that doubled /l/ and /n/ are occasionally expressed in writing. This is based mainly on the spelling *kll* "all" (cf. Classical Arabic *kull*) which is found in Dadanitic, Hismaic, and Safaitic (Littmann 1943:xiii). But it is perfectly possible that the word was pronounced with a short vowel between the two *l*'s (e.g., **kulil*). The other supposed examples of this feature are also capable of alternative explanations (see §4.2.1) and at present the hypothesis must be regarded as not proven.

# 3. PHONOLOGY

## 3.1 Consonants

Given the nature of the sources, our knowledge of the phonology of the dialects of Ancient North Arabian is necessarily fragmentary. Most dialects appear to have had a consonantal phonemic repertoire of roughly twenty-eight sounds. Unless there is evidence to the contrary, these are usually assumed to have been similar, though not always identical, to their equivalents in Classical Arabic. They are presented in Table 8.1 using the Roman letters with which Ancient North Arabian texts are conventionally transliterated, rather than phonetic symbols, to emphasize that this is a purely hypothetical schema based partly on the traditional pronunciation of the cognate phonemes in Classical Arabic, as described by the early Arab grammarians (eighth century AD), and partly on reconstructions (see below).

The phonemes /b, /d/, /d̲/, /h/, /k/, /l/, /m/, /n/, /t/, /t̲/, /w/, /y/, /z/ were probably pronounced more or less like their equivalents in Classical Arabic. There is no way of telling whether certain phonemes had aspirated allophones (the so-called "bghadhkphath"), as, for example, in Masoretic Hebrew and Aramaic of the Christian era. The phoneme shown here as /f/, could have been pronounced [p] in some or all positions (as in Ugaritic, Hebrew, Aramaic, Akkadian, etc.) or as [f] throughout, as in Arabic. It is worth noting that in Safaitic (as also in early Arabic) the letter *f* is used to transliterate both Greek φ and π (e.g., *flfṣ*

**Table 8.1 The consonantal phonemes of Ancient North Arabian**

| | Place of articulation | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Manner of articulation | Bilabial | Labio-dental | Inter-dental | Dental/ Alveolar | Palato-alveolar | Palatal | Velar | Uvular | Pharyn-geal | Glottal |
| *Stop* | | | | | | | | | | |
| *Voiceless* | | | | t | | | k | q | | ʾ |
| *Emphatic* | | | | ṭ | | | | | | |
| *Voiced* | b | | | d | | | g (?) | | | |
| *Fricative* | | | | | | | | | | |
| *Voiceless* | | f | t̲ | s[3] | s[1] | y | | h̲ | ḥ | h |
| *Emphatic* | | | ẓ | ṣ | | | | | | |
| *Voiced* | w | | d̲ | z | | | ġ | | ʿ | |
| *Emphatic* | | | ḍ | | | | | | | |
| *Trill* | | | | r | | | | | | |
| *Lateral cont.* | | | | | | | | | | |
| *Voiceless* | | | | s[2] | | | | | | |
| *Voiced* | | | | l | | | | | | |
| *Nasal* | m | | | n | | | | | | |

for Φίλιππος), the well-known confusion of [b] and [p] in Arabic being a much later phenomenon.

### 3.1.1 Stops

In Hismaic, there is a small amount of evidence for the occasional confusion of /d/ and /ḏ/, probably under the influence of the Aramaic used by the neighboring Nabataeans: for example, *d-s²ry* for the divine name *ḏ-s²ry*; *dkrt* for *ḏkrt*; and *d ʾl* "he of the lineage of" for *ḏ ʾl* (Macdonald 2004d). However, there is no evidence for the supposed alternation of /t/ and /ṯ/ in this dialect. On both these, see King 1990:69–70. However, in Dadanitic the numerial "three" is found as *ṯlṯt*, *ṯlt*, and *tlt* (see §4.4.1 and Table 8.2) which might suggest a weakening of the distinction between these two sounds in this dialect, though it may equally have been confined to the phonetic conditions of this particular word.

It is impossible to tell whether /g/ was pronounced [g], as in some Arabic dialects, or [ǧ] as in Classical Arabic, or even [ž] as in some dialects of Syria and Southern Iraq. It is also impossible to determine whether /k/ had an allophone [č] in certain positions, as in many dialects in Syria, Iraq, Arabia and the Gulf Coast.

