



UvA-DARE (Digital Academic Repository)

The Pronominal Suffixes After Two Consonants in Cairene Arabic: A Historical Overview

Zack, L.

DOI

[10.17885/heiup.859.c13957](https://doi.org/10.17885/heiup.859.c13957)

Publication date

2022

Document Version

Final published version

Published in

Semitic Dialects and Dialectology

License

CC BY-NC-SA

[Link to publication](#)

Citation for published version (APA):

Zack, L. (2022). The Pronominal Suffixes After Two Consonants in Cairene Arabic: A Historical Overview. In M. Klimiuk (Ed.), *Semitic Dialects and Dialectology: Fieldwork—Community—Change* (pp. 113-132). Heidelberg University Publishing. <https://doi.org/10.17885/heiup.859.c13957>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)

LIESBETH ZACK 

The Pronominal Suffixes After Two Consonants in Cairene Arabic: A Historical Overview

ABSTRACT Grammars and textbooks of Cairene Arabic dating from the nineteenth century show two sets of suffixes after two consonants: the suffixes as used in modern Cairene Arabic: *-aha*, *-ukum* and *-uhum*, and a set with the vowel *i* between word and suffix: *-iha*, *-ikum* and *-ihum*. This second set of suffixes started to disappear at the end of the nineteenth century. The vowel *i* in *-iha*, *-ikum* and *-ihum* is an epenthetic vowel which is inserted between the two consonants at the end of the word (e.g. *ism*) and the suffixes *-ha*, *-kum*, *-hum* in order to break up the cluster of three consonants. However, the origin of the vowels *a* and *u* in the suffixes *-aha*, *-ukum* and *-uhum* is disputed. Some scholars, such as Birkeland (1952) and Diem (1991), argue that these vowels are remnants of old case endings, while others such as Owens (2006) and Watson (2002) claim that they are the result of vowel harmony, in which the epenthetic vowel is influenced by the vowel in the following syllable.

This paper will use historical written sources of Cairene Arabic to investigate the occurrences of these suffixes before the nineteenth century. Then, nineteenth-century sources are used to show the decline and disappearance of the suffixes with *i*. Finally, the two theories concerning the origin of the vowels of the suffixes will be discussed in light of these findings.

KEYWORDS Cairene Arabic, Egyptian Arabic, historical dialectology, pronominal suffixes, language change

1 Introduction

In modern Cairene Arabic, the pronominal suffixes after two consonants (CC) are as follows:

TABLE 1. Pronominal suffixes in Cairene Arabic after CC.

	MSG	FSG	PL
1	<i>-i</i>	<i>-i</i>	<i>-ina</i>
2	<i>-ak</i>	<i>-ik</i>	<i>-ukum</i>
3	<i>-u</i>	<i>-aha</i>	<i>-uhum</i>

In Cairene Arabic, clusters of three consonants are not allowed.¹ Therefore, in 3FSG and in the plural forms (Table 1, in boldface), an extra vowel is needed in order to avoid a cluster of three consonants. This vowel is stressed. In 3FSG the vowel is *a*, in 1PL it is *i*, and in 2PL and 3PL it is *u*.

Sources from the nineteenth and the beginning of the twentieth century display two varieties for 3FSG, 2PL and 3PL. Besides the forms mentioned in Table 1, there existed another set of suffixes. This set contains the buffer vowel *i*.

TABLE 2. Pronominal suffixes in Cairene Arabic after CC in the nineteenth century and today.

	Nineteenth century	Current situation
3FSG	<i>-iha, -aha</i>	<i>-aha</i>
2PL	<i>-ikum, -ukum</i>	<i>-ukum</i>
3PL	<i>-ihum, -uhum</i>	<i>-uhum</i>

The set of suffixes with *i* started to disappear at the end of the nineteenth century, and this process was completed at the beginning of the twentieth century. This raises some questions that will be addressed in this paper: Why were there two different sets of suffixes? Which one is the oldest? Why did the suffixes with *i* disappear? I will attempt to shed light on these questions by looking at the suffixes in pre-twentieth-century texts. This is no easy task, considering that this is a feature that can only be found in texts in Arabic script that are vocalised, or in transcribed texts. Although the latter can be found in abundance in the nineteenth century, they are very scarce in earlier periods.

