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Navigated Spaces, Connected Places

Proceedings of Red Sea Project V held at the University of Exeter, 16–19 September 2010

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The Semiticisation of the Arabian Peninsula and the Problem of its Reflection in the Archaeological Record

Roger Blench

Introduction

The Arabian Peninsula is entirely Semitic-speaking today, with Arabic dominant and Modern South Arabian languages confined to a small area of the extreme south, along the coast of the Ḥaḍramawt, in Oman and on Socotra. However, epigraphic South Arabian languages (Sabaean, etc.) were once much more widespread and indeed their speakers migrated across the Red Sea, speaking what would become Ethio-Semitic languages. Semitic languages are relatively well-attested compared with other branches of Afroasiatic and the lack of diversity within Modern South Arabian argues that their arrival cannot be of any great antiquity. Nonetheless, we have no clear idea of when Semitic languages became dominant in the Arabian Peninsula, nor by what mechanism the existing populations disappeared or were assimilated. The archaeology of Arabia and adjacent parts of Ethiopia has become significantly better known in the last few years and yet there is no clear correlate in the material record for this remarkable process. This paper examines the evidence and makes some proposals as to the nature and chronology of the Semiticisation of the Arabian Peninsula, using principally lexical evidence from the Modern South Arabian languages.

The Linguistic Situation

Semitic languages are part of the larger language phylum, Afroasiatic, which includes Berber, Ancient Egyptian and the languages of Ethiopia as well as the Chadic languages of Central Africa (Figure 8:1). This classification is not wholly settled, especially as to the inclusion of Omotic and Elamitic.[1]

The Semitic branch of Afroasiatic is well-known and described, and has significant ancient attestations in the form of Eblaitic and other epigraphic languages of the Near East.[2] By the standards of Afroasiatic, Semitic languages are extremely close to one another. Omotic, by contrast, is so internally divided that it has been long debated as to whether it is a member of the Afroasiatic group and whether Omotic constitutes a coherent branch.[3] But the *Semitic Etymological Dictionary* (SED)[4] is likely to reconstruct thousands of roots for common Semitic, the internal classification of which is generally agreed upon by scholars (Figure 8:2).

One intriguing issue that remains unresolved is the position of the Gurage languages of Ethiopia; these languages are so different from Ethiosemitic (i.e., Amharic, etc.) and from each other that it is a real possibility that these are relic Semitic languages, remaining in Ethiopia after the migration of the main core of Semites up the Nile River.[5]

The South Semitic languages consist of three branches, Modern South Arabian (MSA), Epigraphic South Arabian (ESA) and Ethiosemitic. The MSA languages are a set of six languages, confined to a small area of the extreme south, along the coast of the Ḥaḍramawt, in Oman and on Socotra (Figure 8:3). They are relatively well-documented, with substantial dictionaries of four of them.[6] The ESA languages are the so-called "Sabaean" languages which are generally considered ancestral to modern South Semitic.[7] These include Sabaean, Minaean and Qatabanian inscriptions and are generally dated to between the 8th century BC and the 6th century AD.[8] The ESA languages include Aksumite, which is attested on both sides of the Red Sea (Figure 8:4). During the 3rd century AD inscriptions of the so-called *(')l* type appear and are almost certainly the precursors of Arabic-type languages gradually spreading down into the peninsula. However, it is logical to assume the speakers reached the region much earlier and the languages only took on written form towards the last part of their lifespan.

There is no real doubt that the ancestors of both Epigraphic (ESA) and Modern South Arabian (MSA) were languages spoken in the Near East rather than Ethiopia. But the date and processes whereby the speakers of these languages migrated and diversified are unknown. Apart from inscriptions that can be read, some contain evidence for completely unknown languages co-existing with ESA. Beeston[9] cites an inscription from Marib which begins in Sabaean but then switches to an unknown language. He mentions several other texts that have similar morphology (a final –k suffix) and may represent an unknown non-Semitic language (or possibly a Nilo-Saharan language such as Kunama, for which such a feature would be typical).