The phonemes /ḫ/ and /ġ/ were probably realised as [x] and [ɣ] respectively as in Arabic. The consonant transcribed /q/ in Table 8.1 may have been a uvular stop as in Classical Arabic, or, alternatively, an "emphatic" correlate of /k/ (i.e., /k'/), as in Hebrew and Aramaic. Whatever its exact pronunciation it appears generally to have remained distinct since only one instance has so far been identified in which it is confused with another phoneme. This is in an unpublished Safaitic text in which the author spells the word *qyẓ* "he spent the dry season" as *ʾyḍ* in an unequivocal context. This is the earliest attestation of a pronunciation in which the etymological phonemes /q/ and /ẓ/ had fallen under /ʾ/ and /ḍ/ respectively, a feature of modern urban Arabic in such cities as Damascus, Jerusalem, and Cairo.

In the orthography of the Ancient North Arabian scripts, the letter ʾ represents a phonemic consonant in all contexts and never the equivalent of Classical Arabic *hamzat al-waṣl*, that is, a prosthetic glottal stop, the sole function of which is to carry an initial vowel and which disappears when the latter is assimilated to a preceding vowel. Thus *bn* ("son," in all positions) as against Classical Arabic *(ʾ)ibn*. This contrasts with Old Arabic personal names found in Nabataean orthography (for instance in the Nabataean inscriptions of Sinai), where ʾ is regularly written in *ʾbn* (e.g., the name *ʾbn-ʾl-qyny*). For a discussion of this phenomenon see Macdonald, forthcoming. There are a few personal names in Safaitic texts written with two successive ʾs, e.g., ʾʾs¹d (cf. Classical Arabic *āsud* < **ʾaʾsud*; see Littmann 1943:xii–xiii), but as yet no examples in words have been identified, so we do not know whether this was a living feature of the language or merely a fossil inherited in particular names.

Very occasionally, ʾ is found unexpectedly in medial position and it has been suggested that this may represent a medial /a:/ (Winnett and Harding 1978:12). However, this is highly unlikely and the few examples cited are all capable of other explanations.

The ending which in Arabic appears as *-ah* in pause but *-at* before a vowel (i.e., *tāʾ marbūṭah*), is always written as *-t* in Ancient North Arabian, implying that it was pronounced **-at* in all contexts.

### 3.1.2 Fricatives

The voiceless nonemphatic sibilants in Ancient North Arabian, Ancient South Arabian, Old Arabic, and Classical Arabic up to the ninth century AD, present a complex problem (see

Beeston 1962). Proto-Semitic had a voiceless dental fricative */s/, a voiceless palato-alveolar fricative */š/, and a third sibilant, conventionally written */ś/, the exact nature of which is uncertain but which may have been a lateral dental fricative [ɬ]. While the Ancient (and Modern) South Arabian languages (in common with Hebrew and early Aramaic) retained all three, in Arabic and, with one possible exception, the Ancient North Arabian dialects they were reduced to two:

(1) The voiceless nonemphatic sibilants in Ancient North Arabian

| *Proto-Semitic* | | *Ancient North Arabian (except Taymanitic)* | *Proto-Semitic* | | *Taymanitic* |
|---|---|---|---|---|---|
| */š/, */s/ | ⟶ | [š] (written $s^1$) | */š/ | ⟶ | [š] (written $s^1$) |
| | | | */s/ | ⟶ | [s] (written $s^3$) |
| */ś/ | ⟶ | [ɬ] ? (written $s^2$) | */ś/ | ⟶ | [ɬ] ? (written $s^2$) |

We know from the phonetic descriptions by the early Arab grammarian Sibawaihi (died *c.* AD 796) that in early Classical Arabic, س the reflex of Proto-Semitic */s/ + */š/, was pronounced something approaching [š], and that ش the reflex of Proto-Semitic */ś/, was pronounced something approaching [ɬ]. It was only subsequently that the pronunciation of س shifted to the [s] (*sīn*), and that of ش to the [š] (*šīn*) of later Arabic. This can be tabulated as follows:

(2) The voiceless nonemphatic sibilants in Arabic

| *Proto-Semitic* | | *Arabic before the 9th century AD* | | *Arabic after the 9th century AD* |
|---|---|---|---|---|
| */š/, */s/ | ⟶ | [š] (written س) | ⟶ | [s] (written س) |
| */ś/ | ⟶ | [ɬ] (written ش) | ⟶ | [š] (written ش) |

This means that Ancient North Arabian /$s^1$/ (which is cognate with later Arabic س *sīn*) was actually pronounced like something approaching [š], while Ancient North Arabian /$s^2$/ (which is cognate with later Arabic ش *šīn*) was probably pronounced something like Welsh *-ll-* [ɬ]. These findings are confirmed by the treatments of loans from Aramaic. Thus, for example, the Aramaic name of the great Syrian sky-god, Baʿal-Šamīn "lord of heaven," was borrowed into Dadanitic and Safaitic as *bʿls$^1$mn*, that is, with Aramaic /š/ represented by Ancient North Arabian *$s^1$*, not *$s^2$*.