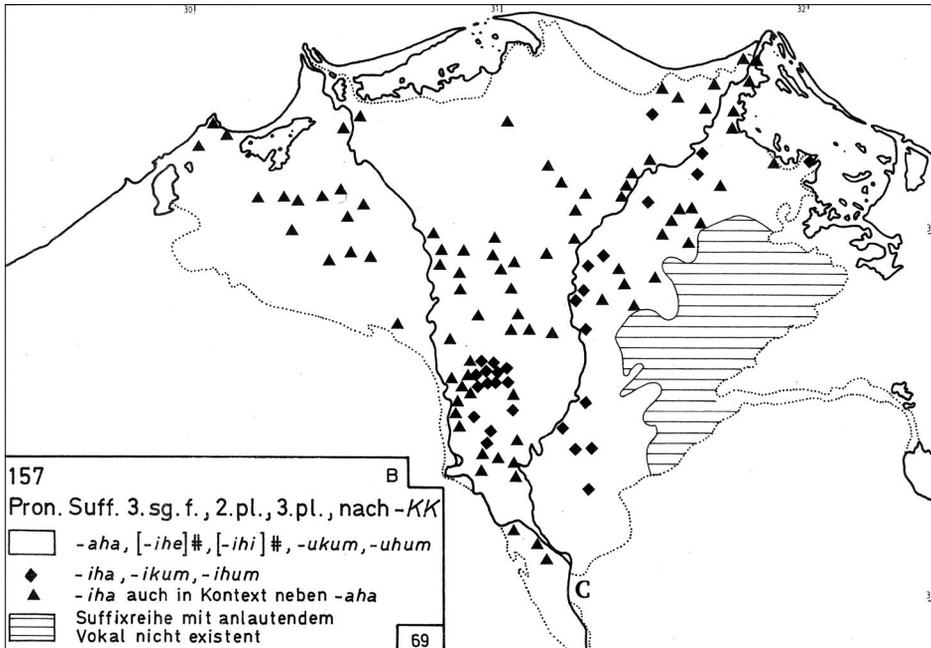
The article will first discuss the current situation with regard to the vowels of the suffixes in Cairo and the Delta. Then, evidence from texts from the fifteenth and eighteenth centuries will be given, followed by an overview of suffixes found in texts

¹ See Woidich (2006: 17).

from the nineteenth and beginning of the twentieth century. In the final part, two opposing views on the origin of these vowels will be given: while some researchers claim they are remnants of old case endings, others propose that they are epenthetic vowels that were affected by vowel harmony. These two theories will be discussed in light of the situation in Cairene Arabic.

2 The current situation in Cairo and the Delta

Map 157 in Behnstedt and Woidich's (1985b) dialect atlas of Egypt (see Map 1) shows that there are three distinct groups of suffixes in the Delta.² The unshaded part, which covers most of the Delta, represents the set of suffixes *-aha*, *-ukum*, *-uhum*. The suffix *-aha* is pronounced as *-ihe* or *-ihi* in pausa. The second group, indicated with a diamond, has suffixes with the vowel *i*: *-iha*, *-ikum*, *-ihum*. The third group, marked with a triangle, has both *-iha* and *-aha*. According to Behnstedt and Woidich's (1985a: 78) *Anmerkungen zu den Karten*, the *i* in the second and third group can be explained as an epenthetic



MAP 1. Pronominal suffixes 3FSG, 2PL, 3PL after CC (Behnstedt and Woidich 1985b: map 157). © Dr. Ludwig Reichert Verlag, Wiesbaden. C for Cairo added by the author.

2 The shaded part on the right, which represents the Šarqiyya, will not be taken into consideration here. Also, the region to the south of Cairo, in the Nile Valley, is not relevant here because the suffixes contain an unstressed *schwa*. See Behnstedt and Woidich (1985a: 78).

vowel to break up the sequence of three consonants. However, the vowel *i* in the pausal forms *-ihe#* and *-ihi#* in group 1 (which has *-aha* in context and *-ukum* and *-uhum* for the other forms) has a different origin. Because of pausal *imāla* (raising of final *a*), *-aha#* became *-ahe#* / *-ahi#*. The *i*-sound then spread to the left of the suffix. This is the group to which Cairo belongs as well. Note, however, that Cairo does not have the pausal forms *-ihe#* and *-ihi#*. The dialect of Cairo does not have pausal *imāla* anymore; this feature disappeared in the nineteenth century (see Blanc 1973–1974; see also section 4.3 below).

3 Pre-nineteenth-century Cairene Arabic

Pre-nineteenth-century sources written in the dialect of Cairo are rare.³ There are no reliable texts in transcription, and colloquial texts written in the Arabic script are very scarce. Moreover, texts written in Arabic script in which information about the vowels of the suffixes can be found are even harder to find, as it was not common practice to mark texts with vowel signs.⁴ Below, two texts are discussed in which some information can be found; one from the fifteenth, and one from the eighteenth century.

