Arabic Vocalisation in Judaeo-Arabic Grammars of Classical Arabic

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Many Judaeo-Arabic texts use Arabic vocalisation signs. In the vast majority of such texts, vocalisation is sporadic, and rarely includes case endings, *tanwīn* or other elements typical of fully vocalised classical Arabic texts. A much smaller group of Judaeo-Arabic texts – most if not all of which were originally composed in Arabic script and later transcribed into Hebrew characters – are consistently vocalised with Arabic signs. Examples include Judaeo-Arabic fragments of the Qur'ān (Halle DMG Arab 5),¹ of al-Ḥarīrī's *Maqāmāt* (L-G Ar. 2.73), and of medical (Mosseri I.126.2, IX.124, X.30.1) and grammatical works (T-S NS 301.25). In addition, there are fully vocalised manuscripts that use a combination of Tiberian vowels with Arabic signs such as *waṣla* and *tanwīn*, which are not found in the Tiberian system; for example, a complete copy of the Qur'ān in Judaeo-Arabic (Ox. Bodl. Hunt. 529).

Few studies of Arabic vocalisation in medieval Judaeo-Arabic texts exist. E. Rödiger included a relatively detailed analysis of the Arabic vocalisation in his description of the Judaeo-Arabic Qur'ān fragment Halle DMG Arab 5, highlighting a number of instances of non-standard vocalisation.² Recently, E.-M. Wagner has studied Arabic vocalisation marks in Judaeo-Arabic letters and legal documents written by Halfon b. Manasse, an early 12th century Jewish court scribe. Wagner suggests that this scribe may have become familiar with Arabic vocalisation practices through copying Arabic books into Hebrew characters, subsequently pioneering the use of Arabic signs in Jewish documentary texts.³

A study of Arabic vocalisation in Judaeo-Arabic texts is important for a number of reasons. Firstly, by identifying instances of non-classical vocalism such study can contribute to our knowledge of the phonology of medieval Arabic, in both its Jewish and its Muslim varieties, given that vocalisation marks

¹For a transcription (without vowels) and a facsimile of this manuscript, see Paudice, 2009, pp. 230–239, 252–257. For a study of the manuscript, see Rödiger, 1860.

² Rödiger, 1860, pp. 485–489.

³ Wagner, forthcoming. See Ox. Bodl. Heb. e.74.1–6, a Muslim letter formulary, transliterated into Hebrew by Halfon b. Manasse.

in texts transcribed into Hebrew characters could have been copied from Arabic *Vorlagen*.⁴ Secondly, it can inform our ideas on medieval Jewish education in Classical Arabic and its scribal conventions, shedding light on the level of Jews' knowledge of Arabic vocalisation rules, the kinds of people who might have had this knowledge, the periods when Arabic vocalisation marks were used by Jewish scribes in texts of different types, and the role Judaeo-Arabic texts consistently vocalised with Arabic vocalisation signs might have had as teaching materials for learning Classical Arabic pronunciation and vocalisation rules. To answer the latter set of questions, a systematic study of Judaeo-Arabic manuscripts with Arabic vocalisation signs is required, based on a corpus of sources that includes texts that were transcribed from Arabic as well as those that were originally written in Judaeo-Arabic.

This article makes a small contribution to the programme of research outlined above by analysing the Arabic vocalisation in Judaeo-Arabic manuscripts transcribed from Arabic *Vorlagen*, based on my work on a corpus of Classical Arabic grammars copied in Hebrew characters and preserved in the Cairo Genizah and in the Firkovich Collections in the National Library of Russia.⁵ The article consists of an edition of a grammatical fragment vocalised with Arabic signs, accompanied by a study of its spelling and vocalisation in the context of linguistic features reflected in other Judaeo-Arabic grammars of Classical Arabic and vocalised Judaeo-Arabic texts.

1 T-S NS 301.25

T-S NS 301.25 is a well-preserved one-folio fragment measuring 20.5cm x 12.5cm. The folio carries two unrelated texts: on recto, a grammar of Classical Arabic is copied in Judaeo-Arabic, in a 12th–13th century Egyptian handwriting;⁶ on verso, in a different Egyptian 12th–13th century hand, there is a dirge for a communal official who bore the title Nagid.⁷

The grammar on T-S NS 301.25 recto has been identified by Dr Almog Kasher from Bar-Ilan University as a passage from *Kitāb al-Jumal fī al-Naḥw* by Abū al-Qāsim 'Abd al-Raḥmān b. Isḥāq al-Zajjājī, a 10th century Arab grammarian.⁸ *Kitāb al-Jumal fī al-Naḥw* is an introduction to Classical Arabic

⁴ For studies of Judaeo-Arabic Genizah fragments vocalised with Tiberian vocalisation signs see Blau and Hopkins, 1998, pp. 195–254; Khan, 1992, pp. 105–111; Khan, 2010, pp. 201–218.