It follows from this that Ancient North Arabian (and Arabic before the ninth century AD) had no [s]. However, there is one possible exception. Taymanitic appears to have had a letter, graphically related to South Arabian *$s^3$* (= [s]), which seems to represent [s] in transliterations of the name of the Egyptian god Osiris occurring in two personal names. Rather different forms of what is probably the same letter have been identified in two other Taymanitic texts (see Müller and Said 2001:114–116) and there is one further example on a seal of Babylonian design, but in a context which raises considerable difficulties. Since, at present, only a little over four hundred Taymanitic inscriptions are known, and few of them are more than twenty letters long, no firm conclusions can be drawn from this until more evidence appears. However, it seems unlikely that the Taymanitic alphabet would have employed a letter to represent a sound which did not exist in the Taymanitic dialect, and

so there is certainly a possibility that, at some stage in its history, Taymanitic used all three voiceless nonemphatic sibilants (see Macdonald 1991).

In Taymanitic, Thamudic D, and possibly Thamudic C, it seems that /ḏ/ had probably merged with /z/ (as in Hebrew), since the *z* sign is used for both phonemes.

### 3.1.3 Emphatics

The etymological phonemes /ṣ/, /ṭ/, /ḍ/, and /ẓ/ are emphatics. In most Semitic languages /ṣ/ is the emphatic correlate of [s]. However, since there was no [s] in Safaitic and Hismaic, *ṣ* is often used in these dialects to transliterate Greek *sigma* (e.g., *qṣr* for καῖσαρ ["Caesar"]; *flfṣ* for Φίλιππος ["Philip"]; etc.) and in the Hismaic abecedary *ṣ* is put in the position of Phoenico-Aramaic *samek* (= [s]). It is not certain whether this implies a weakening of the "emphatic" quality or whether it was simply felt to be the nearest equivalent to the foreign sound. The fact that in other transliterations the letter $s^1$ (approximately[š]) was used for Latin *s* (e.g., $tts^1$ for *Titus*) and Greek *sigma* (e.g., $grgs^1$ for Γεωργός [George]), points perhaps to the latter (see Macdonald 1992b).

The phoneme /ṭ/ was almost certainly the emphatic correlate of /t/, and /ḍ/ was, at least in origin, that of /d/. However, the Akkadian transliteration of the Ancient North Arabian divine name *rḍw* as *Ruldaiu* points to a strongly lateralized pronunciation of /ḍ/, at least in North Arabia in the seventh century BC. It has also been suggested that the god Ὀροτάλτ, who Herodotus says was worshiped by the Arabs in eastern Egypt in the fifth century BC, represents a garbled transliteration of a similar pronunciation of the divine name *rḍw*, though this is more speculative. On the other hand, in the Roman period, Greek transcriptions of names which include /ḍ/ always represented it by *sigma* (e.g., Σαιφηνος for *h-ḍfy*, "the Ḍayfite", Macdonald 1993:306). In Nabataean, native Aramaic words show the cognate of North Arabian /ḍ/ as /ʿ/ ([ʕ]) (e.g., Nabataean *ʾrʿ* against Safaitic *ʾrḍ* "earth, land"), as is normal from Imperial Aramaic onwards. However, in loanwords and transcriptions of names which are linguistically North Arabian, /ḍ/ is consistently represented by *ṣ* (e.g., Nabataean *ṣryḥʾ* from Arabic *ḍarīḥ* "trench, cist," or the name *rṣwt* as against Safaitic *rḍwt*). Kofler quotes examples of the confusion of /ḍ/ and /ṣ/ in early Arabic dialects and suggests that /ḍ/ may have been pronounced more as a fricative than a stop (1940–1942:95–97). There is no example in Safaitic and Hismaic of a confusion of /ḍ/ and /ṣ/, so the two sounds seem to have remained distinct in these dialects. However, if /ḍ/ was pronounced as the emphatic correlate of /ḏ/ (rather than of /d/), i.e., as an emphatic interdental fricative, as it is in all modern Bedouin dialects, it would have shared its place of articulation, emphatization, and fricative release with /ṣ/, and the two sounds would have been sufficiently similar for /ḍ/ to be transcribed by /ṣ/ in scripts such as Nabataean Aramaic which had no letter for /ḍ/ (I owe this interesting observation to Professor Clive Holes).

