such-and-such a tribe [φυλή]".[56] As I have said, we know that social groups called ʾl (usually translated as "tribe", though I would prefer "lineage") were present in the oases of Taymāʾ and al-Ḥasā

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51 CASKEL 1953b, *28*; 1954a, 36.
52 CASKEL 1953b, *29*; 1954a, 36–37.
53 LANCASTER 1981, 28–29.
54 See, for example, BEESTON 1979; ROBIN 1996, cols 1194–1196.
55 See, for example, DRESCH 1989, 75–83.
56 See Wadd. 2393 from Deir al-Laban, dated AD 320: Κάσσι(ο)ς Μαλίχαθος κώμ(ης) Ῥειμέας φυλ(ῆς) Χασητηνῶν, καὶ Παῦλος Μαξιμῖνος κώμ(ης) Μερδόχων φυλ(ῆς) Αὐδηνῶν; and Wadd. 2265 from al-Namārah (undated) Ἀζῶος Βόρδου κώμης Σοδάλας φυλῆς Χαχαβηνῶν (last word re-read in DUSSAUD and MACLER 1901, 96); and Wadd. 2431 from Najrān in the Ḥawrān, a dedication of a church to St Elias, dated AD 669 (= 563 of Bosra = indictions XI and XII): Σέργιος Σαμαάθου [κ]ώ(μης) Νορεράθης φυλῆς Σοβορηνῶν; etc.

centuries before CASKEL's "Bedouinization" is supposed to have taken place, but we do not know what form these social organizations took, and so should beware of falling into the same trap as CASKEL by insisting that they were "tribes" in any particular sense of the term. All we can say is that they were "social groups" of some sort, and that in al-Ḥasāʾ, at least, they appear to have been segmented since we find people claiming affiliation to up to three generational levels of ʾl.

Similarly, we need to look rather more closely than CASKEL did at what we can glean of the social structures of the settled inhabitants of the oases in sixth and seventh century Arabia. Here I am beyond my competence and would only make a couple of points. When a Bedouin tribe has both nomadic and settled sections we should not assume that all aspects of the nomad's social organization and "ideology" are appropriate to the sedentary. Thus, the reason why a nomadic leader can only rule by consent is simply that those who do not wish to follow him cannot be forced to do so. They can simply go off with their family and herds and live away from him. This very basic fact of nomadic life surely lies at the roots of the Bedouin ideology of independence and jural equality.[57] Of course, in a raid or a war to which he has agreed, the Bedouin will suspend his independence for the duration and obey orders from the person he has accepted as leader, just as when he joins the Saudi National Guard or the Jordanian army, he suspends his independence and agrees of his own free-will to obey orders for the duration of his service in return for payment. Because this is voluntary it does not affect his ideology.

A sedentary is in a quite different position. His capital is generally in land or other real property which it is difficult to move at a moment's notice. He is therefore subject to external authority in a way which the nomad is not. Such a position quickly produces hierarchical societies in which populations can be compelled to do things, and leaders quickly become rulers with an obedient, paid, military force. Thus, it is only really in the nomadic life that it is possible fully to practise the "Bedouin ideology" – either in the rather vague form outlined by CASKEL, or the more detailed and coherent one explained by the Bedouin to ethnographers.[58]

It is therefore highly unlikely that even the settled sections of nomadic Bedouin tribes would have been able to continue practising the Bedouin "ideology" in full, and there is no reason at all to believe that settled tribes such as those of Mecca, or the Jews of Madina, Taymāʾ, Khaybar, etc. would have done so.

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57 See LANCASTER and LANCASTER 1988, 54.
58 See for example LANCASTER 1981, and LANCASTER and LANCASTER 1988.

It is one of the paradoxes of the concepts of "Bedouinization" and "Bedouin states"[59] that in order to rule settled people – rather than simply force them periodically to pay "protection money" – let alone to rule a state, the Bedouin has to abandon the very principles which make him a Bedouin: jural equality and individual independence. This is why Bedouin shaykhs who have become settled rulers, like the Āl Rashīd of Ḥāʾil, very soon employed paid, professional armies with which to impose their will both on their sedentary subjects and their nomadic fellow tribesmen. Though they retained the title, they were in fact no longer Bedouin shaykhs, *primus inter pares*, but kings who could impose their will on their settled and nomadic subjects alike. Only very occasionally, and under special circumstances, do we find cases where a Bedouin tribe dominated a city or other settled area for any considerable length of time, without itself settling; and even in these cases they could not be said to have *governed* them.[60]

Dostal and the Bedouin as "reiterkriegerische Kamelhirten"

Caskel's idea that "the Bedouin" of Arabia only developed in Late Antiquity produced another group of theories that were equally bizarre and equally far removed from reality. In the late 1950s, the Viennese anthropologist Walter Dostal was attracted to the *outcome* in Caskel's thesis – i.e. that there had been a "Bedouinization of Arabia" sometime between the fifth and seventh centuries AD – but was aware of the weakness of the way in which Caskel had tried to demonstrate it. So he proposed "redefining" (as he put it) the word "Bedouin" by "the restrictive definition 'camel-herders' accustomed to fighting as rider warriors"[61], or "reiterkriegerische Kamelhirten"[62].

He starts from Henninger's division of the *badw* into, on the one hand, "Vollbeduinen" who are exclusively, or principally, camel-herders, and are thus able to lead a fully nomadic life in the desert, and on the other, the "Halbbeduinen", herders of sheep and goats who were supposed to be tied to the desert's

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59 See Macdonald 2009a, text VII for a discussion of these.

60 See for instance Kennedy 1986, Degener 1987, Heidemann 2002, Franz 2007, 225–247. I am most grateful to Kurt Franz for pointing this out and for alerting me to these references.

61 Dostal 1979, 125.

62 Dostal 1967, 11.

edge.[63] He expands on this by defining the "Bedouin" as camel-breeders[64] and nomads[65] whose society is based on "the notion of descent from a common ancestor".[66] However, for his theory of the "evolution of Bedouin life" the essential element of his definition was the "reiterkriegerische Kamelhirten".

Dostal's New Definition of 'Bedouin'

Once he had arbitrarily defined the Bedouin in these terms he searched for the "material object best suited to our purpose of representing the development of this cultural group", and concluded that "only the saddle, that is, the rider-warrior characteristic, can be used as our point of departure".[67] In what immediately follows it is clear that by "saddle" he means only the "camel-saddle", and that he sees the mounts of the "mounted warriors" only as dromedaries.

It is difficult to exaggerate the importance of this to DOSTAL's thesis. For his whole argument turns on his assumption that Bedouin habitually fought from camel-back, and thus can be identified by the "rider-warrior characteristic" which he has quite arbitrarily built into his definition of "Bedouin". As we shall see, the assumption is entirely wrong, and this error undermines the key element

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63 DOSTAL 1959, 12, quoting HENNINGER (1943: 4). These rather crude terms, which suggest clear-cut divisions where there are only gradations, were based on the attempts of earlier scholars (Musil, Dalman, von Oppenheim, etc.) to express the distinctions made by many Bedouin between different ways of Bedouin life. See the next note. I am most grateful to Johann BUESSOW for pointing out that "the dichotomy between 'full Bedouin' and 'semi-sedentaries' seemed to make even more sense when it had become part of administrative practice in French-ruled Syria. See LANGE 2005, 109; BUESSOW 2011, 78.

64 However, DOSTAL recognizes that this is by no means exclusive: "The Bedouins have specialized in the breeding of dromedaries, but they raise sheep and goats for their daily needs. The Bedouin's capital is, however, the dromedary, on which his existence in great measure depends" (DOSTAL 1959, 12). This is certainly true of both the ancient and modern Bedouin. See, for instance, BRIANT (1982, 136–137), who points out that, with one possible exception, the camel-herders of whom we know in ancient Arabia also raised other animals. Even of this one exception, the Debai, Strabo says "some of them are nomads, whereas others are also farmers" (XVI.4.18, translation from Loeb edition). For a discussion of the reasons for sheep-herding by a modern camel-raising tribe, the Rwala, see LANCASTER 1981, 101–104. KNAUF (1988, 11–12), on the other hand, considers a "mixed economy" to be a characteristic of his "Proto-Beduinen" and "Frühbeduinen" as distinct from the (theoretical, at least) "Kamel-Monokultur" of his "Vollbeduinen", see below.

65 A subsidiary part of the definition is that they store provisions in the form of dried milk.

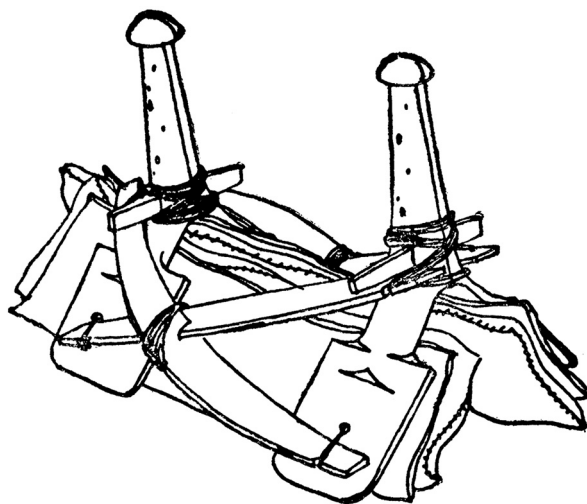**66** DOSTAL 1959, 13.