1. See Blench 2006 for a review of some of the alternative proposals.
2. Fronzaroli 1969; Rubin 2008.
3. This is generally considered resolved. See e.g., Bender 2000, 2003.
4. Militariev & Kogan 2005, also in progress.
5. See, i.e., lexical data in Leslau 1979.
6. Leslau 1938; Johnstone 1977, 1981, 1987.
7. Höfner 1943; Beeston 1984; Kogan & Korotayev 1997; Nebes & Stein 2004.
8. Ricks 1982; Versteegh 2001.
9. Beeston 1981: 181.

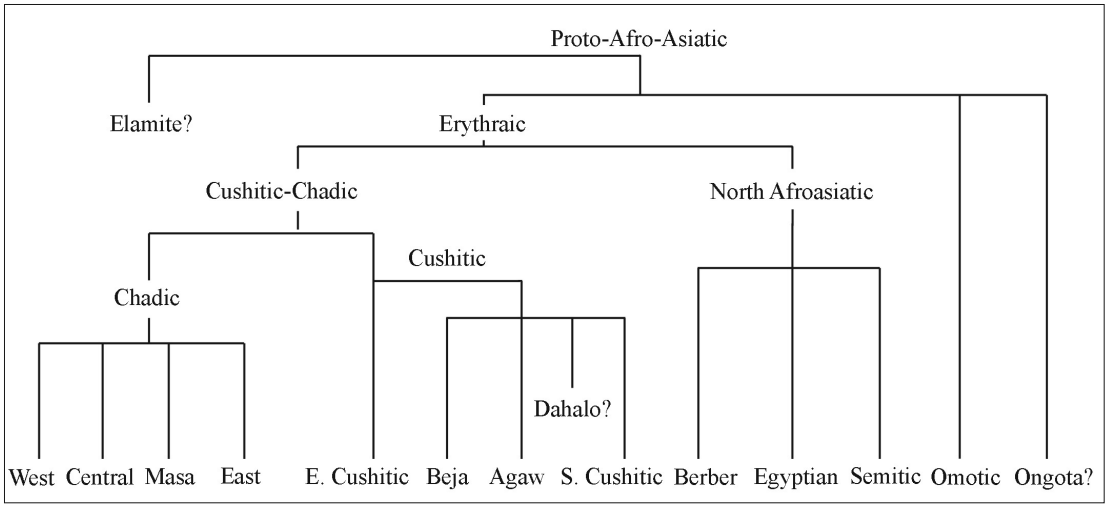

Figure 8:1. Afroasiatic classification.

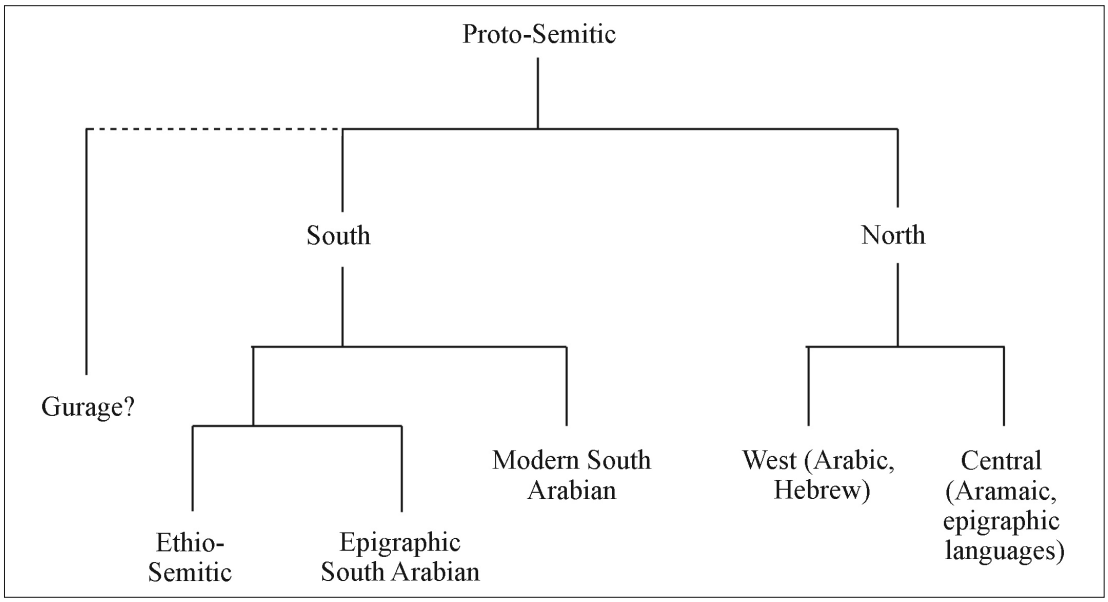

Figure 8:2. Semitic language phylogeny.