The conventional symbol *ẓ* (originally taken over from the Cairene pronunciation of Classical and Modern Standard Arabic) is unfortunate since the phoneme it is intended to represent was probably the emphatic correlate of an interdental (/ṯ/, or perhaps /ḏ/), and not a dental sibilant. The former would be more likely, at least in Hismaic and Safaitic, if, as suggested above, /ḍ/ was pronounced as the emphatic correlate of /ḏ/. In Dadanitic, Hismaic, and Safaitic, /ẓ/ is clearly distinguished from other phonemes except in the one example of *ʾyḍ* for *qyẓ* mentioned above. It has been suggested that, in Dadanitic, /ẓ/ might have fallen under /ṭ/ (as in Aramaic), but no conclusive evidence has yet been presented for this shift and the two phonemes appear to be represented by distinct letter-forms. A sign for *ẓ* has not yet been identified in Dumaitic, Taymanitic, Thamudic B, C, and D, or in Hasaitic, but since it is a relatively rare phoneme, it is, at present, impossible to determine whether this is significant.

### 3.1.4 The sounds /w/ and /y/

In Safaitic, there is considerable alternation of /w/ and /y/, which when represented in the Ancient North Arabian scripts are always consonants, not vowels (Robin 2001: 553 is incorrect on this point). This variation is found in all positions, e.g., *wrḫ/yrḫ* "month"; *ts²wq/ts²yq* (unpublished) "he longed for"; *s²ty/s²tw* (CSNS 324) "to winter." In each case, the first item in these pairs is the common form and the second a much less frequent variant. Given the difficulty of dating most of the texts, it is impossible to say at present whether these variations represent chronological developments or synchronic dialectal differences.

However, forms with *-w* and *-y* are almost equally common in the divine name *rḍw/rḍy* in Safaitic inscriptions. This deity is also found in Dumaitic and Thamudic B texts, but there only as *rḍw*. The Dumaitic, and at least some of the Thamudic B inscriptions, are considerably earlier than the Safaitic, and this might seem to suggest that the form *rḍw* is the older and that the advent of *rḍy* marks a change of pronunciation. However, the Akkadian transliteration *Ruldaiu*, which is securely dated to the early seventh century BC, implies a pronunciation **ruḍayu* (i.e., *rḍy*), and it therefore seems more likely that the two spellings represent dialectal (?) differences. It is not yet possible to tell whether the same is true of the other cases of *w*/*y* variation.

In a number of other cases, Safaitic and Hismaic have /-y/ where Classical Arabic has /-a:/ or /-a:ʔ/, thus Safaitic *s¹my* "sky, clouds," as against Arabic *samāʾ*, or Safaitic and Hismaic *bny* "he built" and *byt* "he spent the night," as against Arabic *banā* and *bāta*. In some of these cases, there is evidence that Dumaitic and Thamudic B agreed with Arabic. Thus, the divine name *ʿtr-s¹m*, which occurs in Dumaitic and Thamudic B texts and in which *s¹m* is the word for "heaven," implies a pronunciation *s¹amā (in which the /-a:/ would not appear in the consonantal script), as opposed to Safaitic *s¹my* (*s¹umiyy ?), see Macdonald *et al.* 1996:479–480.

Conversely, there are some words in which final /-a:/ is written with a *-y* in Arabic, but which in Ancient North Arabian did not end in consonantal /y/. These are most notably the prepositions which in Safaitic, Hismaic, and Thamudic B appear as *ʾl* (cf. Arabic *ʾilā*) "towards, for," and *ʿl* (cf. Arabic *ʿalā*) "on, over, against." In Dadanitic, both *ʿl* and *ʿly* are found, though the former is more common. This implies that the final sound may have been a diphthong *-ay* (/-ai/), which would have been left unwritten in all the Ancient North Arabian scripts, except Dadanitic (see §2), where it would appear as *-y* (*pace* Drewes 1985, who believes diphthongs had been monophthongized in Dadanitic and that final *-y* represented [e:]). The forms without *-y* in Dadanitic may then represent either an uncertainty about writing diphthongs or a pronunciation with a final short vowel, as in some modern Arabic dialects (i.e., *ai > *ā (as in Classical Arabic) > *a).

