Variation in the Dadanitic inscriptions: the case of RḌY

FOKELIEN KOOTSTRA

Summary
In the first millennium BC Dadān was an important oasis town on the incense trading route with a flourishing writing tradition in a local script, called Dadanitic. Dadān (modern-day al-ʿUlā) was situated in the north-west of the Arabian Peninsula. The Dadanitic corpus is the only Ancient North Arabian corpus to boast a substantial number of monumental inscriptions. Despite the official character of these inscriptions, they also contain variation in language, orthography, and technical execution. This paper will focus on the variation in the spelling of the verb from the root √RḌY before enclitic pronouns. It will argue that this particular variation attests a phonological change in the Dadanitic language after it started being written. This has important implications for the orthography and our general understanding of variation in this corpus of inscriptions.

Keywords: epigraphy, Dadanitic, orthography, phonology, language change

Introduction
Dadanitic is the name of the script used to carve inscriptions in and around the ancient oasis of Dadān (modern-day al-ʿUlā), located in the north-west of the Arabian Peninsula. Although the exact dating of the inscriptions is difficult, since none of them mention known historical events, it is commonly assumed that they were produced between the sixth and first centuries BC (see Rohmer & Charloux 2015 for a recent overview of the arguments for this dating). The Dadanitic corpus is characterized by the formulaic nature of the inscriptions, generally following a tripartite division also common to other varieties of Ancient North Arabian (e.g. Safaitic, see Al-Jallad 2015: 6). The longer inscriptions generally start with the name of the author (superscriptio), followed by a narrative section (narratio), and end with a blessing formula for the author of the inscription (invocatio) (Sima 1999: 49 after Knauf 1980) (see Fig. 1).

Despite the highly formulaic nature of the inscriptions, there is also a lot of variation present in the Dadanitic corpus (e.g. Sima 1999: 95). One of these points of variation can be found in the blessing formula of the inscriptions, notably, in the spelling of the verb based on the root √RḌY. As in the example in Figure 1, this verb always occurs with an enclitic personal pronoun attached to it. It is most commonly attested as in AH 141 rḍ-h, but it also occurs with the final root consonant represented as rdy-h (Fig. 2).

This variation is mentioned in several previous studies, but none of them discuss the causes behind this variation (Drewes 1985: 168–170; Farès-Drappeau 2005: 70). Sima seems to suggest a chronological development when he says that, although most inscriptions show the spelling rḍ-h some retain the rdy-h form. He does not discuss this any further, however, apart from calling it an orthographic phenomenon (1999: 106). While I agree with Sima that this variation represents a chronological development, the reasons behind this development and its trajectory deserve closer attention as they have important implications for the development of the orthography and phonology of Dadanitic.

Morphology
Based on the consistent use of RDY as a transitive verb, with an enclitic pronoun as its direct object, the verb cannot be interpreted as a G-stem verb rādiya, which has a stative meaning ‘to be pleased, content, satisfied’ (compare Classical Arabic for example). Therefore, this form should be interpreted as a D-stem verb radḍVya (see also Stiehl 1971: 10; Sima 1999: 106). As all attested forms are used transitively, this means that the variation in spelling cannot be due to a different development of triphthongs /-iya-/ and /-aya-/ in this case.
Alternatively, the difference in spelling could be interpreted as a difference in morphological form: rḍ-y-h representing the optative use of the suffix conjugation /raḍḍaɣayahu/ 'may he favour him' and rḍ-h the imperative /raḍḍī-hu/ 'favour him'. However, since the two forms are always used in the same formula, with the same meaning, this cannot be confirmed from the context. In addition, both third feminine singular of the suffix conjugation (SC) rḍt-h and rḍyt-h are attested as well (see Fig. 2). These forms can only represent variant spellings of the same morphological form and since they are based on the same stem formation, the difference in spelling cannot be explained as a difference in vowel quality.

Alternatively, the difference in spelling could be interpreted as a difference in morphological form: rḍ-y-h representing the optative use of the suffix conjugation /raḍḍaɣayahu/ 'may he favour him' and rḍ-h the imperative /raḍḍī-hu/ 'favour him'. However, since the two forms are always used in the same formula, with the same meaning, this cannot be confirmed from the context. In addition, both third feminine singular of the suffix conjugation (SC) rḍt-h and rḍyt-h are attested as well (see Fig. 2). These forms can only represent variant spellings of the same morphological form and since they are based on the same stem formation, the difference in spelling cannot be explained as a difference in vowel quality.