⁵ I thank Dr José Martínez Delgado (University of Granada) for drawing my attention to the sources in the Firkovich Collections. I thank Dr Almog Kasher (Bar-Ilan University) for his comments on this article, as well as his cooperation and expert advice on the Arabic grammatical tradition. For studies of Judaeo-Arabic grammars of Classical Arabic, see Basal, 2010 and Vidro and Kasher, 2014.

⁶ I thank Dr Amir Ashur of Tel Aviv University for assessing the manuscript's handwriting.

 ⁷ Published in Allony, 1991, pp. 460–461. I thank Dr Michael Rand for his help with the poem.
 ⁸ Kitāb al-Jumal fī al-Nahw is edited in Cheneb, 1927 and Al-Hamad, 1996. See also Sezgin, 1984, pp. 88–94; Zabara, 2005; Binaghi, 2015.

grammar written for beginners, in which Al-Zajjājī presents the rules of grammar accompanied by multiple examples and explains grammatical terminology. Numerous Arabic script copies of and commentaries on *Kitāb al-Jumal* exist, testifying to its popularity in the Muslim world, especially in al-Andalus.⁹ *Kitāb al-Jumal* was well known to Andalusian Jewish grammarians, as is shown by quotations from it identified in Jonah ibn Janāḥ's *Kitāb al-Luma*' and in Isaac ibn Barūn's *Kitāb al-Muwāzana bayn al-Lugha al-'Ibrāniyya wal- 'Arabiyya*.¹⁰

Copied in the 12th–13th century, T-S NS 301.25 is one of the earliest surviving manuscripts of *Kitāb al-Jumal*.¹¹ The preserved text belongs to The Chapter on Knowing the Markers of Inflection ($b\bar{a}b ma'rifat 'al\bar{a}m\bar{a}t al-i'r\bar{a}b$) and forms the closing section of the chapter.¹² Below this, The Chapter On Verbs is announced but is not copied, leaving a large empty space at the bottom of the page. The text is consistently vocalised with Arabic signs.

2 Edition¹³

1⁴ ולם 'פֿעלא ולם 'פֿעלא ומא'.

2. אשבה דֹלָך פֿגמיע עֹלאמאת אלאעראב

3. אֹרבע עֹשרה עֹלאמה אֹרבע ללרפֿע וֹכֿמס

¹⁶ ללנצֹב וֹתֹלֹת ללכפנצִי¹⁵ ואתנתאן ללגזם

¹⁷. וגֿמַיע מא יערב בה אלכלאם דסעה אשיא.

הֹלֹת¹⁸ חֹרכֹאתַ וֹהי אַלצֹמה ואָלפֿת חֹה ואַלכסרה.

7. וֹאֹרֹבَע¹⁹ אחרֹף וֹה²⁰⁵ אלוֹאו²¹ וֹאליֹא ואֹלף וֹאלנון

⁹ Binaghi, 2015, pp. 339-348.

¹⁰ See Becker, 1998, pp. 44–46, 57 and Becker, 2005, pp. 66–67.

¹¹ The earliest identified copy in the Arabic script is dated 1207 CE (Binaghi, 2015, p. 173).

¹² Cheneb, 1927, pp. 18–21, esp. p. 21; Al-Hamad, 1996, p. 3–6, esp. p. 6.

¹³ A transcription of this fragment, without vocalisation signs and identification, can be found on the Friedberg Genizah Project (FGP) website, https://fjms.genizah.org/.

¹⁴ In Cheneb, 1927, p. 21 and Al-Hamad, 1996, p. 6 the elision of the final *nun* in 2fsg verbs is also mentioned, exemplified by لم تفعلي. This passage is worded and placed slightly differently in the editions. The omission of this passage in the early Judaeo-Arabic copy, together with its instability in the editions, suggests that it is a gloss which made its way into the main body of the text.

¹⁵ אלגומי, corrected to ללגומ, (see n. 16), with the *plene* spelling of the short /i/ of the genitive, may have originated in the process of dictation or of 'inner dictation' when copying from a model. Alternatively, the spelling ללכפצי could be explained by the graphic similarity between the Arabic ضع and خ.