3.1 Fifteenth century: ʿAlī Ibn Sūdūn al-Bašbuḡāwī

One of the earliest texts that contains information about the vowels of the suffixes is ʿAlī Ibn Sūdūn al-Bašbuḡāwī's fifteenth-century *Nuzhat al-nufūs wa muḏḥik al-fabūs*.⁵ Al-Bašbuḡāwī was born in Cairo in 1407 and died in Damascus in 1464. His humorous poems contain a good deal of colloquial elements, some of which are vocalised. In his study of this text, Vrolijk (1998: 153) mentions one example of the vocalised suffix هم كُنْهُمْ *kannuhum* 'as if they are.' He also mentions three vocalised examples of the 3FSG suffix with the vowel *a*: مَهْرَهَا *mahrahā* 'her dowry,' وُمَهَا *w-ummaha* 'and her mother' and فى رَاسَهَا *fī rāsahā* 'on her head' (Vrolijk 1998: 153). I need to clarify here that in the first two examples the *fathā* cannot be explained by the accusative case, as in both instances the noun containing the suffix is the subject: خَطَّيْتُ لَكَ عَزُوبِيَهْ مَهْرَهَا 'and her mum cries meow'⁶ (Vrolijk 1998: 82 a l. 10), and عَشْرِينَ فُرُورِي *ʿashrin fūrūrī* 'I got you engaged to a bride whose dower is twenty *para*'⁷ (Vrolijk 1998:

3 See Davies and Doss (2013: 26).

4 See Zack (2019: 210–212).

5 Text edition and study by Arnoud Vrolijk (1998). The work consists of two parts: the study (in English) and the text edition. When referring to the edition of the Arabic text, the letter *a* is mentioned after the page number.

6 The poem is about a little kitten.

7 The *para* was $\frac{1}{40}$ of a piastre.

83a l. 11). Of course, in the third example فى راسها (Vrolijk 1998: 139a l. 14), the noun is preceded by فى, so if there was a case ending, it would have been a *kasra*. However, this last example poses a problem because *rās* ends in a single consonant and therefore the suffix would be expected to be *-hā* rather than *-ahā*. An explanation could be that it should be read as *raʔsahā*. There are two other instances in which the word is vocalised as راسها (Vrolijk 1998: 140a l. 11 and p. 141a l. 13).

Vrolijk states that the suffix was *-ihā* when the syllable preceding the suffix contained an *i* or *ī*:

There is some evidence, however, that the intermediary vowel becomes ‘i’ when the last syllable of the preceding word has an ‘i’ or ‘ī’ vowel: بِيَدِهَا *bīdihā* ‘in her hand’ (82: 9). (Vrolijk 1998: 153)

Vrolijk suggests that this is a case of vowel harmony in which the vowel of the noun influences the vowel of the suffix. Because the word *ʔid* is colloquial, he does not seem to consider the possibility that the *i* is in fact the genitive case ending. However, because *ʔid* is preceded by *bi-*, it cannot be excluded that the vowel does in fact indicate the genitive case, making this a mixed form containing both colloquial and classical elements. However this may be, one example is not enough to establish a general rule. Another important point is that in this example no vowel at all is needed because *ʔid* (like *rās*) ends in one consonant and therefore takes the suffix *-hā*. This example is from a line of poetry, so the extra vowel is probably dictated by the metre.⁸ The only other examples with *-ihā* that I have found in this text are words that are preceded by a preposition. For instance, forms like على رجليها (Vrolijk 1998: 112a l. 3) and فى يومها (Vrolijk 1998: 114 l. 15) are ambiguous because the *kasra* could be explained as the genitive case ending. Also, the word اسمها ‘her name’ (Vrolijk 1998: 112a l. 2) with an *i* in the preceding syllable, but the suffix *-ahā* rather than *-ihā*, contradicts Vrolijk’s theory of vowel harmony.

Besides the examples mentioned by Vrolijk (1998: 153), I have found additional instances of vocalised suffixes in which the vowel before the suffix is different than the one expected in Classical Arabic:⁹

-ahā:

على ظهرها ‘on her back’ (Vrolijk 1998: 112a l. 8 and 139a l. 15);

ان المركب بطنها مَعَوَّقَةٌ فى الثوبية ‘the belly of the boat is held back in the water’ (Vrolijk 1998: 141a l. 1).

8 This is not the case in the examples of راسها, because these all occur in prose text.

9 For instance, كَنَّهَا ‘as if she’ (Vrolijk 1998: 98a l. 13) and تحنَّها ‘underneath her’ (Vrolijk 1998: 98a l. 14) both have *a* as in Classical Arabic.

-*ukum*:

يا حُرَيْبُكُمْ يَا بَنَاتِي ‘Oh your restive one (?), oh my good luck’ (Vrolijk 1998: 106a l. 4).¹⁰

No additional examples of the suffix هم with vocalisation were found.