**FIGURE 1. A Dadanitic inscription with a typical formulaic structure.**

<table>
<thead>
<tr>
<th>AH 141</th>
<th>superscriptio (line 1)</th>
<th>gź/bn/bgr</th>
<th>gź son of bgr</th>
</tr>
</thead>
<tbody>
<tr>
<td>narratio (line 2–5)</td>
<td>ḟḥll-l-dgt/h/b’d/ ml-h/b-tqm\mm\u2013\u2013/ w b-n/</td>
<td>performed the ḟḥll for dgt on behalf of his property at tqm\mm\u2013\u2013 and at n’ll\u2013\u2013</td>
<td></td>
</tr>
<tr>
<td>invocatio (line 5–6)</td>
<td>f-rḍ-h/w/s’d-h/w-tb-h</td>
<td>so may he favour him and aid him and reward him</td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 2. Attested spellings of √RḌY.**

<table>
<thead>
<tr>
<th>Defective spelling</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>rd (123)</td>
<td>rdt (2)</td>
<td></td>
<td>125</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plene spelling</th>
<th>rdy (29)</th>
<th>rdyt (1)</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>152</td>
<td>3</td>
<td>155</td>
</tr>
</tbody>
</table>

**FIGURE 3. Attested suffixing forms of III-weak verbs.**

This goes for final -y and final -w verbs alike. Compare third masculine singular ‘gw (e.g. AH 065; AH 157; U 032), but third feminine singular ‘gt (AH 006; AH 079; U 126).

The consistent representation of final weak consonants in the third masculine plural SC verbs, as opposed to the third feminine singular SC verbs in which the third root consonant y is rarely represented, could suggest a different phonological environment in each. This could confirm the vocalic nature of the third masculine plural suffix -ū/ and suggest that while /ayū/ and /awū/ were maintained,

AH 288/4  
frdyt-h/w ḏr’t-h ----  
'so may she favour him/her and his/her posterity...’

**Phonology**

**III-weak verbs**

Since the morphological form of the verb cannot explain the difference in spelling, the reasons behind variation should probably be sought in the realm of phonology and orthography. If we compare the spelling of RḌY to other verbs with a glide as their final consonant, it becomes clear their spelling is more consistent. The final root consonant of final weak verbs is always represented in Dadanitic in the third masculine singular forms in word-final position and in the third masculine plural SC, but it is lost in third feminine singular verbs SC (Fig 3). Unfortunately, there are no attestations of III-weak verbs with enclitic pronouns, apart from RḌY.

<table>
<thead>
<tr>
<th></th>
<th>masculine</th>
<th>feminine</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>bny</td>
<td>he built</td>
<td>(e.g. AH 208; JaL 006; JSLih 045)</td>
<td></td>
</tr>
<tr>
<td>bnyw</td>
<td>they built</td>
<td>(e.g. Müller D.H. 1889: 63–64, no. 8; U 008; AH 200)</td>
<td></td>
</tr>
<tr>
<td>wdyw</td>
<td>they placed</td>
<td>(JSLih 077)</td>
<td></td>
</tr>
<tr>
<td>ṣfw</td>
<td>they offered</td>
<td>(U 037)</td>
<td></td>
</tr>
<tr>
<td>bnt</td>
<td>she built</td>
<td>(Al-ʿUḏayb 043)</td>
<td></td>
</tr>
<tr>
<td>ʾft</td>
<td>she offered</td>
<td>(U 005)</td>
<td></td>
</tr>
</tbody>
</table>

1 I would like to thank Ahmad Al-Jallad (personal communication) for suggesting this interpretation of the difference between rd and rḍy.

2 The form rḍt is also attested in Tall al-Ḳaṭīb, no. 1, but the context seems to be slightly different than in other inscriptions (there is no enclitic pronoun on rḍt). In combination with the fragmentary nature of the inscription it is unclear how this should be interpreted and whether the form really represents a verb here.

3 All inscriptions referenced in this work can be found in the online OCIANA database where they can be found with their transcriptions, translations and available photographs. http://krcfm.oorient.ox.ac.uk/fmi/webd/ocian.

4 There is one attestation of rḍyt (AH 288).
/ayat/# collapsed to /ayt/, /ēt/, /āt/, or /at/.

However, taking into consideration the rḍy-h(m) forms, it becomes clear that the final glide does not only go unrepresented when it is followed by a closed syllable. Even if we assume that final short vowels were lost, this would only create a final closed syllable at the end of forms with a masculine singular enclitic pronoun /raḍḍaya-hu/ > /raḍḍaya-h/. In forms with a plural enclitic pronoun it would not: /raḍḍaya-hum/. Both forms, with and without the final glide present, are attested with both singular and plural enclitic pronouns.