Figure 8:3. Modern South Arabian languages.

MSA languages share an intriguing common feature with some Afroasiatic languages on the mainland: the conservation of lateral fricatives. The lateral fricatives, /ɮ/ and /ɬ/, are relatively rare in the world's languages but within Afroasiatic they occur in Chadic, Cushitic and MSA languages. They have disappeared in other branches of Semitic, but it is thought that they were a feature of proto-Afroasiatic. This conservation may have relevance for the peopling of South Arabia, as the old Afroasiatic root for "cattle" is *ɬa*, which is widely attested with a lateral fricative.

Figure 8:4. Map showing approximate locations where Epigraphic South Arabian languages are spoken.

Evidence from Ethnography and Archaeology

The ultimate homeland of Afroasiatic is Africa and most probably Ethiopia, where its most diverse branches, Omotic and Cushitic, are spoken. Semitic is a relatively late branching from Afroasiatic, as testified by the relative closeness of all Semitic languages. As a consequence, the dominance of Semitic in the Arabian Peninsula is presumably comparatively recent. It must be the case that other quite different languages were spoken prior to Semiticisation several thousand years ago. There is no evidence as to the nature of these languages or their affiliation; although such a major cultural transformation must have left traces in regional archaeology, no proposals have been made as to the "signal" of the Semitic expansion.

The archaeology of Arabia demonstrates that it has been inhabited for as long as 100,000 years,[10] presumably by foraging populations for the great majority of that period. The coast of Arabia was populated early by a-ceramic fisher-foragers and during the 5th millennium BP there are signs of sedentarisation, both on the Tihama Plain[11] and in Ras el Hamra region of Oman.[12] No traces of such populations remain today, although fishing remains an important subsistence strategy among coastal Arabs and the Soqotri.[13] It is likely that they were assimilated by the incoming South Arabians and the possibility is that sedentarisation and the elaborated material culture that marks this is a sign of these early interactions.

Although stone tools provide abundant evidence for early foragers, there are few clues to the ethno-linguistic identity of their users, as Semitic languages are now dominant in Arabia. There is surprisingly little substrate vocabulary in MSA languages, providing few clues to the pre-Semitic populations. However, one possibility presents itself. All across the Arabian Peninsula, spreading as far north as Palmyra, the Solubba, hunter-gatherer traders, tinkers and musicians, persisted until as late as World War II.[14] They were reputed to 'not look like' Bedouin and to have a deep knowledge of the desert. They have been identified with the *Selappayu* of Akkadian records.[15] One of the links with the foraging past was their use of the so-called "desert kites", or gazelle traps, which are attested as early as 7,000 BC,[16] but which were still in use in the 20th century. So the Solubba may have represented the last remaining traces of the pre-Islamic populations of Arabia. Unfortunately, there seems to be no recent information on whether any still survive and whether their technical vocabulary of hunting or dog-breeding includes any distinctive lexemes.

Western Asia was an important centre for livestock domestication, with goats, sheep and cattle all first attested archaeologically in this region.[17] Livestock began to filter down into the peninsula by 6th or 7th millennium BC.[18] The initial evidence is for cattle, but sheep and goats and possibly domestic donkeys followed soon after. The earliest site with evidence of domestic cattle is Manayzah in eastern the Ḥaḍramawt, which is dated to 6,000 BC.[19] Shortly afterwards the nearby site of Shi'b Keshiya (mid 5th millennium BC) provides evidence for ritual assemblages of cattle skulls, as well as co-associated ovicaprine herding and continued extensive hunting. Analysis of the Keshiya skulls shows them to be taurines, which argues for an introduction from the Horn of Africa.[20] Wadi at-Tayyilah, an early Neolithic site in the eastern highlands of northern Yemen has medium-sized bovids combined with stone architecture, but it is uncertain whether the cattle are truly domestic.[21] The site of Buhais 18, in modern-day Sharjah, dates to 5,000-4,300 cal. BC is an assemblage of mostly domestic small ruminants with a few cattle bones.[22] There is no evidence for agriculture and this is interpreted as a site temporarily occupied by nomads.