67 DOSTAL 1959, 15.

Fig. 1: The *shadād* (so-called 'North Arabian') saddle. (From Musil 1928, Figure 37).

of his definition. It should also be noted that this definition was made on a purely theoretical level without any consultation with actual Bedouin, who would have told him that they did not fight from camel-back.

It is also important to realise that Dostal's use of the term "Vollbeduinen" differs considerably from that of Henninger from whom it is borrowed.[68] Because Dostal has introduced the element of aggression into his definition of the term "Bedouin", "Vollbeduinen" are for him only those camel-herders who have adopted the *shadād*, or so-called "North Arabian camel saddle", which rests over the hump (Fig. 1) and which he believed made it possible for them to fight from camel-back. Thus, for example, those nomads of South-East Arabia who use the *ḥawlānī* saddle behind the hump (Fig. 2), while being "Vollbeduinen" by Henninger's definition because they are camel-herders, are considered only "proto-Bedouins" by Dostal because they do not use the *shadād*.[69]

Dostal then artificially limits the term "Bedouin" to his "Vollbeduinen" (i.e. "reiterkriegerische Kamelhirten" using the *shadād*) and suggests that Henninger's "Halbbeduinen" (sheep and goat herders) should henceforth be described simply as "nomads" or "semi-nomads".[70] He has thus abandoned a division which, however unsatisfactory, was ultimately based on distinctions

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68 Henninger 1943, 4.
69 Dostal 1959, 20–21, 28.
70 Dostal 1959, 29.
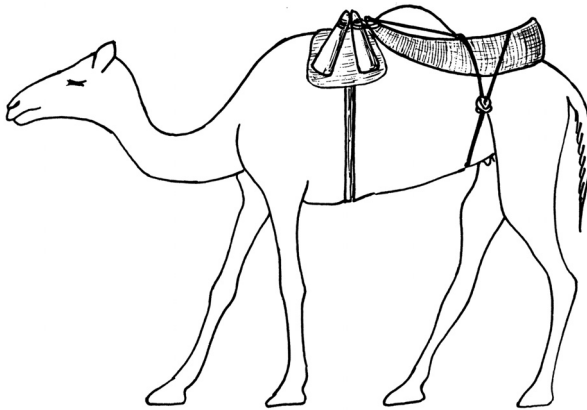
Fig 2: The *ḥawlānī* (so-called 'South Arabian') saddle.
(From MONOD 1967, Figure 9).

made by many Bedouin themselves, and replaced it with a purely theoretical one based on a supposed technological advance, which the Bedouin do not recognise as significant in this respect,[71] and which did not have the effects he supposes.

Camel Riding, Saddles, and Their Uses

Probably the earliest way of riding a camel was bareback on the crupper, holding onto the hump, and this is still used when the rider is in a hurry or does not have the time or the opportunity to saddle his mount (Figs 3, 4). It is secure, when the rider knows what he (or she) is doing, and JAUSSEN reports that he once saw a camel-rider in this position "qui descendait les pentes du Mōğib[72] plus rapidement qu'avec une jument."[73]

However, the crupper is hard and bony and does not make for a very comfortable ride and so this is not the riding method of choice. Since camels have always been primarily pack-animals, it is probable that people occasionally hitched a ride on these pack saddles during migrations, and indeed even today they are the primary saddle used by women. Eventually, I would suggest, these pack saddles were adapted into riding saddles of different designs in different parts of Arabia.

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71 LANCASTER and LANCASTER 1988, 53.

72 This is the extremely deep and precipitous gorge in central Jordan which descends 1,300 metres from the escarpment to the Dead Sea.

73 JAUSSEN 1908, 272.

Fig. 3: Bare-back camel riding on the crupper.
(From Raswan 1935, plate opposite p. 75).

Dostal, however, takes a very different view and concentrates on only two of these designs: the *shadād* (so-called "North Arabian") saddle and the *ḥawlānī* (so-called "South Arabian") saddle.

In fact, the terms "North Arabian" and "South Arabian" are misnomers when referring to these saddles, since the use of the *ḥawlānī* type is confined almost entirely to South East Arabia and parts of the Gulf coast, with the *shadād* type in use in most other parts of the Peninsula, including areas of northern Oman and northern, and most of southern, Yemen.[74] However, as I have said, these are only two of the numerous different types of camel saddle used in the Middle East and North Africa.[75]

It is not clear why Dostal thought that the use of the *ḥawlānī* saddle resulted in "small-herd keeping ... with a limited range of movement",[76] but the Bedouin

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74 It is known as the *qātab* in the north of Yemen and the *khayy* in the South. There is also a lighter version, which can be used for two riders, called a *murowwas*, see Chedeville *apud* Monod 1967, 238–239, and it is surely this which is shown on the South Arabian relief *CIH* 720 (BM 102601, see Bulliet 1975, 97, fig. 42). This fits very well with the fact that, apart from the crude undated figurines cited by Dostal and Bulliet, all the camel saddles shown in ancient Yemeni art are of the *shadād* type.

75 For a detailed discussion of these see Monod 1967.

76 Dostal 1959, 27. Note Wendel Phillips' comment: "The contention of Walter Dostal ... that riding on the hump represents significant progress over riding behind the hump can only provoke ridicule among those familiar with camel nomadism. Dostal's very original thesis that a

Fig. 4: A rock drawing showing riding bare-back on the crupper of a camel
(Photograph courtesy of William and Fidelity LANCASTER).

of South-East Arabia would certainly dispute this and one need only point to the
fact that those who guided Thesiger across the Empty Quarter were using this type
of saddle.[77] Bertram THOMAS reports that, on one of his long journeys in South-
East Arabia, the *shadād*-type saddle, which he had brought with him, "was the
subject of universal disapprobation for its size and weight, wherefore I suffered
the humiliation of being given a different camel to ride each day".[78]

MONOD makes the important point that the *shadād*, where the legs are
crossed round the front pommel, places the rider more over the withers than over
the hump itself,[79] and so the *ḥawlānī* and the *shadād* saddles do not place the

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camel herder riding on the crupper [*sic*] could not keep large herds of camels ... is not to be taken
seriously; the writer has frequently seen enormous herds of camels in various parts of Oman,
and the camel drivers have always been riding behind the hump" (1966, 263, chapter 3, note 2).

77 See, for instance, his description of how his saddle was constructed (1959, 43–44, and pls
8–9).

78 THOMAS 1932, 193.

79 MONOD 1967, 239 "on a peut-être trop tendance à tenir la selle-bât orientale pour un appareil
où le méhariste se trouve nécessairement installé à califourchon *sur* la bosse, sagement inséré
entre les arcades, pommeau et trousseequin. En réalité il aura très souvent tendance à occuper la
partie antérieure de l'appareil, à se rapprocher par conséquent du garrot en croissant les jambes

rider "on the crupper" and "on the hump" respectively as DOSTAL suggests, but above the rear or front slopes of the hump.

Dostal and the Supposed Origins of the *shadād*

DOSTAL believed that "the *šadād*" camel saddle was "an adaptation to the dromedary of the arched horse saddle" of the horsemen of Central Asia and that it could not have evolved independently among "the dromedary herders". He thinks that "it was probably the Parthians who introduced the arched saddle into the border-lands of Arabia".[80] As far as I can see, he has absolutely no evidence for these statements and gives no reason why it could not have evolved among the Arabian nomads. The only link he can find between the Central Asian horse saddle and the North Arabian *shadād* is the claim that the first representations of the *shadād* are very roughly contemporary with the "relatively late appearance of the [arched saddle] in Central Asia".[81] Thus, he reports that the "earliest traces" of the saddle-bow in Central Asia "come from the end of the first millennium BC and the beginning of our era", while he claims – wrongly – that the first traces of the *shadād* "are dated between the second and third centuries A. D.".[82] He also states that the places where these traces are found "lie in the northern part of Arabia, near the invasion routes from Central Asia".[83] I am not clear what Central Asian invasions he means, but even if this were accurate, it would hardly provide a firm basis on which to postulate the series of technological borrowings and adaptations required by his thesis. Moreover, the principle of the Central Asian horse-saddle and that of the *shadād* have very little in common beyond the basic shape needed to go over any animal's back.

One reason why DOSTAL looks to the Central Asian horse-saddle for the origin of the *shadād* appears to lie in his belief that all changes and improvements in camel-riding among Arabian nomads came from "contact with the urban-cultural

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autour du pommeau." He also quotes Chedeville to the effect that this is also how the Yemenis use their saddles of the *shadād* type, the "*qātab* (Taizz) ou *khayy* (Aden) 'monté sur la partie antérieure du bât, à l'aplomb du garrot'" (1967, 239).