AH 001  ʾẓ//llw/zll/h-nq/l-//ḏġbt/f rḍ-hm
‘they performed the zll ceremony of the nq for ḏġbt so may he favour them’

AH 235  ʾẓlw/h-ẓ{l}[l]----//---- l- ḏġbt/f rḍy[-hm]
‘they performed the zll ceremony for ḏġbt so may he favour {them} and aid them and their posterity’

U 058  ʾẓll/h-ẓll//{b-}khl/l-ḏġ//bt/bʿd/{n}
hl-h//w dt-h b-bdr//f r[d]-h w ʾḥrt-h
‘he performed the zll ceremony {at} khl for ḏġbt on behalf of his palm trees and his crops of the season of the later rains at bdr so may he favour him and his posterity’

JSLih 061  ʾdq/l-//h/{h}-ṣlmn//{f} rḍ-y-h//w //{s¹}d-h
‘he dedicated the two(?) statues to lh so may he favour him and aid him’

It is unclear what the vocalization of the feminine enclitic pronoun would have been. Since it is never written with a -h to represent a long final -ā (**.hh for -hā) it probably did not end in a long vowel (Drewes 1985: 170). Both spellings of RḌY are also attested with the feminine singular enclitic pronoun.

U 056  ʾẓllt l-//ḏġbt b-{k}hl b’d///{d}ṭ-h/f rḍ-h
‘she performed the zll for ḏġbt at khl on behalf of her crops of the season of the later rains so may he favour her’

AH 088  fʿlt//h-ẓll/f rḍy-h//w ʾḥrt-h
‘she made the zll so may he favour her and her posterity’

II-weak verbs

The lack of a clear conditioning environment for the difference between the collapse of the triphthong in feminine singular verbs and before an enclitic pronoun suggests that we may have to consider a general collapse of the triphthong. In this case, variation in orthographic representation of the glide depending on its position in relation to word boundaries may explain the difference between the consistent representation of the y in word-final position and its common disappearance before an enclitic pronoun. Indeed, if we consider the medial weak verbs with a glide for their second root consonant, it seems that triphthongs in this position had collapsed as well. In the one attested II-w verb kn ‘he was’, the medial glide is never represented, suggesting the presence of a medial long vowel /kāna/ or /kōna/.

U 108  {b}rd/s¹lm//ḏġbt/ʾẓ//ll/l-ḏġbt//b-khl/
bd/ḏ-kn/l-h/b-yy//r
‘brd s¹lmḏġbt performed the zll for ḏġbt at khl on behalf of that which was his at yr’

There may be two examples of the verb byt ‘to spend the night’ (AH 291 and Graf Abū al-Ḍibāʿ 1). Both these examples are attested in short graffiti. If byt is a verb in these inscriptions, it likely represents a D-stem /bayyata/, since it is a denominal verb. In this case the medial y does not represent a triphthong /aya/.

AH 291  nʿm//klʾ//w byt
‘nʿm ʿklʾ and he spent the night’
OR
‘nʿm ʿklʾ and byt’

5 Compare the Safaitic inscriptions in which both spellings with and without a medial glide are attested, e.g. bt and byt ‘he spent the night’; mt and myt ‘he died’. The presence of y instead of etymological w in myt could suggest the sound changes áwi/u > ā and awí/ú > i (Al-Jallad 2015: 120). This interpretation depends on when the triphthong in medial weak verbs collapsed. See Huehnergard (2005: n. 75) who considers the triphthong to have collapsed at the Proto-Semitic stage, but Suchard (2016) for a reconstruction of Proto-North-West-Semitic with the triphthong maintained.
Graf Abū al-Ḍibāʻ 1  ---  `gr/w {h}{n}l//byt/b-lwh/dld

‘...`gr and hn`l spent the night (sing.) at lwh dl`d’

OR

‘---`gr and {h}{n}l byt are at lwh dl`d’

Each inscription may better be interpreted by reading byt as a personal name instead of as a verb.6 While it is part of the basic formula of Safaitic inscriptions to begin the verbal phrase following the genealogy at the beginning of an inscription with the conjunction w-, this is not part of the common structure of the Dadanitic inscriptions where the verb usually follows the personal names directly. However, there are several examples in the Dadanitic inscriptions where multiple persons are mentioned at the beginning of an inscription, separated by the conjunction w-.

JSLih 121  y`d/bn sqw//w bs`lm/bn tly

y`d son of sqw and bs`lm son of tly”7

In Graf Abū al-Ḍibāʻ 1 it is problematic to read byt as a verb, as it seems to follow at least two personal names and we would expect a plural form bytw.

