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### Citation

Putten, M. van. (2021). Madd as orthoepy rather than orthography.  
*Journal Of Islamic Manuscripts*, 12(2), 202-213.  
doi:10.1163/1878464X-01202004

Version: Publisher's Version

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**Note:** To cite this publication please use the final published version (if applicable).



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# *Madd* as Orthoepy Rather Than Orthography

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## Abstract

This article explores the function and distribution of the *maddah* sign throughout the history of the Islamic manuscript tradition. It demonstrates that, to date, descriptions have not adequately described its use, and it shows that rather than being a part of Classical Arabic orthography, medieval sources clearly indicate that the *maddah* sign was specifically used to express an orthoepic feature of Classical Arabic prose, namely *madd*, the pronunciation of vowels as overlong.

## Keywords

*maddah* – *madd* – orthography – orthoepy

## 1 Introduction<sup>1</sup>

The *maddah* sign in modern Arabic orthography has only one function: it distinguishes a *hamzah* followed by an *ā* from a *hamzah* followed by short *a*, as in *آتَى* *ātā* ‘to give’ versus *أتى* *atā* ‘to come’. However, when we look at medieval Arabic manuscripts, we find a much more diverse use of *maddah*, which frequently occurs throughout Islamic manuscript history. It occurs in places where it cannot represent the sequence *hamzah* followed by long *ā*.

In modern works on Classical Arabic grammar and orthography, if the broader use of the *maddah* in pre-modern manuscripts is mentioned at all, it is explained as a purely orthographic practice.

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<sup>1</sup> Submitted in an earlier version on June 25, 2020. Accepted for publication on July 30, 2020.

When êlif with hêmza and a simple vowel or tènwīn (أ, ب, etc.) is preceded by an êlif of prolongation (اـ), then a mere hêmza is written instead of the former, and the sign of prolongation, *mèdda* or *maṭṭa* (مَطَّة, مَدَّة, مَدَّ), i.e. *lengthening, extension*), is placed over the latter; e.g. سَمَاءٌ *semā'un*, جَاءَ *ǧā'a*, يَتَسَاءَلُونَ *yatasā'alūna* [...]

*Mèdda* is sometimes placed over the other letters of prolongation, و and ى when followed by an êlif hêmzatum, only the hêmza being written [...]; as يَجِيءُ بِسُوءٍ<sup>2</sup>

Rather than أأ for *ā*, to avoid two successive l's, one writes آ (مَدَّة *maddah*):  
أَكَلِ *ākilun*, قُرْآنِ *qur'ānun*, رَاهِ *ra'ā-hu*.

**Note 1.** In archaic spelling, for example in the *Ḳorān*, *maddah* identifies the sound sequences *ā*, *ī*, *ū* (long vowel + '): أَصْدِقَاءُهُ *aṣḍiqā'uhū*, يَجِيءُ *yajī'u*, سُوئِلِ *sū'ila*.<sup>3</sup>

Further miniature letters were introduced: a [...] small *mīm-dāl* derived from *madd* 'extension' for the word-initial *ā* or the word-final *ā*.<sup>4</sup>

Indeed, when examining vocalised Classical Arabic manuscripts, one frequently encounters this practice of the *maddah* sign before *ʿalif* followed by *hamzah*. It is often used instead of the *hamzah* sign, the *maddah* being sufficient to denote its presence. This, however, is neither a particularly archaic practice, nor a purely Quranic peculiarity, as Fischer suggests, but rather occurs in classical manuscripts throughout history until the modern period. Moreover, the descriptions given by these works are incomplete. While it is true that the most common context in which the *maddah* sign appears is above a word-final *ā* followed by a *hamzah* and not infrequently with word-initial *hamzah* followed by a long vowel, as Gruendler suggests, this is by no means the only context in which it appears. It can also occur above *ī* and *ū* followed by a *hamzah*. Moreover, it may arise just as readily word-medially as it occurs

2 William Wright, *A Grammar of the Arabic Language: Translated from the German of Caspari and Edited with Numerous Additions and Corrections* (Cambridge: Cambridge University Press, 1896), 24f.

3 Wolfdietrich Fischer, *A Grammar of Classical Arabic, Third Revised Edition.*, trans. Jonathan Rogers (New Haven, CT & London: Yale University Press, 2002), 11.