80 DOSTAL 1979, 129.

81 DOSTAL 1959, 19.

82 DOSTAL 1959, 20.

83 DOSTAL 1959, 19–20; see also 1979: 129: "we then approach the conclusion that the *shadad* is an adaptation to the dromedary of the arched horse saddle; and this thesis is confirmed above all by something we cannot ignore in this discussion; namely, that the first archaeological appearance of the *shadad* dates from the same period as the earliest representations of Near Eastern horsemen with arched saddles". On this see below.

Fig. 5: A Nabataean figurine of a saddled camel.
(From Parlasca 1986, 202, Abb. 1).

population"[84] and not from within the nomadic society itself. One might draw a parallel with Caskel's belief that Bedouin social structure and ideology came from settled townsmen who had taken to the nomad life. Thus, Dostal says that in "the relation between dromedary herders and advanced civilization: the dromedary nomads have taken over the role of recipient".[85]

He claims that what he calls the "arched saddle", though invented among Central Asian nomads, only reached the North Arabian Bedouin as the result of a loan from a "neighbouring advanced civilization"[86] Indeed, he attributes the "retention" of what he regards as the "primitive" *ḥawlānī* saddle *behind* the hump in South-East Arabia to the camel-herders there having "no chance of contact with the centres of clearly marked civilization and thus [they] lacked this important stimulus to development".[87] It need hardly be said that there is no evidence for this assumption.

The Nabataeans were the nearest settled neighbours to the North Arabian nomads at the period at which Dostal claims the use of the "arched" horse saddle among the sedentaries gave the nomads the idea for the *shadād*. But it is

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84 Dostal 1959, 27–28, also 1979, 129–130, 136.
85 Dostal 1979, 136.
86 Dostal 1979, 136.
87 Dostal 1979, 130.

Fig. 6: A Nabataean figurine of a saddled horse.
(From EL-KHOURY 2002, Figure 61).

quite clear from the elaborate Nabataean figurines that while they used a cam-
el-saddle, which, though not a *shadād*, was clearly "arched" (Fig. 5), they rode
their horses with a simple saddle cloth attached by girths (Fig. 6), i.e. they had
arched camel saddles but not arched horse saddles.

This is also the situation in the rock drawings by nomads which are accom-
panied by Safaitic inscriptions, where the *shadād* (among other saddles) is used
on camels (Fig. 7), but horses seems to be ridden either bareback or with a saddle
cloth (Fig. 8). DOSTAL claimed that "arched" horse and camel saddles are found
on Palmyrene reliefs.[88] But, when, on these, it is possible to glimpse what is
under the riders' draperies, it is clear that, like the Nabataeans, the Palmyrenes
apparently rode horses with a simple saddle cloth or perhaps a thin cushion, and
camels with some kind of frame which permitted the rider to sit over the front of
the hump.[89] Horse riders are never shown on the very elaborate arched saddles
which appear on camels in ceremonial contexts.[90]

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88 DOSTAL 1959, 20.

89 For horses with saddle cloths, see, for instance, DRIJVERS 1976, pls. LXV, LXVIII.1, LXIX (and
note that when there are camels in the same reliefs they have almost identical cloths); for horses
apparently without saddle cloths, see pls LXII.1 and 2, LXVI.1 and 2; for camels see pls LXV,
LXVIII.1 and 2.

90 Compare, for instance, DOSTAL 1979, Pl. 68 (a camel rider), with the ceremonial saddles on
Pls 67, 69, 70.

Fig. 7: A rock drawing showing a camel with a *shadād*, 'signed' in a Safaitic inscription. (Photograph OCIANA project).

Fig. 8: A rock drawing of a horse rider 'signed' in a Safaitic inscription. (Photograph OCIANA project).

Fig. 9: A camel race. (Photograph courtesy of Julian Lush).

Dostal and Effects of Using the *shadād*

We should turn now from the supposed origins of the *shadād* to the supposed effects of its adoption by the Bedouin. Dostal claims that the riding position over the hump "enabled the rider to get the maximum speed out of his camel".[91] He does not say why he believes this, and I know of no evidence that is true. In fact, being much heavier than the *ḥawlānī* saddle, it would, if anything, slow the camel down as suggested in the quotation from Bertram Thomas, cited above.[92]

Dostal thinks that this supposed increase in speed had three effects of enormous historical significance. Firstly, "from now on, the camel-rider in the north of Arabia could cover larger distances much faster, and thus open up new pastures more easily, and keep, and watch over, bigger herds than before".[93] This is surely a *non sequitur*. Herds cannot be raced from one area of pasture to another, but must move at a grazing pace. The range and size of a herd is thus entirely unrelated to the speed achievable by a long-distance rider.[94]

Secondly, he believed that with the use of the *shadād*, "the range of movement of the camel-shepherds is increased and the contact with the urban-cultural

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91 Dostal 1979, 128.

92 Dostal (1959, 27) claims that the position behind the hump was "very primitive and the speed slow". However, Thesiger (1959, 45) writes of this type of saddle in Oman that the bedu "prefer to ride [on it] kneeling, especially if they mean to gallop". In Oman the 'jockeys' in camel races rode bareback on the crupper with legs drawn up around the hump. I am most grateful to Dr Miranda Morris for this information. In Saudi Arabia, before the introduction of robot jockeys, camel racing saddles were behind the hump with the riders' legs hanging down (see Fig. 9).

93 Dostal 1979, 128.

94 See the quotation from Phillips 1966, 263, chapter 3, note 2, in note 76 above.

element intensified. ... It is this relationship which is responsible for the carry-over of many urban-cultural elements into camel-shepherd culture."[95] "The impulses received by the dromedary herders from their multiple contacts with the zone of advanced civilizations led, from the very beginning, to the emergence of a special development-form. Here is a striking example of how the nomad groups, inside the area affected by advanced civilization, gradually assumed their later guise of mounted fighting nomads."[96] This insistence that all advances in nomadic societies *must* come from contact with "advanced civilizations" is a hall-mark of DOSTAL's theory.

Dostal, the shadād, and Camels in Warfare

Thirdly, DOSTAL claims that this increase in speed was "a fundamental factor in the development of the camel herders as mounted fighting forces".[97] Again, he gives no details and no justification for this statement, but the implication seems to be that he thinks that camels were used like cavalry in raids or in battle. But this is completely to misunderstand the camel's peculiar qualities. Its advantage over the horse is not as a fighting-platform, but as a means of transport, since it can cover long distances in arid conditions at a steady and relatively fast speed.[98]

Thus, although a camel at a gallop might be used in a raid to stampede the victim's herds or in a hasty retreat from a battle[99] where speed and momentum over a relatively short distance are required, the control available to the rider and his ability to wield weapons such as the long lance or the sword would be extremely limited. This has nothing to do with the type of saddle, but with the anatomy of the animal and the particular movements associated with its gallop. A camel charge is therefore in no way comparable to – or a match for – one of cavalry, either of the individualistic Bedouin type or the more disciplined army variety.[100]

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95 DOSTAL 1959, 27.

96 DOSTAL 1979, 136.

97 DOSTAL 1979, 128.

98 For examples see BURCKHARDT 1831, 2:78–81; HILL 1975, 34; GAUTHIER-PILTERS and DAGG 1981, 101.

99 See MUSIL 1928, 356.

100 Ironically, this is recognized by BULLIET (1975, 99). It is the more surprising therefore that he accepts, and tries to demonstrate, this part of DOSTAL's thesis which could only work if these facts were ignored.

Moreover, once in the melée of battle, the difficulties of manoeuvring a camel put its rider at a considerable disadvantage in close hand-to-hand fighting; and his height above the infantry, far from giving him an advantage, renders him particularly vulnerable since his mount makes a large and easy target for the swords, knives, and arrows of the surrounding foot soldiers.[101] For these reasons the Bedouin have always used the camel to transport them to and from battle. Those with horses will ride pillion (as a *radīf*) behind a friend or relative on the latter's camel, leading the horse to keep it fresh. When the place of battle is reached the horseman slides off the camel and mounts his horse. Those without horses prepare to fight on foot. The camels are kept at a safe distance from the fighting ready for pursuit or flight according to the outcome of the battle.

This is exactly what is shown in the Assyrian reliefs illustrating Ashurbanipal's campaigns against the Arabs in the seventh century BC, before the adoption of the *shadād* (Fig. 10), and in the Safaitic rock drawings of the turn of the era, *after* its adoption (Figs. 11, 12).