10. Bailey 2009.
11. Durrani 2005.
12. Biagi & Nisbet 2006.
13. Naumkin 1988; Naumkin & Porxomovskij 1981.
14. Dostal 1956; Betts 1989.
15. Postgate 1987.
16. Helms & Betts 1987; Alsharekh 2006.
17. Zeder 2008.
18. McCorriston & Martin 2009.
19. McCorriston & Martin 2009; Martin *et al.* 2009.
20. Louise Martin, *pers. comm.*
21. Fedele 2008
22. Uerpmann & Uerpmann 2008

Phenotypic characterisations of cattle provide some evidence for the strata of breeds entering the peninsula. The cattle in Arabia today are of two distinctive types: humped zeboid cattle of Indian origin and short-horned taurines resembling those of mainland Africa.[23] Cattle kept by the Soqotri and Jibbali peoples preserved the archaic taurine breeds until recently. Long-horned taurines are also represented in Ethiopian rock-paintings of the earliest period, so these may well have once been present in Arabia. The presence of African taurines argues that for some period, Ethiopian-type languages such as Cushitic may well have been present on the Arabian mainland. But this cannot now be established for certain, because a further wave of Semitic herders must have overtaken the speakers of these languages and assimilated them. It would be interesting to correlate these movements with the various phases of rock art.[24] For example, by the Bronze Age (3rd to 2nd millennium BC) paintings show herds of cattle associated with *wusum*, tribal markings,[25] epoch would be a much more credible date for the dispersal of MSA languages.

The 7th millennium dates are earlier than evidence for Semitic languages anywhere and much earlier than we would expect for the ancestor of a relatively tightly focused group such as Modern South Arabian.[26] From this we can say that it is highly unlikely that the first pastoralists to reach Arabia were Semitic-speaking. They presumably spoke some language of the ancient Near East, perhaps a relative of Sumerian, for all we know. Whether the resident foragers adapted to this language wave or persisted speaking archaic languages is unknown.

To judge by the linguistic affiliations of MSA, its ancestral speakers came from the north and ultimately the Near East. After the appearance of written records in the mid 3rd millennium BC, the Semitic-speaking Akkadians and Amorites were entering Mesopotamia from the deserts to the west, and were probably already present in places such as Ebla in Syria. The ancestors of MSA speakers thus could hardly have been foragers and must have been either cultivators or pastoralists at this period.

In the case of agriculture, "recent investigations are establishing the tandem beginnings of crop agriculture and irrigation during the fourth millennium BC".[27] Wheat and barley have turned up in various archaeological assemblages, while lentils, chickpeas, peas, and possibly broomcorn millet, from Ḥayt al-Suad and Jubabat al-Juruf, place crop agriculture in the late 4th millennium. Even though it is likely there was some type of vegeculture in Ethiopia at this period[28] the South Arabian cultigen repertoire points strongly to the Near East. There is also a possibility that herders were irrigating wild forages both for livestock and to attract wild game. However, MSA languages show no very neat attestations of names for these crops, suggesting they were introduced gradually and by multiple routes.

Can linguistics be used to establish the identity of early pastoralists and should we correlate speakers of MSA languages with herding economies? A promising approach is the reconstruction of animal names; if we can establish the livestock species that reconstruct in South Arabian this will provide clues to pastoral practice. Sima[29] has collated all the names applied to livestock in Epigraphic South Arabian and the *Semitic Etymological Dictionary* (SED),[30] which has fortunately reached Volume II, covering 'animals', and provides useful comparative material (although by virtue of its etymological format it excludes non-reconstructible lexemes). Blench[31] summarises the linguistic data for livestock names in the languages of Ethiopia. The following paragraphs tabulate livestock names from the major sources on MSA and ESA languages and compare them with other branches of Semitic to establish their affinities.