Orthography — final -y as a mater lectionis

Thus, it seems that the triphthongs /VyV/ and /WwV/ had collapsed in Dadanitic. The fact that y is only consistently represented in word-final position suggests it developed into a mater lectionis, representing word-final -i or -ē. In word-internal position, however, the long vowel that remained after the collapse was left unrepresented, such as before enclitic pronouns and the feminine suffix forms. This confirms the existence of a mater -y, alongside -w and -h (Drewes 1985: 167–168). Until now, the evidence for the use of -y for -i or -ē in Dadanitic was considered less clear-cut than for -w and -h (Macdonald 2008: 186).

† If this is the case, rd-h represents a developed phonological form of the SC, while rdy-h shows us that the triphthong was still intact when this spelling was introduced: /raḍḍaya-hu/. The form rd-h suggests a pronunciation /raḍḍē-h/. For this form to develop, the final triphthong had to have collapsed, possibly after an initial loss of final short vowels. This would leave us with a form /raḍḍē/ or /raḍḍī/ for the third masculine singular of the SC, in which case the etymological -y would come to represent /ē/ or /ī/. This became represented with a mater lectionis in word-final position (as in verbs like bny), but not in word-internal position.

This suggests that we are witnessing a historical development in the corpus, where the rdyt and rdy-h forms represent older forms or archaic spellings, indicating a period in which the final triphthong had not yet collapsed, while the rdt and rd-h spellings represent the form after the collapse of the triphthong. This means that all other attestations of III-y feminine verbs (e.g. `ft (U 005; AH 015) are only attested in the more progressive spelling. Since the rd-h forms seem to have been the norm (224 attestations, with only thirty attestations with plene spelling), and `ft only occurs twice, it is not surprising that these two attestations conform to the more common spelling convention.

The fact that there is no variation attested in the spelling of word-final triphthongs suggests that at the time when the triphthongs collapsed word-final -y came to be used as a mater lectionis for -ē or -ī, and not -ā which would have been represented by -h (Drewes 1985: 170). Given the high frequency of rd-h spellings, most of the final -ys on third masculine singular SC verbs were probably intended to represent -ē (e.g. bny and `fy as /banē/ or /banī/ and /ʾōfē/ or /ʾōfī/), as Drewes already suggested (1985: 170). However, since over 10% of the attested forms of √RḌY preserve the plene spelling of the final root consonant, it is not unlikely that some of the word-final -ys in other verbs were also intended to represent a triphthong at the time of writing. The consistency in the writing of the etymologically correct root consonant in the verb suggests that the collapse /awa/ and /aya/ had different outcomes, probably /awa/ > /ū/ or /ō/ and /aya/ > /ī/ or /ē/.

---

6 byt is not attested as a personal name in other Dadanitic inscriptions, but clearly occurs as such in two Safaitic inscriptions (AAEK 74 and RWQ 45).

7 Note that the w at the beginning of the second line is placed a little away from both lines and is written at a height more or less between both lines (the trace of the inscription is available on the OCIANA website, http://krcfm.orient.ox.ac.uk/fmi/webd/ociana, accessed 3/11/2017).

---

8 Except for one attestation of ’yy, for ’gw (JSLih 177).
Conclusions

The variation in spelling of the verb from the root RḌY before enclitic personal pronouns, in combination with evidence from other weak verbs, suggests that triphthongs collapsed in Dadanitic in II-weak and III-weak verbs. In addition to this, the variation in spelling of RḌY suggests the triphthong -aya(-) only collapsed after the Dadanitic writing tradition developed.

The difference between most commonly used spelling rḍ-h as opposed to invariable representation of final glides in III-weak verbs in word-final position suggests -y came to be used as a mater lectionis to represent -ē or -ī after the collapse of the triphthong.

This clearly shows that the Dadanitic language continued to develop after it first started to be written, and the rḍy-h spelling represents an archaic linguistic layer within the corpus. This does not prove that all the inscriptions containing rḍy-h forms are older than those containing rḍ-h spellings. The archaic forms may have been preserved in spelling for some time, possibly representing a more formal linguistic register.

Acknowledgements

I would like to thank Marijn van Putten for all our discussions about the development of matres lectionis and the phonology of Dadanitic, and for reading and commenting on a first draft of this paper. Simone Mauri and Benjamin Suchard also provided helpful comments on a first draft. I would also like to thank Ahmad Al-Jallad for his guidance during my research on Dadanitic. I am indebted to everyone involved with the OCIANA database, for making the Dadanitic inscriptions (and other ANA corpora) easily accessible and searchable. All errors are of course my own.

Sigla

| Al-ʿUḍayb | Dadanitic inscriptions from the al-ʿUḍayb area, published in OCIANA |
| Müller D.H. 1889 | Inscriptions published in Müller 1889. |

References


Author’s address
Fokelien Kootstra
e-mail fokelien@gmail.com