It is the tactic described in the pre-Islamic poetry, where the arrival at the scene of battle is marked by the command *nazāl* "dismount", and was used in the Arab conquests. It was described by Ibn Khaldūn in the fourteenth century, and it remained the tactic employed by the Bedouin right up to the suppression of Bedouin warfare in the first half of the twentieth century. I think it is safe to say that, apart from the very occasional, rather chaotic, charge to break up the enemy

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101 BULLIET (1975, 99) thinks that camel riders using the *shadād* could "take advantage of their superior height, seated as they were above the animal's hump, to strike down any unmounted defenders". While this might possibly be true in single combat between a cameleer and foot soldier, as soon as the rider has to cope with more than one opponent on foot, his distance from them, and the easy target which his mount presents, put him at a considerable disadvantage. It seems likely, therefore, that anyone fighting from camel-back in a melée would soon find himself on the ground with a dead or dying mount. See note 142. Ironically, BULLIET himself recognizes this when he writes: "Yet if new saddles and new weapons put desert tribes in a position to coerce caravans into buying their protection, they did not by any means make a camel rider the equal of a similarly armed horseman. The gallop is an unusual pace for the camel and one that requires both a well-trained animal and an expert rider. Yet even with the gallop there is no parallel in camel warfare to a cavalry charge; the camel simply cannot produce the momentum and impact of the warhorse … Arab tactics against cavalry … have always dictated dismounting and fighting as infantry or, if possible, changing mounts to a warhorse which has been brought along solely for combat." (1975, 99). This provokes the question of why he bases his whole theory on the supposed invincibility which he attributes to the nomads mounted on the *shadād*.
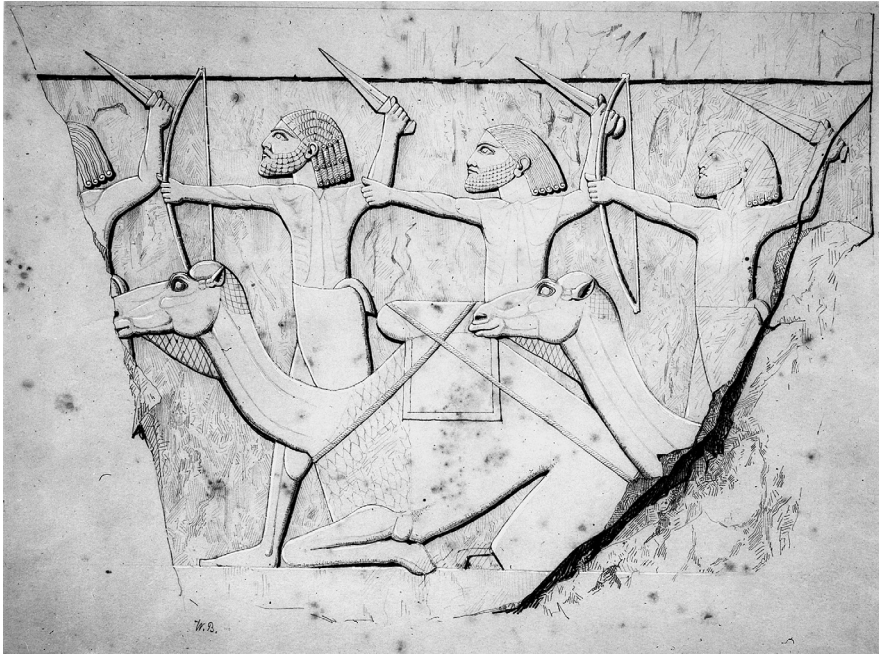
Fig. 10: A drawing of a relief, now lost, showing the Arabs, having couched their camels, going into battle against Ashurbanipal on foot. (British Museum Or.Dr.VII.28).

ranks,[102] the Bedouin have never fought from camel-back if they could possibly get off and fight on foot or on horseback.[103]

The only "evidence" which Bulliet, Briant, Knauf, Högemann, etc., were able to cite for the notion that ancient nomads fought from camel-back are three descriptions by Classical authors of camels being deployed like cavalry in the regular armies of settled kingdoms and empires.[104] In these, of course, their deployment

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102 See a description of this at the end of the Appendix.

103 As noted above, I know of no rock drawings showing fighting from camel-back, and certainly none which are accompanied by Safaitic or Thamudic inscriptions. The pillion riders in the Ashurbanipal reliefs are shown using their bows simply to fend off pursuit, the Arabs who are fighting can be seen on foot. Note that Glubb (1948, 128–129) describes how raiders he was pursuing would stop their camels every so often, the pillion riders would slip off and, kneeling on the ground, fire back at the pursuers, before clambering up behind the saddle and dashing off again.

104 Bulliet 1975, 95; Briant 1982, 132–133, 178; Knauf (e.g. 1983, 150; 1985a, 25; 1985b, 40, note 182) and Högemann (1985, 35–39).

Fig. 11: A Safaitic rock drawing showing two men fighting on foot with their camels, bearing the *shadād* saddle, couched behind them. (Photograph OCIANA project).

Fig. 12: A Safaitic rock drawing showing men fighting on horseback and on foot, with the latter's camels on the edge of the battle. Note that the accompanying inscription has been removed to provide greater clarity. (Photograph OCIANA project).

would have been determined, not by the traditional practice of nomads, but by generals accustomed to the tactics of regular cavalry, who adapted the camel to these. See the Appendix.

Bulliet, the *shadād*, and "Arab Political Power"

Bulliet's Summary of his Theory

Bulliet developed the Caskel/Dostal thesis, in a theory which he summarizes as follows:

> The North Arabian saddle made possible new weaponry, which made possible a shift in the balance of military power in the desert, which made possible the seizure of control of the caravan trade by the camel-breeders, which made possible the social and economic integration of camel-breeding tribes into settled Middle Eastern society, which made possible the replacement of the wheel by the pack camel.[105]

It will probably be clear by now that every stage of this summary is wrong. Whatever the reasons for the replacement of the wheel by the camel were – if indeed this really took place – the scenario put forward by Bulliet is illusory. I can find no evidence that "the North Arabian saddle made possible new weaponry".[106] Nor is there any evidence of "a shift in the balance of military power in the desert". Moreover, his attempts to demonstrate the "seizure of control of the caravan trade by the camel-breeders" and "the social and economic integration of camel-breeding tribes into settled Middle Eastern society" – whatever that means – are based on a misunderstanding of what little evidence he cites and a confusion of the ways of life of camel-breeders and merchants.[107]

Bulliet skirts round these problems by his very imprecise use of the term "Arab", which shows an extraordinary ignorance of ancient Near Eastern history. He avoids using the word 'Bedouin' and instead refers to "camel-breeders" and "Arabs", terms which he seems to equate. However, he never actually defines what he means by "Arabs" but uses the term both as an ethnicon and as a synonym for 'nomads'.[108] This allows him to skate over the problems related to the term 'Bedouin', but inevitably results in some very superficial, misleading and often

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105 Bulliet 1975, 110.
106 Bulliet (1975, 99) claims that the lance "became the characteristic weapon of camel riders" and cites Schwarzlose 1886, 46–47. However, what Schwarlose actually says is that "Zu Ross – denn das Kameel wurde nur auf dem Wege zum Kampfplatze geritten und an Ort und Stelle mit dem nebenher gefürten Ross (*ğanīb*) vertauscht – war die Lanze die vorzüglichste Waffe der Araber", i.e. the exact opposite of Bulliet's claims!
107 It is a little depressing to find this part of Bulliet's theory still being cited (apparently with approval) in, for instance, Rosen and Saidel's otherwise excellent article (2010, 72, 76, 77).
108 For discussions of the meanings term 'Arab' in antiquity, see Macdonald 2009a, text VI; 2009b.

entirely incorrect statements. To take just two examples, he refers bizarrely to Petra as "a settlement of Arab camel-breeders",[109] and claims that "the cultured Arabs of Petra and Palmyra ... did not cease to be simply the top stratum of a tribal desert society based upon camel breeding and caravan trading".[110] It is clear from this that he had no understanding of what is known of Nabataean and Palmyrene societies, or, it would seem, of camel-breeding which cannot be done within an urban environment.

Bulliet, the Adoption of the *shadād*, and "Arab Political Power"

BULLIET claims that the evidence for "the connection between the North Arabian saddle and Arab political power" is "circumstantial but persuasive".[111] However, his 'demonstration' of it appears to consist solely of an attempt to trace the *shadād* back to the second century BC, in order to make it contemporary with the period "when the Nabataeans, with their capital at the desert [*sic*] city of Petra, began to become politically and economically important".[112] However, his "evidence" that the *shadād* was in use in the second century BC is limited to the assumption that the cameleers at the battle of Magnesia could not have wielded their four-cubit swords without it. In the Appendix, I have cast doubt on the details in Livy's story, but even if his description were accurate, and even if BULLIET's assumption were true, he has not demonstrated any connection between this saddle and the Nabataeans, let alone that it was the cause of their rise to power. To make the further assumption that, if it existed at the time, their rise to power shows they must have used it, is of course to use a circular argument. In fact even the existence of the *shadād* in the second century BC has not been demonstrated. BULLIET's evidence is not even "circumstantial", and his argument in no way "persuasive".