Livestock Names in South Semitic

If a radical transformation of the subsistence patterns of the Arabian Peninsula took place with the arrival of livestock, examination of the main terms for livestock species in South Semitic languages should make it possible to establish whether the connections are with the Near East or across the Red Sea. The following tables bring together the main names for livestock species, in both ESA and MSA. The column headed 'Literals' relates them to a Semitic root where possible and plausible, and in particular those recorded in ancient Near Eastern languages.

Camel. The wild dromedary camel formerly spread across the Arabian Peninsula and into the Near East. The period of its domestication (as opposed to the taming of wild dromedaries) remains disputed, but a mid 3rd millennium date is often put forward.[32] Certainly by this period finds of camels buried in proximity to human graves begin and rapidly become common. Inferring true domestication may be problematic, and this may be as late as the 1st millennium BC, but the camel clearly played an important role in subsistence from the earlier period. Table 8:1 shows the terms for 'camel' in South Semitic with Near Eastern cognates.

Commentary: The main term for camel in South Semitic, #b-k-r, is attested in Akkadian and is pre-Arabic. It is unclear whether this is the same literal set as #b-ˢ-r. However, the #g-m-l root, from which English "camel" derives, is not known from epigraphic sources, and was probably spread in the immediate pre-Islamic period. It is also widely at-

23. Blench 1993.
24. E.g., Khan 1993.
25. McCorriston & Martin 2009: 238.
26. *Cf.* Bender (1970) for lexicostatistical assessments; Simeone-Semelle (1997) for a more recent synthesis.
27. Harrower 2008.
28. Blench 2007.
29. Sima 2000.
30. Militariev & Kogan 2005.
31. Blench 2008.
32. Vogt 1994.

Language	Attestation	Gloss	Literals
ESA	ʔbl f. ʔblt	camel	#ʔ-b-l
	bʕr	camels	#ʔ-b-l
	gml	camels	#g-m-l
	nqt	f.	
	bkr	young~	#b-k-r
	źby	young~	
	rkb	riding~	? < Arabic
Mehri	beʕáyr	m.	#b-ʔ-r
	məleet	f.	
	hebēr	camels	#ʔ-b-l
	boker (L.)	young f.	#b-k-r
Sḥeri (=Jibbāli)	gūl pl. gmíhl	m.	#g-m-l
	iyɛ́l	f.	
	okrit (L.)	young f.	#b-k-r
Baṭḥari	ḥəbeeʕər	camels	#ʔ-b-l
Ḥarsūsi	beʾiir	m.	#b-ʔ-r
	ḥə-byaar	camels	#ʔ-b-l
Soqotri	gimal		<Arabic
	baʔír	m.	#b-ʔ-r
	baʔahar	f.	#b-ʔ-r
	mibkéroh	young ~	#b-k-r
Akkadian	bakru	young f.	#b-k-r
Arabic	ʔibl	camels	#ʔ-b-l
Classical Hebrew	bekęr	young ~	#b-k-r

Table 8:1. Terms for "camel" in South Semitic with Near Eastern cognates.

tested in Ethiosemitic, unlike #b-k-r. Although camel culture appears to be of some antiquity in the Horn of Africa the lexicon of camel terms appears to be quite distinct and not borrowed from across the Straits of Hormuz.[33]

Donkey. The wild ass, *Equus asinus africanus*, is indigenous to the African continent and formerly a chain of races or subspecies spread from the Atlas Mountains in Morocco eastwards to Nubia, down the Red Sea and probably as far as the border of present-day northern Kenya.[34] A very small population still survives in a remote part of Eritrea, while a related species, the onager, was once common in the Arabian Peninsula. The donkey was domesticated from the African wild ass and studies of donkey mtDNA have shown that the wild ass was domesticated at least twice, some 5,000-7,000 years ago.[35] Donkeys were used in the early Near East and are attested in most early Semitic languages except Eblaitic. Table 8:2 shows the terms for "donkey" in South Semitic with its Near Eastern cognates.