4 Beatrice Gruendler, "Arabic Alphabet: Origin," in *Encyclopedia of Arabic Language and Linguistics (Online Edition)*, ed. Lutz Edzard and Rudolf de Jong (Leiden & Boston, MA: Brill, 2011).

word-finally. Lastly, its spelling is triggered not only by a subsequent *hamzah* but likewise by a succeeding long consonant.

While these uses of the *maddah* sign occur frequently in the Islamic manuscript tradition, the only accurate description of the spelling of the *maddah* that I am aware of is by Nico van den Boogert in his study of the Maghrebi script.<sup>5</sup> It is noteworthy that in Maghrebi writing, the modern use of the *maddah*, to denote a *hamzah* followed by *ā*, is never used. Instead, a baseline *hamzah* is simply placed before the *ʿalif*.<sup>6</sup> This practice has also been adopted in modern print editions of the Quran, where, for example, آدم *ʿAdam* is spelled *ءآدم*.

The following overview is a selection of dated manuscripts throughout the centuries that reveal the practice of using the *maddah* sign. No specific attempt has been made to be comprehensive—an impossible task considering how commonly the *maddah* sign is deployed—and my selection of these manuscripts is based on their availability in digitized form and whether, during my research, I had worked with them for other topics or was easily able to identify examples of the rarer contexts in which the *maddah* sign is used. This overview will establish that the spelling of *maddah* may occur above any long vowel, and that it occurs in situations of a following *hamzah* and a succeeding *šaddah*. This broad view will clearly establish that this is not archaic, but rather a standard and widespread spelling practice throughout the Islamic manuscript tradition. It is hoped that the overview will promote wider awareness and a more accurate description of this spelling practice.

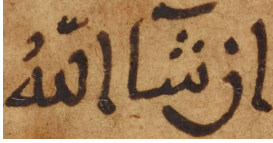
## 2 Ibn al-Nadīm's *Fihrist* (End of the 10th Century) MS Dublin, Chester Beatty Library, Ar 3315

This copy of Ibn al-Nadīm's *Fihrist* (Chester Beatty Library, Ar 3315)<sup>7</sup> was copied from the (now lost) original. It is estimated to date from between around 377AH/987CE (the year Ibn al-Nadīm finished his work) and 1000CE and contains many examples of the *maddah* sign of *ā* before a *hamzah* (NB. not exclusively for word-final *ā* sequences), e.g.:

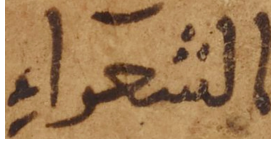
5 Nico van den Boogert, "Some Notes on Maghrebi Script," *Manuscripts of the Middle East* 4 (1989): 33. Note that this practice is in no way exclusive to Maghrebi manuscripts, as we will see in the following section.

6 Ibid.

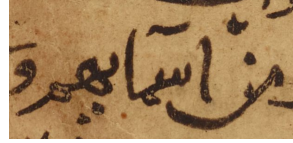
7 Arthur J. Arberry, *The Chester Beatty Library. A Handlist of the Arabic Manuscripts*. Vol. II. MSS. 3251–3500. (Dublin: Emery Walker, 1956), 31.



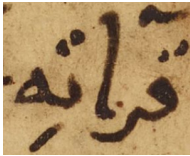
inzā 'in šā'a lāhu (1v, l. 4)



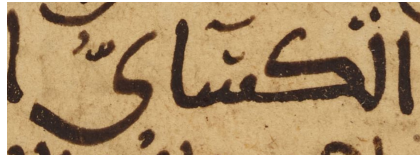
aš-šū'arā'i (1v, l. 25)



min 'asmā'i-him (2v, l. 19)

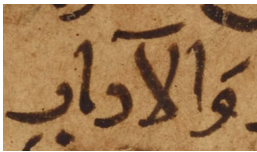


qirā'ati-hī (9v, l. 7)

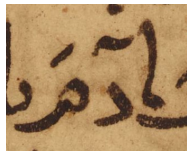


al-kisā'yyu (9r, l. 15)

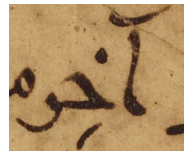
It is likewise used to write ʿā, a spelling practice that continues until this day.