### 3.1.5 Nasal assimilation

As in Hebrew and Aramaic, but in contrast to Arabic, vowelless /n/ is frequently assimilated in most Ancient North Arabian dialects. This is particularly common in Safaitic and Hismaic where, for example, *mn* (cf. Arabic *min*) "from" and *mn* (cf. Arabic *man*) "whoever" are sporadically reduced to *m* (though curiously not in *mn ngd* "from high ground," CSNS 381). Thus, the plural of *nfs¹t* ("funerary monument") sometimes appears as *ʾfs¹* (< *ʾanfus¹), and the verb *intaẓar ("to wait for") always appears as *tẓr* (= *ittaẓar ?). Similarly, in Taymanitic, Thamudic B, Hismaic, and Safaitic (though rarely in Dadanitic), *bnt* ("daughter") is occasionally spelled *bt*. However, this feature has not yet been identified in Hasaitic, where we find *bnt* (*passim*) and *ʾntt*, "wife" (CIH 984a) compare Dadanitic and Thamudic B *ʾtt*, though

the corpus of Hasaitic texts is as yet so small that no firm conclusions can be drawn from this.

Assimilation of vowelless /n/ would also account for a feature characteristic of Taymanitic, that is the reduction of *bn* to *b* ("son of") in genealogies, which contrasts with *bn* (= *banī, lit. "the sons of") where the /*n*/ is followed by a vowel (Macdonald 1992a:31).

## 3.2 Vowels

Little of substance can be said about the vowels of Ancient North Arabian. The vowel inventory is assumed to have consisted of both short and long /a/, /i/, and /u/, but there is no evidence for or against this, except for final /a:/ and /u:/ in Dadanitic (see §2). Attempts to show that the diphthongs /au/ and /ai/ had been monophthongized to /o:/ and /e:/ respectively (as in many spoken Arabic dialects) are not convincing, though they cannot entirely be refuted either (see, again, §2).

# 4. MORPHOLOGY

Since Safaitic and Dadanitic are by far the best attested of the Ancient North Arabian dialects, the morphological descriptions below will concentrate on them, with information from the others when it is available.

It should be noted that several unusual forms have been attributed to Dadanitic on the basis of their apparent occurrence in JSLih 71 (= CLL 91). However, it is now recognized that, with the exception of the article *hn-* in the tribal name, the language of this text is Old Arabic, not Dadanitic. See Beeston *et al.* 1973:69–70 and Macdonald 2000:52–53 and forthcoming.

As in all Semitic languages, the morphology of the Ancient North Arabian dialects is based on the triliteral root, found in its simplest form in the third singular masculine of the suffix-conjugation (often known as the "perfect").

The fact that, in most dialects of Ancient North Arabian, final *-y* is written in words such as *bny* "he built," *s*$^{1}$*my* "sky, clouds" and the gentilic ending (e.g., Safaitic *h-nbṭy* "the Nabataean" which in Arabic would be *al-nabaṭī*) suggests the presence of final short vowels, since without them the /-y/ would have become a long vowel [i:] or a diphthong [ai], and would not then have been represented in the orthography of any of the scripts, except in the case of the diphthong, that of Dadanitic. By contrast, the tiny amount of evidence available suggests that final short vowels may not have been present in the forms of Old Arabic represented in the documents so far identified (see Macdonald, forthcoming).

## 4.1 Nominal morphology

Nouns, adjectives, and pronouns will be discussed in this section. The purely consonantal Ancient North Arabian scripts must often conceal distinctions of number and possibly of case which would have been marked by changes in vowels. As in Arabic, the endings of nouns and adjectives can vary according to whether they stand alone ("in pause," "pausal forms") or are annexed to another noun or to an enclitic pronoun ("in construct"), see §5.1.3 below and Appendix 1, §3.3.2.1.

### 4.1.1 Gender

The normal feminine singular ending in all Ancient North Arabian dialects is *-t* (even in pause; see §3.1.1): for example, *mr't* "woman," Dadanitic (JSLih 64/2); *frs*$^{1}$*t* "mare,"