Language	Attestation	Gloss	Literals
ESA	ḥmr	wild ass, onager	#ḥ-m-r
Mehri	ḥayr/ ḥəyeer		#ḥ-y-r
	ḥiiriit	(female)	#ḥ-y-r
Sḥeri (=Jibbāli)	ḳéráḥ		#k-r-h
	ḳéréḥét	(female)	#k-r-h
	aḥyɛ́r		#ḥ-y-r
Ḥarsūsi	ḥayr/ ḥeyir		#ḥ-y-r
Soqotri	ʃmálhen		#ḥ-m-r
Akkadian	imēru		#ḥ-m-r
Ugaritic	ḥmr	donkey, load	#ḥ-m-r
Ugaritic	ʕr		#ḥ-y-r
Mandaic	hamara	donkey, pack-animal	#ḥ-m-r
Hebrew	ʕayir	m.	#ḥ-y-r
Arabic	ʕayr		#ḥ-y-r
Zway	umar	donkey (? < Arabic)	#ḥ-m-r
Beja	humáar	zebra	#ḥ-m-r

Table 8:2. Terms for "donkey" in South Semitic with Near Eastern cognates.

Commentary: The #ḥ-m-r and #ḥ-y-r literals are both attested in Ugaritic and probably spread down into the peninsula from the Near East along with the use of the donkey for carrying loads. They are almost unknown on the Ethiopian side of the Red Sea and may be late Arabic borrowings, although the Beja term for "zebra" is perplexing and may be a recent application to a wild equid.

Cow, cattle. Cattle were domesticated twice, or possibly even three times, with the humped zeboids in India long separated from the humpless taurines of the Near East and North Africa.[36] Zebu was brought from India (possibly by sea) and cross-bred with taurines in both Arabia and East Africa, leaving only residual populations in isolated places without substantial introgression.[37] The zebu vanquished the hump-less longhorns shown in rock-paintings in the Horn of Africa[38] and all but eliminated the humpless shorthorns which now survive only in residual populations in the Sheko valley in Ethiopia, among the Jibbali of Oman and on Soqotra Island.[39] The long term presence

33. Blench 2006.
34. Groves 1986; Haltenorth & Diller 1980:109; Blench 2000.
35. Beja-Pereira *et al.* 2004.
36. Loftus *et al.* 1994.
37. Blench 1993.
38. E.g., Gutherz *et al.* 2003.
39. Blench 1998.

Language	Attestation	Gloss	Literals
ESA	bqr	cattle	#b-q-r
	bʔr	bull	PS #b-r
	θwr	bull	
	sˡfrt	small ~	?=taurines
Mehri	bəḵəreet/ əbḵaar	cow	#b-q-r
	ɣooɬəb/ ɣayɬaab	bull	
	Tawr	bull	< Omani Arabic
	fōr	young bull	
Sḥeri (=Jibbāli)	lḗʔ		#l-ʔ
	lhóti		
	ɣóɬəb	bull	
	fʳór	bull	
	ʃóṭer	calf	
Ḥarsūsi	bəḵərə́t		
	θawr	bull	< Omani Arabic
	ɣóɬəb	bull	
Soqotri	leʔe (?)		#l-ʔ
	ʔelheh	cow	#l-ʔ
	fáʔahar	bull	*cf.* Hebrew?
	ʃáṭar	calf	?
	ʔalf	heifer	ʔ-l-p
Eblaitic	ba-ḳa-lum	cattle	#b-q-r
Eblaitic	li-a-núm	cattle	#l-ʔ
Akkadian	alpu	bull, ox	ʔ-l-p
Ugaritic	ʔalp	bullock	ʔ-l-p
Hebrew	bāḳār	cattle	#b-q-r
Arabic	baḳar	cattle	#b-q-r

Table 8:3. Terms for "cow/cattle" in South Semitic with Near Eastern cognates.

of cattle on the African mainland opposite Arabia (i.e., at Nabta Playa where the wild status of the cattle is debated) means that we cannot be certain that an epigraphic citation refers to domestic cattle. Table 8:3 shows the terms for cattle in South Semitic with Near Eastern parallels.

Commentary: The #l-ʔ root is attested widely across Afroasiatic and usually with a lateral fricative, *ɬa*, suggesting this was originally applied to the wild cattle of northeast Africa. Following domestication, it would have spread to the Near East, where the #b-q-r root develops and spreads down into the Arabian Peninsula.