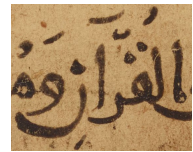
wa-l-ādābi (1v, l. 20)



ādama (7r, l. 17)



āhir (10r, l. 8)

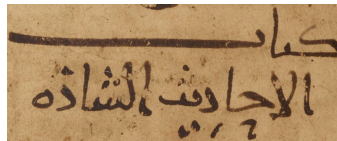


al-qur'ān (12v, l. 1)

Different from later manuscripts, this manuscript does not seem to use the *maddah* sign before a *šaddah*.



aš-šawādd (9v, l. 8)



kitāb al-ahādīṭ aš-šāddah (91r, l. 3-4)

### 3 Al-Hamaḍānī's *Kitāb al-'Alfāẓ* (552AH/1128CE), MS Leiden Or. 1070

The copy of 'Abd al-Raḥmān b. 'Īsā al-Hamaḍānī's (d. 320AH/923CE) *Kitāb al-'Alfāẓ al-Kitābiyyah* is held in the Leiden University Library special collections under the shelfmark Or. 1070 and was copied in 552AH/1128CE.<sup>8</sup> This manuscript is an example of another fully vocalised manuscript that provides ample evidence for the use of the *maddah* sign, primarily as the sign that is written over a long vowel followed by a *hamzah* (not just *ā* but also *ī*):



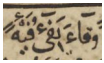
*iddi'ā'i* (2r, l. 7)



*ar-ru'asā'i* (3r, l. 5)



*al-'ulamā'i* (3r, l. 6)



*wa-fā'a yaqr'u fay'atan* (7r, l. 7)



*'isā'ti-hī* (8r, l. 2)



*'ašwā'i-hī* (8r, l. 6)

In addition, there are ample examples of the *maddah* sign being used when a long vowel is followed by a long consonant.



*aš-šādḍati* (2v, l. 2)



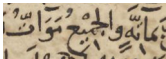
*al-'āmmati* (2v, l. 3)



*māddatan* (3r, l. 10)



*sābbun* (12v, l. 2)



*bi-māttatin wa-l-ġamī'u mawāttu* (28r, l. 10)



*āmmun* (62r, l. 9)



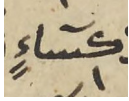
*muġārratan* (71v, l. 7)

I have not identified any examples in this manuscript where a word-initial *hamzah* followed by an *ā* or another long vowel is written with a *maddah* above. While this spelling is common today, it appears not to have had the same popularity in earlier centuries.

<sup>8</sup> Jan Just Witkam, *Inventory of the Oriental Manuscripts of the Library of the University of Leiden*, vol. 2 (Leiden: Ter Lugt Press, 2007), under Or. 1070.

4 Ibn Durayd's *Ġamharat al-Luġah* (644AH/1246 CE) MS Leiden Or. 321 a–c

The Leiden University Library special collections hold a copy of Ibn Durayd's (d. 321AH/933 CE) lexicographical work *Ġamharat al-Luġah* (Or. 321 a–c), the first part of which is a more modern copy, whereas the latter two are dated to 644AH/1246 CE.<sup>9</sup> This work consistently shows *maddah* being used in front of *hamzah* and *šaddah*.



*kisā'in* (c, 2r, l. 15)



*tā'irun* (c, 3r, l. 4)



*ġā'ū* (c, 4v, l. 11)



*ġanā'imu* (c, 5r, l. 8)



*sū'in* (b, 274v, l. 14)



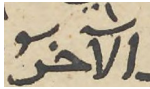
*marī'u* (c, 176v, l. 1)



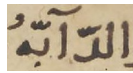
*nubū'an* (c, 152r, l. 2)



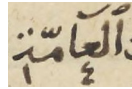
*nasī'atan* (c, 100r, l. 17)



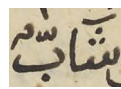
*al-āḥaru* (c, 4v, l. 4)



*ad-dābbatu* (b, 2v, l. 1)



*al-āmmati* (c, 31r, l. 20)



*šābbun* (c, 184r, l. 16)

5 Al-Dānī's *al-Taysīr* (1149AH/1736 CE) MS Berlin, Staatsbibliothek, Landberg 864

A copy of the *Kitāb al-Taysīr fī al-Qirā'āt al-Sab'* by 'Abū 'Amr al-Dānī (d. 444AH/1052 CE) dated to 1149AH/1736 CE and held at the Staatsbibliothek zu Berlin (Landberg 864)<sup>10</sup> is our final example of this practice and reveals that the use of *maddah* in this manner continued in the Classical Arabic manuscript tradition to (at least) the early modern period.