¹⁶ Originally ללגזמי, corrected to ללגזם.

¹⁷ This vowel sign is barely legible and uncertain.

¹⁸ Originally תלאת, corrected to תלת.

¹⁹ The expected form is ארבעה.

²⁰ This vowel sign is barely legible and uncertain.

²¹ Ink traces are preserved above the final *waw*, but the vowel is uncertain.

8. [ו]חדף וסכֿון 22 לא 22 יכֿון מֿעֹרָבَ פַי שיא 24 מַן אלכֿלאָם 9. אַלֿא בֿאחדַ 25 הֿדה אלאשֿיֿא.

3 Analysis

3.1 Spelling and vocalisation reflecting non-standard pronunciation

Although T-S NS 301.25 is a copy of a grammar of Classical Arabic, and its spelling and vocalisation were undoubtedly intended to represent Classical Arabic, some of its readings indicate non-standard pronunciations. These include:

- a. לֹמָיע (l. 2), with a *sukūn* instead of the expected *fatḥa* for the Classical Arabic *fa-jamī* 'u, probably reflects a sandhi-type elision of the short /a/.²⁶
- b. The numeral three is vocalised וֹתֹלֹת (l. 4) in place of the Classical Arabic wa-<u>talāt</u>un. In the second occurrence of the same numeral in line 6, the initially written תלאת is corrected by overwriting to תֹלֹת.
- c. The spelling דלעד (1. 5) instead of *tis 'atu* reflects a voiced or an unaspirated pronunciation of /t/. The same pronunciation is attested in medieval Judaeo-Arabic letters from the Maghreb in the spelling of the name Tustarī as דטתרי.²⁷

²² Ink traces are preserved above the final *nun*, but the vowel is uncertain.

²³ The *sukūn* is partially rubbed and is uncertain.

²⁴ The final *aleph* may have been crossed out.

²⁵ Two dots are visible above the *aleph* and the *het*.

²⁶ Cf. Woidich, 1991, pp. 1632–1633.

²⁷ See Wagner, 2010, p. 35 and n. 23 there.

²⁸ Rödiger, 1860, pp. 487–488.

reflects the Palestinian substrate pronunciation, in which the *shewa* stands for a short /e/, or is a Hebraism.²⁹ The vocalisation of this preposition with a *fatha* found in manuscripts with Arabic vowel signs may hint that the intended value of the *shewa* here is, in fact, a short /a/ reflecting the reading *ba*-, possibly by hypercorrection.³⁰

3.2 Inflectional vowels

The majority of case endings in T-S NS 301.25 are correct. Exceptions are:

a. אוֹמְעָהָא (l. 1) should probably have the genitive case marker /i/ and not the accusative /a/. Although the preceding text is missing, the phrase according to the editions is³¹

وحذف النون ايضا علامة للجزم في تثنية الافعال وجمعها 'The elision of the *nun* is also a marker of *jazm*, in the dual and plural verb forms.'

It is likely that the reading in our fragment was the same, as is supported by the preserved examples לֹם יֹפֿעֹלֹא ולם (l. 1). If so, the genitive case ending is expected after the preposition יש.

- b. לֹלרֹפֿע (1. 3), where the genitive rather than the nominative ending is expected after the preposition.
- c. לא יכון מערב (l. 8), where a *fatha* on the second radical, and a nunated nominative ending *-un* are expected: *mu 'rabun.*³² The active participle form *mu 'rib* is highly unlikely in this context and appears to be a mistake. The accusative ending may be due to an erroneous parsing of ווס מיכון kāna and of מערב as its object.

Confusion in the marking of case endings is also attested in a Kufan grammatical primer preserved in T-S Ar. 31.254, T-S 24.31 and T-S AS 155.132,³³ where the name 'Abd Allāh after a preposition is occasionally vocalised with a *fat*ha – for example, עלי עבד אללה (T-S 24.31 r.) – as well as in the Qur'ān fragment Halle DMG Arab 5 and in Judaeo-Arabic texts with Tiberian vocalisation.³⁴

²⁹ Khan, 2010, p. 209; Khan, 1992, pp. 110–111.

³⁰ For examples of substituting /a/ for the Classical Arabic /i/ by hypercorrection, see Khan, 2010, p. 206.

³¹ Cheneb, 1927, p. 21; Al-Hamad, 1996, p. 6.

³² Cf. Cheneb, 1927, p. 21; Al-Hamad, 1996, p. 6.

³³ Edited and analysed in Vidro and Kasher, 2014.