Goat. The goat, *Capra hircus aegagrus*, evolved 7 million years ago, but the first evidence of domestication is in the Euphrates river valley at Nevali Çori in Turkey at ca.

Language	Attestation	Gloss	Literals
ESA	ʿnz	goats	#ʿ-n-z
Mehri	tayh	full-grown goat	#t-y-ʃ
	ḥaa-ráwn	goats	#ʔ-r-n
	wooz *also* ḥooz	she-goat	#ʿ-n-z
Sḥeri (=Jibbāli)	ɛrún	goats	#ʔ-r-n
	ʔɔz	she-goat	#ʿ-n-z
	tuʃ/téʃ	he-goat	#t-y-ʃ
Hōbyōt	ḥoʔz		#ʿ-n-z
	ḥəywəroon	goats	#ʔ-r-n
Baṭḥari	ḥaʔz		#ʿ-n-z
	ʔaaʔəraan	goats	#ʔ-r-n
Ḥarsūsi	taayəh	he-goat	#t-y-ʃ
	ḥə-wəruun	goats	#ʔ-r-n
	wōz		#ʿ-n-z
Soqotri	ʔoz, ʔuz	small ruminants	#ʿ-n-z
	ʔə́rʔəhɔn	goats	#ʔ-r-n
	teʃ	he-goat	#t-y-ʃ
	sered	he-goat, s/r	?
	miʃer	he-goat	< "male palm tree"
	ʔéyfif	kid	? but young animals (gen.)
	téʔɛh	black goat	? #t-y-ʃ
	ḥḍḍ, maḥḍéḍoh	taboo goat	?
Akkadian	enzu, ezzu, inzu	she-goat	#ʿ-n-z
Ugaritic	ʿz	caprine	#ʿ-n-z
Hebrew	tayiʃ	he-goat	#t-y-ʃ
Arabic	tays-	goat	#t-y-ʃ

Table 8:4. Terms for "goat" in South Semitic with Near Eastern cognates.

11,000 BP, with a possible second domestication shortly afterwards in the Zagros Mountains in Iran. Luikart *et al*.[40] studied the maternal DNA of domestic goats and concluded that "goats and other farm animals have multiple maternal origins with a possible centre of origin in Asia, as well as in the Fertile Crescent". Table 8:4 shows the principal terms for "goat" in MSA.

Commentary: Despite the antiquity of goat domestication, the widespread #t-y-ʃ root is not attested epigraphi-

40. Luikart *et al.* 2001.

cally in the ancient Near East, suggesting that the spread of the goat in Arabia may be later than cattle, camels and sheep. However, the likely cognacy of the Akkadian #ˢ-n-z root with the *ḥoʾz, ʾoz* forms typical of MSA does suggest a link.

Sheep. Sheep, *Ovis aries*, were probably domesticated in eastern Turkey by 11,000 BP.[41] They can be divided into four main races (thin-tailed hair and wool sheep, fat-tailed and fat-rumped sheep),[42] but all these races derive from two maternal lines (as defined by mtDNA) in Central Asia.[43] The characteristic sheep of the Arabian Peninsula is the fat-tailed sheep, mentioned in the Old Testament (Leviticus 3:9), where a sacrificial offering includes the tail fat of a sheep. Herodotus has a curious observation:

> *"There are also in Arabia two kinds of sheep worthy of admiration, the like of which is nowhere else to be seen; the one kind has long tails, not less than three cubits in length, which, if they were allowed to trail on the ground, would be bruised and fall into sores. As it is, all the shepherds know enough of carpentering to make little trucks for their sheep's tails. The trucks are placed under the tails, each sheep having one to himself, and the tails are then tied down upon them."*[44]

Table 8:5 collates the terms for "sheep" in South Semitic.

Commentary: Both #k-b-ʃ and #θ-w-t can be clearly traced back to the Near East, suggesting that sheep were part of the earliest wave of livestock to reach South Arabia.