While BULLIET attempted to use the rise of the Nabataeans to demonstrate that "an alteration in the balance of political power in favour of the nomads did, in fact, occur"[113] with a consequent "social and economic integration of Arabs and settled folk",[114] he merely assumes that the same is true of Palmyra and Mecca. Having cited Strabo's account of the nomadic *scenitai* in the Syrian Desert, he concludes that "Palmyra's rise marks the Arabs' transition from charging tolls for

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109 BULLIET 1975, 93.
110 BULLIET 1975, 109.
111 BULLIET 1975, 91.
112 BULLIET 1975, 91–92.
113 BULLIET 1975, 91.
114 BULLIET 1975, 107.

crossing their land to being themselves in control of the trade".[115] But there is no evidence that anything more than a transient minority of the Palmyrene population was ever "Arab" in BULLIET's sense, i.e. nomads, let alone that the city's rise to power and wealth was based on the use of the *shadād*.[116] Finally, he claims that the rise of Mecca "simply marks a further step in the entire process by which the camel-breeding Arabs first found the means of controlling their greatest potential source of wealth [i.e. the trade between South Arabia and the North] …"[117] But the Meccans were not, of course, camel-breeding nomads but sophisticated townsmen who considered themselves different from, and superior to, the nomads[118] whom they used and dominated in both the late Pre-Islamic and the early Islamic periods.

Bedouin and the Use of the Camel in the Early Islamic Conquests

The time is long past when the armies of the early Islamic conquests were considered to have been made up almost entirely of Bedouins.[119] It is now clear that the early Islamic armies were commanded and largely manned by sedentaries, though with a smaller but significant Bedouin contingent.[120] They may therefore be thought of as the armies of a settled state. However, unlike the generals mentioned above, those of the early Islamic armies had long familiarity with the use of the camel.

It is thus no surprise to find that, as HILL says, the use of the camel "as a cavalry mount in the conquests was very infrequent … whereas attestations for dismounting are much more numerous. The camels were left in the camp and guarded by slaves … The warriors who had camels but not horses must therefore

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115 BULLIET 1975, 102.

116 He misinterprets the huge ceremonial saddles shown on some Palmyrene reliefs as the *shadād*. See BULLIET 1975, 102–103. See notes 89 and 90 above.

117 BULLIET 1975, 106.

118 For examples of this see DONNER 1981, 81, 263

119 To take an example at random, see HITTI (1967, 144) "most of the armies of conquest were recruited from the Bedouins".

120 The composition varied, of course, from campaign to campaign. The armies which conquered Syria, for instance, were very largely made up of sedentaries, while reinforcements sent to the army in Iraq appear to have had rather larger Bedouin elements. See DONNER 1981, 118–119, 147, 192–197, 200–202, 205–209 (but see AL-MADʿAJ 1988, 72), 221–226. It is now clear that the armies of the conquests contained very large numbers of Yemenis at all levels. See SMITH 1990, 134 and AL-MADʿAJ 1988, 64–82.

be considered as mounted infantry".[121] It is clear from HILL's excellent article that while the large numbers of camels in the Muslim armies gave them a great advantage over their enemies in mobility in desert areas, they were used almost entirely for transport.[122] The Muslims *fought* either on horseback, particularly with the lance, or on foot where the archers appear to have been particularly devastating.[123] However, especially in the early days, horses were not very plentiful, and anyway the Muslim horsemen could not hope to match the training and heavy armour of the Byzantine and Persian cavalries. Thus, as Hill says, "the mobility of the Arabs, so superior to that of their enemies for movement over long distances in desert or steppe, became inferior when they were faced by their opponents on the battlefield. The evidence strongly suggests that for the pitched battles the Arabs chose positions which would favour infantry, supported by archers, and afford little scope for the effective use of heavy cavalry".[124]

Thus the importance of the camel to the early Muslim armies lay, not in its use as a battle mount, but in enabling the Arabs "to cover long distances rapidly and to use the desert for passage, for a raiding base, and as a refuge". "Their rear, with its lines of communications, was thus safe from enemy interference, the sending of reinforcements was without hazard, and the families were left in safety at desert watering-places."[125] In all this the camel's vital role was in transport, and the type of riding-saddle – or even whether there was a riding-saddle at all – was irrelevant.

Conclusion

CASKEL's idea that Arabia was "Bedouinized" between AD 100 and the sixth century, and DOSTAL's and BULLIET's theories that by possession of the *shadād* the North Arabian Bedouin were able to sweep to military and political domination of the sedentaries beg the questions: when and where did this happen and what is the process they envisage?

Unfortunately DOSTAL gives no evidence to support his statement, and, quite apart from the irrelevance of the *shadād* to any such process, such a scenario is

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121 HILL 1975, 34.
122 HILL 1975, 32–34; see also DONNER 1981, 222–223. On the advantages this mobility gave the Muslims in desert areas, see HILL 1975, 40–42, where (40) he also describes the difficulties they encountered in adapting to other conditions.
123 HILL 1975, 37–38.
124 HILL 1975, 37.
125 HILL 1975, 41–42.

unrecognisable in what we know of the relations between Bedouin and sedentary during the last three thousand years. I have dealt elsewhere with KNAUF's suggestion that the Nabataeans remained Bedouin throughout their history,[126] and, contrary to BULLIET's assumptions, it is even more clear that the Palmyrenes were never Bedouin. Finally, there can be no doubt that the Islamic conquests, far from sweeping the Bedouin "to political and military domination" of the sedentaries, only brought the nomads more firmly under sedentary control.[127]

APPENDIX. Camels in ancient regular armies

The Battle of Qarqar, 854 BC

The earliest reference to the use of camels in warfare occurs in the Annals of Shalmaneser III (858–824 B. C.), where it is related that Gindibu the Arabian supplied 1,000 camels to the alliance of Syrian kings at the battle of Qarqar, in 854 BC.[128] Unfortunately, we are not told how these camels were deployed, and, to judge from later practice, they may well have been used simply to transport the baggage and any troops Gindibu brought with him.[129] These are likely to have dismounted to fight on foot like the Arabs in the battle shown on Ashurbanipal's reliefs (see Fig. 10). To do otherwise would have endangered the effectiveness of the large numbers of cavalry and the many chariots in the allied army, as the following incident makes clear.

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126 See MACDONALD 2009a, text VII. Ironically, KNAUF believes that the *shadād* gave a military advantage to those who possessed it over those who did not. Since there is clear evidence that the nomads who carved the Safaitic graffiti used the *shadād* (see, for example, Figs 7, 11), whereas there is no evidence at all that it was in use among the Nabataeans, this should mean that these nomads dominated the Nabataeans (who, incidentally, KNAUF considers were 'Bedouin'), something which, of course, is not borne out by the evidence.

127 See, for instance, DONNER 1981, 251–267.

128 See the Monolith Inscription of Shamaneser III, see GRAYSON 1996, 23, line 94.

129 I am most grateful to Professor Israel Ephʿal for pointing out to me (personal communication) that the description of the enemy troops in the Monolith Inscription refers only to participants in the battle, not to the camp followers. It is therefore more probable that Gindibu's camels were used to transport his infantry rather than baggage. However, it is surely curious, that the text should mention the camels rather than those they brought to the battle, but it is possible that the camels were specified because they were an exotic or unexpected feature of the enemy's force.

The Battle of Sardis, 547 BC

This is found in Herodotus' description of the way Cyrus used camels in his battle against Croesus in front of Sardis, in 547 BC:[130]

> Now at this time there was no nation in Asia more valiant or warlike than the Lydian. It was their custom to fight on horseback, carrying long spears, and they were skilled in the management of horses .... When Cyrus saw the Lydians arraying their battle, he was afraid of their horse, and therefore did as I will show by the counsel of one Harpagus, a Mede. Assembling all the camels that followed his army bearing food and baggage, he took off their burdens and set men upon them equipped like cavalrymen; having so equipped them he ordered them to advance before his army against Croesus' horse; he charged the infantry to follow the camels, and set all his horse behind the infantry ... The reason of his posting the camels to face the [Lydian] cavalry was this: horses fear camels and can endure neither the sight nor the smell of them. ... So when battle was joined, as soon as the horses smelt and saw the camels they turned to flight, and all Croesus' hope was lost.

It is clear from this that camels were normally used in Cyrus' army solely to transport "the food and the baggage", and that when Cyrus "took off their burdens and set men upon them equipped like cavalrymen" he was doing something exceptional. In fact, he used them purely to throw Croesus' superior cavalry into disarray and there is no suggestion that the camels were in regular use as mounts.

Camels and Horses

The supposed instinctive dislike of horses for camels[131] was a *topos* which was clearly widely believed, at least in Persia. Herodotus remarks[132] that in Xerxes' army the Arabian contingent, which was mounted on camels,[133] "always served

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130 Herodotus I.79–80, quoted from the Loeb edition. Note that the word Herodotus uses for camels is κάμηλοι, which, like its English equivalent, is used of both Bactrian camels and dromedaries. It is therefore perfectly possible – indeed more likely given that they were part of Cyrus' army – that these were Bactrian camels and had nothing to do with Arabia.