³⁴ Rödiger, 1860, p. 487; Khan, 2010, p. 205; Blau and Hopkins, 1988, p. 469, §26.

3.3 The marking of long vowels

In a number of cases in T-S NS 301.25, $\log |\bar{a}|$ is represented by an *aleph* vocalised with a *sukūn*; for example, מאֹ (1. 1, 1. 5), עֹלאמה (1. 2), עֹלאמה (1. 3), אלכאלאם (1. 5), לא (1. 8) and לא (1. 8, example uncertain). This spelling is found in about half of the cases of long $\overline{|a|}$ in the fragment; in the rest of the cases the *aleph* is unvocalised, and other long vowels are never marked with a sukūn on the respective matres lectionis. The marking of all three matres *lectionis* with a *sukun* is attested in Islamic manuscripts, 35 and was known to Jewish scribes. It is used in Judaeo-Arabic fragments L-G Ar. 2.3, 2.4, 2.10, 2.142 of Kitāb al-Afʿāl Dawāt Hurūf al-Līn by Judah Hayyūj – for example, (L-G Ar. 2.3 v.) and באלול (L-G Ar. 2.4 v.) – as well as in an Arabic script Pentateuch commentary by Abū al-Faraj Furqān in BL Or. 2545, where a sukūn can be found on matres lectionis both in the original Arabic words (mainly for the long /ī/ and / \overline{u} /) – for example, $\tilde{\iota}$ (BL Or. 2545, f. 8 v.) – and in transliterations of Hebrew words - for example, מגמזין for מגמזין (BL Or. 2545, f. 87 r.).³⁶ This function of the sukūn was carried over to the Tiberian shewa in some Judaeo-Arabic texts, such as a copy of the Qur'an in Hebrew characters in Ox. Bodl. Hunt. 529, where most long $\overline{1}$ and \overline{u} vowels are represented by *yod* or *waw* with a *shewa* while the *aleph* of the long $\overline{|a|}$ is left unvocalised – for example, גַיִר אָלמָגיצוָן הָרָב אָלעָאלמָן, מאַ גַּסְתַעָיָן, and גַיִר אַלמָגיצוָר אַלמָגיצוָ (f. 1 v.) – and a liturgical fragment T-S Ar. 8.3, where the *aleph* of the long \bar{a} is the only *mater lectionis* vocalised with the *shewa* – for example, Terror (f. 13 r.).³⁷

3.4 The marking of the initial *hamzat al-qat* and *hamzat al-waşl*

³⁵ Cf. Wright, 1996, vol. I, p. 13, §10 rem.

³⁶ See Tirosh-Becker, 1998, pp. 383, 386.

³⁷ See Khan, 1992, pp. 108–109 and n. 20 there.

³⁸ See Khan, 2010, p. 205. See also Blau and Hopkins, 1988, p. 239, §14.2.

3.5 Nunation³⁹

The marking of nunated vowels in T-S NS 301.25 is largely in accord with Classical Arabic norms, with the exception of some cases where non-nunated vowels are found instead, for example:

(1. 3) אֹרבע ללרפע ללרפע ארה ארבע

(1. 8) לא יכון מערב פי שיא

In other grammars, too, *tanwīn* is occasionally unmarked where it is clearly intended. Thus, in T-S Ar. 5.45 the forms בכל and for Zaydun, 'Amrun and Bakrun:

ודכלה אלתנוין כקולך זיד ועמר (זיד אלתנוין כקולך זיד ועמר) יIt has the *tanwīn*, e.g. Zaydun (זיד) and 'Amrun (עמר').' (T-S Ar. 5.45, P1 r.)

אעלם אן אלרפע פי אלאסם אלואחד יכון בשיין באלצמה ואלואו פאלצמה זיד ועמל ובכר ומא אשבה דלך עלאמה אלרפע פי הדה אל אסמא צמה אכרהא ובעד אלצמה תנוין 'Take note that the nominative case of single nouns is (expressed) by two things: the *damma* and the *waw*. The examples of *damma* are Zaydun (זיד) and 'Amrun (עמר') and Bakrun (בכר'), etc. The marker of the nominative in these nouns is the *damma* at the end and the *tanwīn* after the *damma*.' (T-S Ar. 5.45, P1 v.)