9 Jan Just Witkam, *Inventory of the Oriental Manuscripts of the Library of the University of Leiden*, vol. 1 (Leiden: Ter Lugt Press, 2007), under Or. 321.

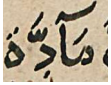
10 W. Ahlwardt, *Kurzes Verzeichniss der Landberg'schen Sammlung Arabischer Handschriften* (Berlin: A.W. Schade's Buchdruckerei, 1885), 84.

al-*asmā' l-qurrā'i* (2r, l. 12)

'Abū ad-Dardā' (4r, l. 16)



ṭā'ifatu (10v, l. 15)



māddah (4v, l. 15)



fa-āmmata (9r, l. 14)

## 6 Quranic Madd

Those familiar with Quranic recitation will be struck by the environment in which the *maddah* occurs in these Classical Arabic manuscripts, as it coincides perfectly with the places where Quranic recitation requires the application of the *madd*, i.e. the overlong articulation of long vowels. Manuals on Quranic reading traditions typically feature a chapter containing considerable discussion of the conditions in which *madd* occurs and the relative lengths of the overlong vowels among the readers, and some of their specificities. We will summarize the rules as they pertain to the canonical seven readers briefly here, based on al-Dānī's *Ġāmi' al-Bayān*:

1. When *ū*, *ī*, or *ā* precedes a *hamzah* within a word, all readers of the Quran agree that it should be read overlong, as in, for example, *'ulā'ika*, *qā'imīn*, *hanā'an*, *marū'an*, *bi-sū'in*, and *'an tabū'a*.<sup>11</sup>
2. When the sequence of a long vowel plus a *hamzah* occurs across word boundaries, there is disagreement on whether to lengthen the vowel. Most readers treat this environment in the same way, thus reading *yā'ayyuhā*, *yā banū 'ādam*, and *ġā'ūū 'abā-hum*. However, Ibn Kaṭīr, Qālūn 'an Nāfi', Warš 'an Nāfi' (in the transmissions of Yūnus and al-'Aṣbahānī), and 'Abū 'Amr do not lengthen the vowel in between words.<sup>12</sup>
3. All readers are also in agreement that a vowel should have an overlong pronunciation if it is followed by a long consonant, e.g. *wa-lā ḍ-ḍāllīn*.<sup>13</sup> Warš 'an Nāfi' adds two more environments in which *madd* is applied. Firstly, he adds it to long vowels when they are preceded by *hamzah*, e.g. *'āadam*,

11 'Abū 'Amr al-Dānī, *Ġāmi' al-Bayān fī al-Qirā'āt al-Sab' al-Mašhūrah*, ed. Muḥammad Ṣad-dūq al-Ġazā'irī (Beirut: Dār al-Kutub al-'Ilmiyyah, 2005), 185.

12 Ibid., 186.

13 Ibid., 203f.

ʾūūtiya, li-l-ʾūmāni.<sup>14</sup> This appears to correspond to the *maddah* that denotes the word-initial ʾā, as it is still used in Modern Standard Arabic today, and not infrequently (albeit less often than when a *hamzah* follows the long vowel) in earlier manuscripts.

Finally, it has been transmitted that Warš ‘an Nāfi‘ applied *madd* to *ay* and *aw*, e.g. *šayyyi’in*, *ka-hayyyi’ah*, and *as-sawwww’i*.<sup>15</sup>

In later, vocalised Quranic manuscripts, such cases of *madd* are, understandably, written with the same *maddah* that we see in these non-Quranic manuscripts. To a large extent, the places in Quranic manuscripts where the *maddah* is written corresponds to where the *maddah* is also written in non-Quranic Classical Arabic texts, as examined above.

The use of *madd* across word-boundaries seems to be typical for Quranic recitation and does not find a clear reflex in the non-Quranic manuscript tradition.