131 I am most grateful to Juliet Clutton-Brock for the information that in fact there is no scientific evidence that horses fear the smell of camels and that it is more likely that in the battle of Sardis, the horses were simply scared by seeing huge, ungainly creatures charging towards them.

132 Herodotus VII.87.

133 Herodotus' remark that "the Arabians had the same gear as their foot, but they all rode on camels" (VII.86) may imply that they were used as mounted infantry, in the Bedouin manner. However, too much should not be made of this since his description of the Arabians comes at the end of a list of cavalry units most of which were "equipped like their infantry".

in the rear ... because the horses could not endure the presence of the camels, and the Arabians thus avoided frightening the horses".[134] Indeed, Aelian notes that "the Persians, since the battle which Cyrus fought in Lydia, keep camels together with their horses, and attempt by so doing to rid horses of the fear which camels inspire in them".[135] Among the nomads of Arabia, it is almost certainly because their horses were and are accustomed from birth to living in close proximity to camels that they have no fear or dislike of them. However, unless horses and camels had been trained together, a supposed Bedouin contingent of a regular army, which rode camels into battle, would have played havoc with the cavalries of both sides.

Camels Used as Cavalry

BULLIET and BRIANT quote descriptions by ancient authors of pitched battles in which camels were deployed like cavalry, and appear to think that this is evidence of how ancient nomadic pastoralists used camels in warfare.[136] It is worth examining these accounts since they are the only support BULLIET provides for the notion – fundamental to his thesis – that ancient nomads fought from camelback.[137]

The Army of Semiramis, Ninth Century BC?

The earliest example they cite of camels being used in regular armies, is in the army of Semiramis as described by Ctesias of Cnidus and reported by Diodorus Siculus (II.17.2), i.e. a second-century BC report of a late fifth-century description of legendary events ascribed to the ninth century! HÖGEMANN identifies the cameleers in this passage as "Arabs" by arbitrarily emending ἄνδρες (men) in this passage to ἄραβες (Arabs). He does this so that he can date to the fifth century BC the supposed introduction of the *shadād*, and hence the transition he postulates from "Proto-Bedouin" to "Full Bedouin", on the assumption that Ctesias was

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134 Herodotus VII.87. It is possible that this deployment also recognizes that camels are not fitted for front-line fighting. Camels were also used for baggage in Xerxes' army as Herodotus VII.125 shows.

135 Aelian 11.36, quoted from the Loeb edition.

136 BULLIET 1975, 95; BRIANT 1982, 132–133, 178.

137 He is followed in this by, among others, KNAUF (e.g. 1983, 150; 1985a, 25; 1985b, 40, note 182) and HÖGEMANN (1985, 35–39).

describing the practice of his own time (late fifth century BC), and assuming that it would be impossible to fight from camel-back in this way without the *shadād*.[138] This, of course, is a large number of assumptions built on an arbitrary emendation of Diodorus' text! Ctesias does not describe the use of camels in battle but simply includes cameleers in his list of the supposed contingents in Semiramis' army, and the use of camels to carry river boats and dummy elephants. There is no indication of the origin of the camel riders, or whether the camels were dromedaries or Bactrians.[139]

The Battle of Magnesia, 190 BC

The second example used by Bulliet and those who followed him, is Livy's description of the cameleers in Antiochus III's army at the battle of Magnesia in 190 BC.[140] Thus, "in front of this cavalry were scythe-bearing chariots and camels of the breed called dromedaries. These were ridden by Arab archers carrying slender swords four cubits long, that they might be able to reach the enemy from so great a height".[141] The similarities between this and the Semiramis story suggest that the idea of cameleers with swords or knives four-cubits long may simply be a *topos* in Classical descriptions of Oriental armies. However this may be, it is certainly difficult to imagine wielding a bow and a four cubit (ca. 2 m) sword from a camel's back, with or without the *shadād*. Moreover, as I have said, in a melée among infantry the rider's height is a positive disadvantage for close fighting while his mount provides a large and easy target.[142]

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138 Högemann 1985, 37, 38 note 30, 39). He is followed in this by Knauf who, however, (1985a and subsequent works) supports this dating by claiming to identify the *shadād* on a Philisto-Arabian coin in the British Museum. I have examined this coin, and compared it with the photograph of another example published by Babelon (1910, 3: pl. 124, no. 17 rev.). Comparing the two, it is difficult to agree with Knauf's claim that the *shadād* is represented. No pommels are visible on either coin. What Knauf takes to be the rear one is, on both coins, the point at which the rider's leg, shown as horizontal, joins his body. Similarly the supposed front pommel is attached to the other end of the rider's leg and is surely intended as his foot, though admittedly grossly out of proportion.

139 They are described simply as κάμηλοι. See note 130 above.

140 Bulliet 1975, 95.

141 Livy XXXVII.40.12. Appian, *The Syrian Wars* VI.32, has a similar description of these cameleers: "There were also other mounted archers from … Arabia, who, riding on swift camels, shoot arrows with dexterity from their high position, and use very long thin knives when they come to close combat".

142 Livy describes in the same battle how even elephants were not safe from "the Roman soldiers, accustomed already by the wars in Africa both to avoid the charges of the beasts and either

The Battle of Nisibis, AD 217 or 218

Bulliet's final example of fighting from camel-back is taken from Herodian's account of the battle of Nisibis, between the Emperor Macrinus and the Parthian king Artabanus IV (V) in 217 or 218 AD.[143] Nowhere does Herodian say that the cameleers were Arabs and instead describes them as κατάφρακτοι, that is members of the heavy cavalry of the Parthian army, who in this instance had – for an unknown reason – been mounted on camels.[144] Κατάφρακτοι were armed with long, heavy, thrusting lances, not the light flexible weapon of the Bedouin

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to assail them with spears from the side or, if they could approach closer, to hamstring them with their swords (XXXVII.42.5). Even cavalry could be attacked in this way, and a camel would be even more vulnerable. Livy describes how, in the battle of Magnesia, the camels themselves, along with the chariot horses, were a great deal more trouble than they were worth, being thrown into confusion by the shower of missiles from the Cretan contingent in the Roman army, together with scattered cavalry attacks and "discordant shouts" (XXXVII.41.9–12). Plutarch (*Life of Crassus* 25.7–8) describes how at the battle of Carrhae only the light-armed Gauls were effective against the heavily armoured Parthian cavalry, "for they laid hold of the long spears of the Parthians, and grappling with the men, pushed them from their horses, hard as it was to move them owing to the weight of their armour; and many of the Gauls forsook their own horses, and crawling under those of the enemy, stabbed them in the belly. These would rear up in in their anguish, and die trampling on riders and foemen indiscriminately mingled." Such tactics would have been much easier against camels.

143 Bulliet 1975, 95. Herodian IV.14.3: "Meanwhile Artabanus was upon them with his vast and powerful army composed of many cavalry and an enormous number of archers and armoured riders [κατάφρακτοι] who fought from the backs of camels with long spears, avoiding close combat."

144 Note that Herodian (IV.14.3) says that these κατάφρακτοι were mounted ἀπὸ καμήλων, which, as pointed out in note 130 above, is a generic word which is used of both Bactrian camels and dromedaries. Since they were part of the Parthian army it is likely that these were Bactrian camels ridden by soldiers who had nothing to do with Arabia. Whittaker (Herodian/ Whittaker 1969, 456, note 1, 457, note 3) suggests emending ἔξωθεν to ἐξ ἄνωθεν ὠθοῦντας which he translates "who forced their way by jabbing from above" and it is this emendation which Bulliet has followed (1975, 293, note 14). However, support for the unemended reading, translated as "avoiding close combat", is found later in the description of the battle: "the Romans easily had the better of those who came to close-quarter fighting [or rather hand-to-hand fighting, συστάδην μαχομένων]" (IV.15.2); and "as long as the eastern barbarians are riding on horses and camels, they fight bravely; if they dismount or are thrown, they are easily taken prisoner because they do not resist in close-quarter fighting" (IV.15.3). This suggests that, whatever the true facts about the battle, Herodian intended the sense of the unemended text, i.e. that the κατάφρακτοι avoided hand-to-hand combat, presumably relying on the charge.

horsemen.[145] It is very difficult to imagine how a κατάφρακτος could fight adequately from camel-back or to see the point of putting him there,[146] and the passage would appear to be just one more of the fantastic elements in Herodian's description of the battle, possibly a late version of the *topos* mentioned above. What it cannot be is a description of ancient nomadic warfare or evidence for technical developments in nomadic camel saddlery.

Conclusion to the Appendix

Thus, none of the accounts of the use of camels in ancient armies used by Bulliet, Briant, Högemann, Knauf, etc., gives any clue as to whether Arab nomads fought from camel-back, let alone whether the type of saddle used was of any relevance.