In the Kufan grammatical primer *tanwīn damma* is never marked:⁴⁰ for example, אָר די (T-S Ar. 31.254 r.) and עלי אַכיך תוב גדי (T-S 24.31 r.). Both *tanwīn fatha* and *tanwīn kasra* are found in the fragments alongside their non-nunated counterparts, but the signs are used indiscriminately: רפעת עבד אללה (T-S Ar. 31.254 r.) r.) רפעת עבד אללה (T-S Ar. 31.254 r.) vs. אללה (T-S Ar. 31.254 r.); לקיני עבד אללה (T-S Ar. 31.254 r.) vs. די לקיני עבד אללה (T-S Ar. 31.254 r.) vs. אללה (T-S Ar. 31.254 r.); לקיני עבד אללה (T-S Ar. 31.254 r.) vs. אללה (T-S Ar. 31.254 r.); בכסר אלפא (T-S Ar. 31.254 r.) לקיני עבד אללה (T-S Ar. 31.254 r.) vs. אללה (T-S Ar. 31.254 r.); אלי אינד אללה (T-S Ar. 31.254 r.) אלי ארי אללה (T-S Ar. 31.254 r.) אלי אלי (T-S Ar. 31.254 r.) אלי אלי (T-S Ar. 31.254 r.) אלי אינד אללה (T-S Ar. 31.254 r.); אלי אלי (T-S Ar. 31.254 r.) אלי (T-S Ar. 31.254 r.) אלי (T-S Ar. 31.254 r.) אלי (T-S Ar. 31.254 r.); אלי אלי (T-S Ar. 31.254 r.) אלי (T-S Ar. 31.254 r

اقسامُ الكلام ثلاثُ اسمُ وفعلُ وحرف; فالاسمُ قولكَ رجلُ وفرَسُ وغلامُ; ضربً زيدُ عمرً; بين الفاعل

³⁹ On *tanwīn* in Judaeo-Arabic texts see Baneth, 1945–1946; Blau, 1980, 153–154; Blau, 1955; Wagner, 2010, pp. 175–188.

⁴⁰ Vidro and Kasher, 2014, p. 206.

⁴¹ See Vidro and Kasher, 2014, pp. 176–177.

The lack of *tanwīn damma* in these grammatical fragments resembles the vocalisation of the Qur'ān fragment Halle DMG Arab 5, in which *tanwīn fatha* and *tanwīn kasra* are marked as expected, whereas *tanwīn damma* is not attested and the simple *damma* is used instead.⁴²

When *tanwin* is marked, its graphic representation varies somewhat among different Judaeo-Arabic grammars of Classical Arabic. In the section on orthographic signs in T-S Ar. 5.45, P1 r., *tanwin* is recorded as two oblique strokes, as in figure 1.



Figure 1. Tanwin as two oblique strokes (T-S Ar. 5.45, P1 r.)43

Unsurprisingly, this sign placed above or below the final consonant is used in the corpus for *tanwīn fatḥa* and *tanwīn kasra* respectively. For *tanwīn ḍamma* more variants are attested. The most common one is a *damma* with an oblique stroke to the left, as in figure 2; in more cursive notation, the stroke connects to the *damma*'s tail (see, e.g., SPB RNL Evr Arab II 185, f. 4 r.).⁴⁴



Figure 2. Tanwin damma as damma with oblique stroke (T-S NS 301.25)45

Tanwīn damma can also be written with a double *damma*, occasionally accompanied by the Hebrew *qubbus*, as in figure 3.

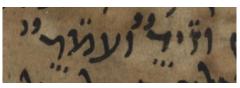


Figure 3. Tanwin damma as double damma with Hebrew qubbus (T-S Ar. 31.30 v.)46

⁴² Rödiger, 1860, p. 486.

⁴³ Image courtesy of the Syndics of Cambridge University Library.

⁴⁴ Image available on Ktiv, the International Collection of Digitized Hebrew Manuscripts, http://web.nli.org.il/sites/NLIS/en/ManuScript/, item 159468, accessed 6 July 2017.

⁴⁵ Image courtesy of the Syndics of Cambridge University Library.

⁴⁶ Image courtesy of the Syndics of Cambridge University Library.

The writing of *tanwin damma* with two *dammas* one on top of the other, mentioned in Muslim treatises on Arabic orthography,⁴⁷ has not been found in Judaeo-Arabic grammars but can be seen in a Judaeo-Arabic copy of the Qur'ān copied in Iraq or Iran in 1575–1625 (see, for example, Ox. Bodl. Hunt. 529, f. 2 v.).⁴⁸

In addition to the *tanwin* sign, *nun* or *aleph* in combination with simple vowels can be used to indicate *tanwin* in all three cases. Examples of *nun* are:

אבו זידָן

'Abū Zaydin' (T-S Ar. 5.45, P1 v.)