If one point merges clearly from the analysis of livestock names is that their connections are all to the Near East. Once late Arabic loanwords are discarded, Ethiosemitic livestock vocabulary is quite distinct from South Semitic and may point either to indigenous domestication (in the case of cattle and donkeys) or to diffusion from North Africa via the Nile Valley. The reason is almost certainly that the Ethiopian side of the Red Sea already had a parallel pastoral culture in place at a very early period and may even have exported some elements, such as taurine cattle, eastwards to Arabia. The seed agriculture of Ethiopia may have originated from the agricultural civilisations represented by ESA, but not the pastoral culture ancestral to MSA.

Conclusions

The Arabian Peninsula was occupied early in the Palaeolithic by inland hunters and salt-traders who were astute at managing wild asses and camels and who may have survived into recent times as the marginalised Solubba. Fisher-foragers occupied much of the shoreline of Arabia. There is no evidence for the languages the peoples of the peninsula spoke at this period, but they were likely to have been very diverse. In the 6th millennium BC, herders of unknown identity from the Near East began to trickle down into the peninsula, bringing cattle (taurine longhorns?), donkeys, sheep and dogs. They probably brought the wild camel into domestication *in situ*. Goats may have appeared on the scene slightly later. The new arrivals began by trading with the hunters and fishers, but rapidly absorbed them and culturally transformed their lives through trade and intermarriage. There may also have been movement of taurine shorthorn cattle across the Red Sea, perhaps with speakers of Cushitic or Nilo-Saharan languages. In the 3rd or 2nd millennium BC, a further wave of herders speaking Semitic languages arrived from the Near East and absorbed the pre-existing populations. Camels and donkeys were domesticated.

Language	Attestation	Gloss	Literals
ESA	s2hn[45] *or* s2hw	sheep	
	ḍ'n	coll.	
	qrṣ	ram	
Mehri	θīwīt	ewe	#θ-w-t
	ḥooz	ewe	*cf.* "goat"
	kábł/ kəboowəł	sheep	#k-b-ʃ
Sḥeri (=Jibbāli)	θēt/θól	ewe	#θ-w-t
	kɔbł	lamb	#k-b-ʃ
Ḥarsūsi	θiit	sheep	#θ-w-t
	kábł	lamb	#k-b-ʃ
Soqotri (HS)	séʾəh/téʾəh	sheep	#θ-w-t
	d¤aḥ		
	kubł	ram	#k-b-ʃ
	luloh	ewe	*cf.* "elheh" (cow)
	réḥloh	lamb	#l-h-r
	fídid	white ~	
	ḥabdad	white ~	
Ugaritic	tʸat	ewe	#θ-w-t
Neo-Assyrian	kabsu	young male ~	#k-b-ʃ
Hebrew	käbäʃ	young ram	#k-b-ʃ
Arabic	kábʃ	ram	#k-b-ʃ
Arabic	taʾwat-	thin ewe	#θ-w-t

Table 8:5. Terms for "sheep" in South Semitic with Near Eastern cognates.

41. Zeder 2008.
42. Blench 1993.
43. Hiendleder *et al.* 1998.
44. Herodotus, *Histories*, III.113.
45. Doubtful attestation Sima 2000: 142.

The attractive environment in *Arabia Felix* also encouraged settlement and crop production and speakers of a parallel branch of Semitic were also drawn south. These early cultivators spoke the languages ancestral to Epigraphic South Arabian and looked to the Near East for their crop repertoire. Around 3,000 BP, speakers of ESA moved west across the Red Sea and formed the well-known kingdoms with whom the Egyptians traded.[46] They brought the plough and cereal agriculture to Ethiopia and also assimilated large areas of Cushitic and Omotic speaking peoples. Controversially, they *may* have encountered resident Semitic-speakers (the enset-cultivating Gurage).

As the economic and agricultural potential of the Arabian Peninsula became more evident to the societies of the Near East, trade routes developed and herders were pushed further into the desert, while foragers were entirely marginalised. Proto-Arabic speakers were likely filtering down into the peninsula from about 2,000 BP onwards, but the development of Islam created a rapid impetus for the spread of the language and the disappearance of a large number of non-Semitic and other South Arabian languages.

References

Acronyms

*	Regular reconstruction
ESA	Epigraphic South Arabian
MSA	Modern South Arabian
N	Nasal
SED	*Semitic Etymological Dictionary*
V	Vowel

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