The only report of a successful use of camels in a pitched battle between rulers of settled kingdoms, is that of Cyrus at the battle of Sardis, mentioned at the beginning of this Appendix, where they were baggage-, not riding-, camels and were used purely to spread confusion. The tactic was suggested by Harpagus the Mede and had nothing to do with Arab warfare, nor apparently any connection with Arabs. Indeed, the only time "Arabs" are mentioned in connection with the use of camels in a battle between regular armies is Livy's account of the battle of Magnesia, where their use was clearly a disaster.

Finally, it is interesting to note that something like "the Cyrus tactic," was occasionally employed by the Bedouin, at least in recent times. See for instance Habib's description of the Ikhwān armies of Ibn Saʿūd:

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145 See Burckhardt 1831, 1:53–54. "The Arabs throw the lance but to a short distance, when they pursue a horseman whom they cannot overtake, and whom they are sure of hitting. To strike with the lance, they balance it for some time over their head, and then thrust it forward; others hold and shake the lance at the height of the saddle ..." Both these uses of the lance can be seen very clearly in the Safaitic and later rock drawings.

146 Note that throughout Herodian's description of the battle the κατάφρακτοι on camels are deployed in exactly the same way as those on horses, the only difference mentioned being that the camels, with their soft pads, were even more vulnerable to caltrops (IV.15.2–3) and tended to trip over each other creating mounds of dead animals and riders (IV.15.5). Note also that Vegetius (III.23), writing almost two hundred years later, regards the camel as *inefficax bello* ('ineffective in battle') though the rather confused passage which follows suggests that this judgement is repeated from one of his sources and that, since it surprises him (*ceterum praeter novitatem, si ab insolitis videatur* – 'however, apart from its novelty, when it is seen by those not used to it', (translation by Milner in: Vegetius/Milner 1996, 111), he is trying to explain it, despite having no first-hand experience of the use of camels in warfare.

If the battle was a match between two different forces grouped on a battlefield, one waiting for the other to charge, the Ikhwan used the following formation: a standard bearer holding aloft the great green and white Ikhwan banner … was positioned several paces in front of the commanding chief Ikhwan. On either side of the chief were the Ikhwan mounted on horses, acting somewhat in the capacity of modern armor to drive a spearhead into the ranks of the enemy. Behind them were the Ikhwan on camels, prepared to give one great push once the wedge was made; rushing in behind the camel corps were the infantry, waving spears or rifles, or both, and heading for the enemy.[147]

References

Sigla

BM	British Museum registration numbers.
C	Safaitic inscriptions published in *Corpus Inscriptionum Semiticarum. Pars V: Inscriptiones Saracenicas Continens*. T. 1, Facs. 1, Paris: Imprimerie nationale, 1950–1951.
CIH	Corpus Inscriptionum Semiticarum *Pars IV* Inscriptiones Ḥimyariticas et Sabaeas continens. Paris: Imprimerie nationale, 1889–1932.
CIS ii	Aramaic (including Nabataean) inscriptions published in *Corpus Inscriptionum Semiticarum. Pars II Inscriptiones Aramaicas continens*. Paris: Imprimerie nationale, 1889–1954.
CSNS	Safaitic inscriptions published in CLARK 1979.
Doughty	Thamudic inscriptions recorded by C. M. DOUGHTY and republished in VAN DEN BRANDEN 1950.
HU	Taymanitic, Hismaic and Thamudic B, C, D inscriptions recorded by Charles HUBER and republished and renumbered in VAN DEN BRANDEN 1950.
JSLih	Dadanitic inscriptions published in JAUSSEN and SAVIGNAC 1909–1922.
JSNab	Nabatean inscriptions published in JAUSSEN and SAVIGNAC 1909–1922.
JSTham	Taymanitic, Hismaic and Thamudic B, C, D inscriptions published in JAUSSEN and SAVIGNAC 1909–1922.
Meek	A Hismaic inscription published in WINNETT 1937, 5–7.
OCIANA	The Online Corpus of the Inscriptions of Ancient North Arabia, Khalili Research Centre, University of Oxford: http://krc.orient.ox.ac.uk/ociana/index.php.
SIJ	Safaitic inscriptions published in WINNETT 1958.
Wadd	Greek and Latin inscriptions in WADDINGTON 1870.
WH	Safaitic inscriptions published in WINNETT and HARDING 1978.

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147 HABIB, 1978, 69.

Primary Sources

Aelian (1958–1959), *On the Characteristics of Animals*, with an English Translation by
    A. F. Scholfield, 3 vols. Cambridge, MA: Harvard University Press.
Appian (1955), *Appian's Roman History*, translated by H. White, Vol. 2. London and Cambridge,
    MA: Harvard University Press.
Herodian (1969), *Herodian*, translated by C. R. Whittaker, Vol. 1, Cambridge, MA: Harvard
    University Press.
Herodotus (1981–1982), *Herodotus*, translated by A. D. Godley, 4 vols., Cambridge, MA: Harvard
    University Press.
Ibn Khaldûn (1958), *The Muqaddimah: An Introduction to History*, translated by F. Rosenthal.
    London: Routledge & Kegan Paul.
Livy (1984), *Livy*, translated by E. T. Sage, Vol. 10: Books XXXV–XXXVII, Cambridge, MA: Harvard
    University Press.
Strabo (1917–1949), *The Geography of Strabo*, translated by H. L. Jones, 8 vols. Cambridge, MA:
    Harvard University Press.
Plutarch (1916), "Life of Crassus," in *Plutarch's Lives*, translated by B. Perrin, Vol. 3:
    Pericles and Fabius Maximus; Nicia and Crassus, Cambridge, MA: Harvard University
    Press.
Vegetius (1996), *Vegetius: Epitome of Military Science*, translated with notes and introduction
    by N. P. Milner, Liverpool: Liverpool University Press.
Vegetius (2004), *Epitoma rei militaris*, edited by M. D. Reeve, Oxford: Clarendon Press.

Secondary Sources

Babelon, E. (1910), *Traité des monnaies grecques et romaines,* Paris: Leroux.
Beeston, A. F.L. (1979 [1981]), "Some Features of Social Structure in Saba," in: *Studies in the
    History of Arabia: Proceedings of the First International Symposium of Studies in the
    History of Arabia, 23rd – 28th of April 1977, Sponsored by the Department of History, Faculty
    of Arts, University of Riyadh, Saudi Arabia*, edited by A. T. al-Ansary, A. M. Abdalla, S. al-
    Sakkar and R. T. Mortel, 115–123. Riyadh: University of Riyadh.
Beeston, A. F.L., Winnett, F. V., Ryckmans, J., and al-Ghul, M. (1973), "The Inscription Jaussen-
    Savignac 71," *Proceedings of the Seminar for Arabian Studies* 3 (1973): 69–72.
Briant, P. (1982), *Etat et pastures au Moyen-Orient ancien*, Cambridge: Cambridge University
    Press.
Buessow, Johann (2011), "Negotiating the Future of a Bedouin Polity in Mandatory Syria:
    Internal and External Political Dynamics of the Sbaʿa-ʿAbada during the 1930s", *Nomadic
    Peoples* 15/1 (2011): 68–92.
Bulliet, R. W. (1975), *The Camel and the Wheel*, Cambridge, MA: Harvard University Press.
Burckhardt, J. L. (1831), *Notes on the Bedouins and Wahábys, Collected during his Travels in
    the East*, London: Colburn and Bentley.
Caskel W. (1953a), *Die Bedeutung der Beduinen in der Geschichte der Araber*, Cologne:
    Westdeutscher Verlag.
— (1953b), "Zur Beduinisierung Arabiens," *Zeitschrift der Deutschen Morgenländischen
    Gesellschaft* 103 (1953): *28*–*36*.

— (1954a), "The Bedouinization of Arabia," in *Studies in Islamic Cultural History*. Edited by G. E. von Grunebaum, 36–46. Reprinted in Peters 1996, 34–44.

— (1954b), *Lihyan und Lihyanisch*. Cologne: Westdeutscher Verlag.

Clark, V. A. (1979), *A Study of New Safaitic Inscriptions from Jordan*, unpublished PhD thesis, University of Melbourne. Ann Arbor, MI: University Microfilms International.

Degener, G. (1987), *Das Emirat der Banū ʿUquail: Eine Untersuchung zum Zerfall des ʿabbāsidischen Kalifats und zur Beduinisierung des Fruchtbaren Halbmonds*, Göttingen.

Donner, F. M. (1981), *The Early Islamic Conquests*, Princeton, NJ: Princeton University Press.

Dostal, W. (1959), "The Evolution of Bedouin Life," in *L'antica società beduina*, edited by F. Gabrieli, Rome: Centro di Studi Semitici, Università di Roma, 11–34.

— (1967) *Die Beduinen in Südarabien. Eine Ethnologische Studie zur Entwicklung der Kamelhirtenkultur in Arabien*, Wien: Beck.

— (1979), "The Development of Bedouin Life in Arabia Seen from Archaeological Material," in *Studies in the History of Arabia: Proceedings from the First International Symposium of Studies in the History of Arabia, 23rd – 28th April, 1977, Sponsored by the Department of History, Faculty of Arts, University of Riyadh, Saudi Arabia*, edited by A. T. al-Ansary, A. M. Abdalla, S. al-Sakkar and R. T. Mortel, Riyadh: University of Riyadh [published 1981], 25–44.