אלכפין יכון מע אל תנוין אלכסר בלא תנוין מתל זידן בתנוין ... אלכפין יכון מע אל תנוין אלכסר בא ... '... the genitive case is with *tanwīn* and *kasra* is without *tanwīn*, for example, Zaydin (זידן) has *tanwīn*.' (T-S Ar. 5.45, P1 r.)

Examples of *aleph* are:

אלרפע פי קולך זידא ואלנצב פי קולך זידא ואלכסר והו אל גר פי קולך זידא אלרפע פי קולך זידא אלרפע פי קולך זידא (An example of the nominative is Zaydun (זידא), an example of the accusative is Zaydan (זידא), and the example of /i/, which is the genitive, is Zaydin (זידא).' (T-S Ar. 5.45, P1 v.)

אלהרכאת פתח והו אלנצב כקולך זידא או רפע והו אלצם כקולך זידא או כפין והו אלכסר כקולך זידא 'The vowels are: /a/ which is the accusative, e.g. Zaydan (זידא), or the nominative, which is /u/, e.g. Zaydun (זידא), or genitive, which is /i/, e.g. Zaydin (זידא).' (T-S Ar. 5.45, P1 r.)

The writing of the *tanwīn* with an *aleph* can also be found in the example קאם (T-S Ar. 5.45, P1 r., for the Classical Arabic *qāma Zaydun*), where *aleph* should probably be interpreted not as a hypercorrection but as a marker of the *tanwīn* but not of the case ending.⁴⁹

3.6 Function of the text

T-S NS 301.25 is unique in the corpus of Classical Arabic grammars in Judaeo-Arabic in that it is consistently vocalised with Arabic vocalisation signs. In all other grammars, Arabic vocalisation is used but is sporadic. This may hint at the fragment's function. Al-Zajjājī's *Kitāb al-Jumal* was composed in

⁴⁷ See Abū al-ʿAbbās Aḥmad Al-Qalqašandī (Egypt, 1355–1418), *Kitāb Ṣubḥ al-A ʿšā* (Shams al-Dīn, 1987, p. 161).

⁴⁸ Image available at Digital Bodleian, https://digital.bodleian.ox.ac.uk/inquire/p/0673a609-8fa3-40f2-b372-23099ab76822, accessed on 22 June 2016.

⁴⁹ See also Blau, 1955 on the use of *aleph* to indicate nunation but not case in certain types of nominal sentences.

order to provide learners with basic knowledge of the Classical Arabic language and grammar,⁵⁰ and was traditionally used in the classroom for beginning students.⁵¹ It is clearly with the same purpose – that of learning the basics of Classical Arabic and its grammar – that this fragment was transcoded into Hebrew characters. That the single currently identified part of this grammar in Hebrew characters is the chapter on inflection, and the following chapter on verbs was not copied even though enough space remained on the page to do so, may indicate that only a portion of this book was transcribed and vocalised, possibly as a vocalisation exercise. Indeed, it seems fitting to use a basic text on grammatical cases, which mainly deals with vowels and ends with a summary of all case markers, as teaching material on the topic of Arabic vocalisation and as a sample text to practice one's vocalising skills. The imperfect vocalisation of the fragment may indicate that this is not an expert's work to be copied by future students, but the product of a learner who has not yet attained full mastery of this subject.

4 Conclusions

In this article I have edited and analysed a Judaeo-Arabic fragment of Abū al-Qāsim 'Abd al-Raḥmān b. Isḥāq al-Zajjājī's basic grammar of Classical Arabic, *Kitāb al-Jumal fī al-Naḥw*, preserved in T-S NS 301.25 and consistently vocalised with Arabic vowel signs. T-S NS 301.25 was undoubtedly intended to represent Classical Arabic, but nonetheless its spelling and vocalisation hint at the scribe's substrate pronunciation and imperfect knowledge of the Arabic case system. The present analysis complements earlier studies of Judaeo-Arabic fragments vocalised with Tiberian vowel signs and describes different ways of indicating vowel length and nunation, which are not regularly marked in manuscripts with Tiberian vocalisation or in those sporadically vocalised with Arabic signs. It is suggested that the fragment is a vocalisation exercise performed by a learner of Classical Arabic and its grammar.

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⁵⁰ Binaghi, 2015, pp. 158–159.

⁵¹ Carter, 2017; Binaghi, 2015, pp. 155–156, 158–159.

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