## 7 *Madd* amongst the Grammarians

The clear parallels between the places where the *maddah* sign is written in Classical Arabic manuscripts and the environment in which *madd* is applied in Quranic recitation suggest that this cannot be coincidence. Thus, while the use of *madd* is usually considered a feature that is specific to Quranic recitation,<sup>16</sup> the distribution strongly suggests that the practice of making these vowels over-long in these environments was not unique to Quranic recitation, but rather part of general Classical Arabic orthoepy. As one would expect, the topic is also discussed by grammarians, explicitly not in the context of describing the proper recitation of the Quran, but simply with respect to the proper pronunciation of Classical Arabic prose.

To my knowledge, the earliest grammarian to discuss this phenomenon explicitly is Ibn Ğinnī (322–411AH/941–1002AD) in his influential grammatical work *al-Ḥaṣā’iṣ* in *bāb fī maṭl al-ḥurūf* “the chapter on the stretching of the letters”.<sup>17</sup> He first discusses the definition of the long vowels, citing the examples *qām* ‘he stands’, *sīr bi-h* ‘travel with him!’, *ḥūt* ‘whale’, *kūz* ‘small jug of clay’,

14 Ibid., 193.

15 Ibid., 202f.

16 E.g. Kristina Nelson, “Tajwīd,” in *Encyclopedia of Arabic Language and Linguistics (Online Edition)*, ed. Lutz Edzard and Rudolf de Jong (Leiden & Boston, MA: Brill, 2011).

17 ‘Abū al-Faṭḥ ‘Uṭmān Ibn Ğinnī, *Al-Ḥaṣā’iṣ*, ed. Muḥammad ‘Alī al-Nağğār (Cairo: al-Maktabah al-‘Ilmiyyah, 1952), III, 124 ff.

*kitāb* 'book', *sa'īd* 'happy', and *'ajūz* 'old woman'. There are three places, however, where their sound is lengthened and their length is strengthened (*'illā 'anna l-'amākina llatī yuṭawwīlu fī-hā ṣawta-hā, wa-tatamakkinu maddatu-hā, talātah*). These three places are when the long vowel is followed by:

1. A *hamzah*: he gives the examples *kisā'ā* 'garment', *ridā'ā* 'robe', *ḥaṭī'ah* 'sin', *razū'ah* 'calamity', *maqrū'ah* 'read', and *maḥbū'ah* 'hidden'.
2. A long consonant: he gives the examples *šābbah* 'young girl', *dābbah* 'animal', *hādā qaḍīb=bakr* (for *qaḍību bakr* with assimilation across word boundaries) 'this is the staff of Bakr', *qad tamūudda t-tawb* 'the dress has been spread out' and *qad qūūṣṣa bi-mā* 'alay-h 'he was reckoned with for what he owed'.
3. When pausing while remembering something: he gives the examples *'aḥwā-ka ḍarabā* 'your two brothers hit ...' while trying to remember to say *'aḥwā-ka ḍarabā zaydā* 'your two brothers hit Zayd', *ḍarabū* 'they hit ...' for *ḍarabū zaydā* 'they hit Zayd' and *iḍribū* 'hit (fem). ....!' for *iḍribū zaydā* 'hit (fem.) Zayd!'

The last of these three conditions is, of course, irrelevant for written Classical Arabic, as it explicitly involves speech. But the first two conditions would be of relevance for properly composed Classical Arabic. Indeed, these conditions match perfectly with what we see in medieval manuscripts and their use of the *maddah*. In other words, the use of the *maddah* is not simply an orthographic device to mark long vowels before a *hamzah*, as has been suggested in the literature; instead, it is a specific sign to denote the orthoepy of pronouncing overlong vowels before the glottal stop and long consonants. While this specific lengthening of the vowel in this environment has now been lost in Modern Standard Arabic pronunciation, it was obviously perceived as such an important distinction that it was specifically and quite consistently marked in carefully produced Classical Arabic manuscripts throughout the history of Islamic manuscript tradition.