Dresch, P. (1989), *Tribes, Government and History in Yemen*, Oxford: Clarendon.

Drijvers, H. J.W. (1976), *The Religion of Palmyra*, Leiden: Brill.

Dussaud, R. and Macler, F. (1901), *Voyage archéologique au Ṣafâ et dans le Djebel ed-Drûz*, Paris: Leroux.

Euting J. (1891), *Sinaïtische Inschriften*, Berlin: Reimer.

Franz, K. (2007), *Vom Beutezug zur Territorialherrschaft. Das lange Jahrhundert des Aufstiegs von Nomaden zur Vormacht in Syrien und Mesopotamien 286–420/889–1029: Beduinische Gruppen in mittelislamischer Zeit I.* Wiesbaden: Reichert.

Gauthier-Pilters, H., and Dagg, A. (1981), *The Camel: Its Evolution, Ecology, Behaviour, and Relationship to Man*, London: University of Chicago Press.

Glubb, J. B. (1948), *The Story of the Arab Legion*, London: Hodder & Stoughton.

Grayson, A. Kirk (1996), *Assyrian Rulers of the Early Millennium BC*, Vol. 2: *(858–745 BC)*, Toronto: University of Toronto Press.

Habib, J. S. (1978), *Ibn Saʾud's Warriors of Islam: The Ikhwan of Najd and Their Role in the Creation of the Saʾudi Kingdom, 1910–1930,* Leiden: Brill.

Harding, G. L. (1971 [1972]), "The Epigraphy: Part II of P. J. Parr, G. L. Harding and J. E. Dayton, Preliminary Survey in N. W. Arabia, 1968," *Bulletin of the Institute of Archaeology, University of London* 10 (1971 [1972]): 36–61.

Heidemann, S. (2002), *Die Renaissance der Städte in Nord-Syrien und Nordmesopotamien: Städtische Entwicklung und wirtschaftliche Bedingungen in ar-Raqqa und Ḥarrān von der Zeit der beduinischen Vorherrschaft bis zu den Seldschuken*, Leiden: Brill.

Henniger, J. (1943), *Die Familie bei den heutigen Beduinen Arabiens und seiner Randgebiete: Ein Beitrag zur Frage der ursprünglichen Familienform der Semiten*, Leiden: Brill.

Hill, D. R. (1975), "The Role of the Camel and the Horse in the Early Arab Conquests," in: *War, Technology and Society in the Middle East*, edited by V. J.Parry and M. E.Yapp, Oxford: Oxford University Press, 32–43.

Hitti, P. K. (1967), *History of the Arabs,* 9th ed., London: Macmillan.

Högemann, P. (1985), *Alexander der Große und Arabien*, Munich: Beck.

Jaussen, A. (1908), *Coutumes des Arabes au pays de Moab*, Paris: Lecoffre.

Jaussen, A., and Savignac, M. R. (1909–1922), *Mission archéologique en Arabie*, 5 vols., Paris: Leroux / Geuthner.

El-Khouri, L. S. (2002), *The Nabataean Terracotta Figurines*, Oxford: Archaeopress.

Kennedy, H. (1986), "The Uqaylids of Mosul: The Origins and Structure of a Nomad Dynasty" in: *Actas del XII congress de la U.A.E.I.* (Málaga, 1984), 391–403.

Knauf, E. A. (1983), "Midianites and Ishmaelites" in: *Midian, Moab and Edom: The History and Archaeology of Late Bronze and Iron Age Jordan and North-West Arabia*, edited by J. F.A. Sawyer and D. J.A. Clines, 147–162. Sheffield: JSOT.

— (1985a), "Philisto-arabische Münzen, 2: BMC Palestine Tf. XIX:25, Supplementa Ismaelitica, 8," *Biblische Notizen* 30: 22–28.

— (1985b), *Ismael: Untersuchungen zur Geschichte Palästinas und Nordarabiens im 1. Jahrausend v. Chr.*, Wiesbaden: Harrassowitz.

— (1988), *Midian: Untersuchungen Geschichte Palästinas und Nordarabiens am Ende des 2. Jahrtausends v. Chr.*, Wiesbaden: Harrassowitz.

Lange, K. (2005), "Economic Mélange, Pure Origins? Outsiders' and Insiders' Accounts of Tribal Identity in Northern Syria," in: *Shifts and Drifts in Nomad-sedentary Relations*. Edited by Stefan Leder and Bernhard Streck, 99–122, Wiesbaden: Reichert.

Lancaster, W. (1981), *The Rwala Bedouin Today*, Cambridge: Cambridge University Press.

Lancaster W., and Lancaster F. (1988), "Thoughts on the Bedouisation of Arabia," *Proceedings of the Seminar for Arabian Studies* 18(1988): 51–62.

Macdonald, M. C.A. (1992a), "The Seasons and Transhumance in the Safaitic Inscriptions," *Journal of the Royal Asiatic Society*, third series 2 (1992): 1–11.

— (1992b), "North Arabian Epigraphic Notes I," *Arabian Archaeology and Epigraphy* 3(1992), 23–43.

— (2009a), *Literacy and Identity in Pre-Islamic Arabia*, Farnham: Ashgate.

— (2009b), "Arabs, Arabias, and Arabic before Late Antiquity," *Topoi* 16 (2009): 277–332.

— (forthcoming), "Towards a Re-assessment of the Ancient North Arabian Alphabets Used in the Oasis of al-ʿUlā," *Arabian Epigraphic Notes*.

Al-Madʿaj, A. M.M. (1988), *The Yemen in Early Islam, 9–233/630–847: A Political History*, London: Ithaca.

Milik, J. T. (1972), *Dédicaces faites par des dieux (Palmyre, Hatra, Tyr) et des thiases sémitiques à l'époque romaine*, Paris: Geuthner.

Monod, T. (1967), "Notes sure le harnachement chamelier," *Bulletin de l'Institut Fondamental d'Afrique Noire* 28, série B (1967): 236–306.

Musil, A. (1928), *The Manners and Customs of the Rwala Bedouins*, New York: American Geographical Society.

Parlasca, I. (1986), "Die nabatäischen Kamelterrakotten: Antiquarische Aspekte und Kulturgeschichtliche Bedeutung," in: *Petra: neue Ausgrabungen und Entdeckungen,* edited by M. Lindner, Munich: Delp, 200–213.

Peters, F. E., ed. (1996), *The Arabs and Arabia on the Eve of Islam*, Aldershot: Ashgate.

Phillips, W. (1966), *Unknown Oman*, London: Longmans.

Raswan, C. R. (1935), *The Black Tents of Arabia (My Life Amongst the Bedouins)*, London: Hutchinson.

Retsö, J. (2003), *The Arabs in Antiquity: Their History from the Assyrians to the Umayyads*, London: RoutledgeCurzon.

Robin, C. J. (1996), "Sheba. 2: Dans les inscriptions d'Arabie du Sud," in: *Supplément au*

Dictionnaire de la Bible, edited by J. Brend, E. Cothenet, H. Cazelles and A. Feuillet, cols. 1047–1254, Paris: Letouzey.

Rosen, S. A., and Saidel, B. A. (2010), "The Camel and the Tent: An Exploration of Technological Change among Early Pastoralists," *Journal of Near Eastern Studies* 69 (2010): 63–77.

Al-Rūsān, M. M. (1986), *Al-qabāʾil al-thamūdiyya wa-l-ṣafawiyya: Dirāsa muqārana*. Riyadh: ʿImādat shuʾūn al-maktabāt, Jāmiʿat al-malik Saʿūd.

Schwarzlose, F. W. (1886), *Kitāb al-silāḥ: Die Waffen der alten Araber aus ihren Dichtern dargestellt. Ein Beitrag zur arabischen Alterthumskunde, Synonymik und Lexicographie*, Leipzig: Hinrichs.

Smith, G. R. (1990), "Yemenite History – Problems and Misconceptions," *Proceedings of the Seminar for Arabian Studies* 20 (1990): 131–139.

Thesiger, W. (1959), *Arabian Sands*, London: Longmans.

Thomas, B. (1932), *Arabia Felix: Across the Empty Quarter of Arabia*, London: Cape.

van den Branden, A. (1950), *Les inscriptions thamoudennes,* Louvain: Institut Orientaliste.

Waddington, W. H. (1870), *Inscriptions grecques et latines de la Syrie, recueillies et expliquées*, Paris: Firmin Didot.

Winnett, F. V. (1937), *A Study of the Lihyanite and Thamudic Inscriptions*, Toronto: University of Toronto Press.

— (1958), *Safaitic Inscriptions from Jordan*, Toronto: University of Toronto Press.

Winnett, F. V. and Harding, G. L. (1978), *Inscriptions from Fifty Safaitic Cairns*, Toronto: University of Toronto Press.