While the first explicit description of this *maddah* by Ibn Ğinnī is fairly late, the terminology used by earlier grammarians seems to suggest that they, too, considered the overlong vowel to be a salient feature, at least, before a *hamzah*. This is clear from their terminological use of *'alif maqṣūrah* 'shortened *'alif*' and *'alif mamdūdah* 'lengthened *'alif*'. While in modern parlance these terms are used to denote the word-final *ā* written with a *yā* and written with an *'alif* respectively, this is a modern innovation. To the medieval grammarians *'alif maqṣūrah* denoted the word-final *ā* regardless of whether it was written with *'alif* or *yā*, whereas *'alif mamdūdah* denoted the *'alif* that was followed by a *hamzah*, and thus, given the orthoepic rule discussed above, the pronunciation of its *'alif* would have been overlong. This distinction was already present

in the time of Sībawayh (d. 180 AH/796 AD), who in *bāb al-maqṣūr wa-l-mamdūd* ‘the chapter of the shortened and the lengthened’<sup>18</sup> says:

The shortened (using *manqūṣ* instead of *maqṣūr*) are each word among the sisters of the *yā'* and *wāw* (i.e. roots with *yā'* or *wāw* as a final root consonant) where its *yā'* or *wāw* occurs after a letter that carries a *fathḥah*, so its shortening is that they are replaced by an *ʿalif* in the place of the *yā'* and *wāw* and it does not end in the accusative, nominative or genitive.

He then cites examples such as *muʿtan* ‘something given’, *muštaran* ‘something bought’, and *miʿzan* ‘goat’.

Turning to the lengthened forms he says:

As for what is lengthened, it is everything that occurs when a *yā'* or a *wāw* would come after an *ʿalif*. So things like this are known to be lengthened, and this is for example with *al-istisqāā'* ‘praying for rain’ because *istasqaytu* ‘I prayed for rain’ is (of the form) *istafʿaltu*, just like *istahrağtu* ‘I moved out’, so if you want the *maṣdar* you know that it is certain that there is supposed to be a *yā'* after the *ʿalif* just like it is certain for the *ğīm* (of *istahrağtu*) to be present in the *maṣdar* (*istihrāğ*) after the *ʿalif*.

Other examples he gives include: *al-ištirāā'* ‘purchase’; *al-ʾiʿtāā'* ‘granting’; *al-ʾuwāā'* ‘howling’; and *ad-duʿāā'* ‘prayer’, as well as several nouns that are only recognised by making them plural, such as *as-samāā'* ‘the sky’, as then the semi-vowel that is replaced by the *hamzah* returns, as in *as-samāwāt* ‘the heavens’.

Interestingly, in the discussion of these nouns with a lengthened final vowel, at no point does Sībawayh point out that the root consonant *wāw* or *yā'* is replaced by a *hamzah*. To Sībawayh, it seems that the most salient feature of the *ʿalif mamdūdah* was indeed what the name suggests, i.e. that it was lengthened.<sup>19</sup> This suggests that already in Sībawayh’s time the orthoepic pronunciation of an overlong *ā* (and likely also *ī* and *ū*) when it was followed by a *hamzah* was considered normative.

18 ʿAbū Bišr ʿUṭmān Sībawayh, *Kitāb Sībawayh*, ed. ʿAbd al-Salām Muḥammad Hārūn (Cairo: Maktabat al-Ḥanğī, 1988), III, 536 ff.

19 For a similar case of the use of *madd* versus *qaṣr* to describe *ʿalif* followed by a *hamzah*, see Sībawayh’s comment *ʾa-lā tarā-hum qālū: Zakariyyāʾūna fi-man madda, wa-qālū zakariyyawna fīman qaṣara* “Do you not see that they say *Zakariyyāʾūna* (for plural of *Zakariyyāʾ*) for he who lengthens and they say *zakariyyawna* (for the plural *Zakariyyā*) for those that shorten” (Ibid., III, 394).

## 8 Conclusion

Contrary to common description, the *maddah* sign is not primarily used to write syllable-initial *ā* in Classical Arabic orthography. Rather, it frequently occurs in environments where *ā*, *ī*, or *ū* precede a *hamzah* or a long consonant. This is exactly the environment where, even today, in Quranic recitation, one is to pronounce these vowels overlong. Ibn Ğinnī's description makes it clear that, in his time, this type of orthoepic overlong vowel realization (*madd*) was not considered an exclusively Quranic practice. Instead, it seems to have been part of the historical orthoepic pronunciation of any form of Classical Arabic prose. In light of this, we should conclude that the use of the *maddah* sign was not so much an orthographic practice deployed to indicate that a *hamzah* follows or precedes a long vowel, as has been suggested by descriptions at the start of this article, but rather it should be seen as a sign that specifically denoted a difference in pronunciation, namely that of an overlong vowel.

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