There are two passages, ‘The letter of Funayn’ (pp. 137a–139a) and ‘About the difference between a boat and a horse and what relates to this’ (pp. 139a–141a) in which the suffix 3FSG is written as هِجِه, representing the suffix *-ihi* with strong *imāla*, which can still be found in the Delta (see section 2 above). Examples are تَحْتِهَا ‘underneath her’ (Vrolijk 1998: 138a l. 15),¹¹ قَالَ لَهَا ‘he said to her’ (Vrolijk 1998: 140a l. 16) and رَجَلِهَا ‘her leg’ (Vrolijk 1998: 140a l. 17). ‘The letter of Funayn,’ from which the first example is taken, is a letter written by a fictional character from the Egyptian countryside and was ‘an attempt to imitate and ridicule the speech of a *baladī* character’ (Vrolijk 1998: 141). The fact that al-Bašbuḡawī wrote the suffix with *hā?* rather than *alif* and also marked the suffix with two *kasras* shows that he took some trouble to stress the fact that this was not Cairene Arabic.

3.2. Eighteenth century: *Lisb al-Manār*

The text of the shadow play *Lisb al-Manār* ‘The play of the lighthouse,’ about the famous lighthouse in Alexandria, dates from the sixteenth century, but the only surviving manuscript containing the text dates from 1707.¹² The play was meant to be performed rather than read in silence, and the manuscript shows signs of being used during performances.¹³ Shadow plays were meant to entertain the masses. It is therefore not surprising that *Lisb al-Manār* contains many colloquial elements.¹⁴ Although the text is only sparsely vocalised, there are two instances of vocalised suffixes that concern us here: كَلُّهُمْ *kulluhum* (Kahle 1930: 8a l. 9) and كَلِّهَا *kullaha* (Kahle 1930: 19a l. 7). However, كَلُّهُمْ is the subject of the sentence, so this could also be interpreted as the Classical Arabic case ending *u*. كَلِّهَا would have been in the nominative if it had been Classical Arabic: وارض قبرص والجزائر كَلِّهَا تتطاع لقوله ‘and the land of Cyprus and all the islands obey his words.’ So here we do have proof of the suffix *-aha*.

10 According to the rules of Classical Arabic, حرين should have been in the accusative (see Caspari and Wright 1862, vol. II: 63). The meaning of حرين is not entirely clear. It is also used on p. 82a l. 7: يَا حُرَيْنِ النَّاسِ يَبْنُخِي. As both examples are from children’s rhymes, and the one on p. 82a is full of diminutives, it seems most likely that حُرَيْنِ is the diminutive of خرون ‘restive.’

11 See also Vrolijk (1998: 153).

12 See Kahle (1930: 3–8) and Zack (2012: 333–334). References to Kahle’s (1930) edition of the Arabic text are marked with the letter a after the page number.

13 See Kahle (1930: 1).

14 See Zack (2012: 335).

What the examples in sections 3.1 and 3.2 show is that the forms with *a* and *u* most likely were the norm. There are no unambiguous examples of suffixes with *i* from this period that could not be attributed to the genitive case; however, the 3FSG form *-ihi* was clearly stigmatised.

In the following paragraph, the appearance of the suffixes in nineteenth-century sources will be discussed.

4 The nineteenth century

From the second half of the nineteenth century, many textbooks, language guides and grammars of Cairene Arabic were published. These were written both by native speakers and orientalist and aimed at teaching Arabic to foreign travellers. Most of these used transcribed Arabic, or both transcription and Arabic script, which makes them very useful sources for phonological research.¹⁵

4.1 *-ikum / -ukum* and *-ihum / -ukum*

Many nineteenth-century sources have *-ikum* and *-uhum*, which are the forms that are used in Cairo nowadays. Some examples with *u* (ordered from the oldest to the most recent sources) are:

- *hommà kân andohoum innâb*¹⁶ (Cadri 1868: 134) ‘they had grapes’;
- *buddûhum (biddûhum)* (Spitta 1880: 54) ‘they want’;
- *wêhum saḥṭâhum ḥagar kullûhum* (Spitta 1883: 146) ‘and she turned them all into stone’;
- *aan’doukoum* (Vaujany 1884: 19) ‘you (PL) have’;
- *ma ṣandokums’ adab* (Spiro 1912: 50) ‘you have no manners.’

There are also a number of sources that mention *-ikum* and *-ihum*. Examples with *i* include:

- *houmma kân ândehom* (Nolden 1844: 141) ‘they had’;
- *intom andikom; nafsi-kom, nafsi-hom* (Nakhlah 1874: 63; 137) ‘you (PL) have’; ‘yourselves, themselves’;
- *كَبَشَتْ كَبْشَهْ ذَهَبٍ وَرَمَتْهَا فِي وَسْطِهِمْ* (Dulac 1889: 67) ‘she took a handful of gold and threw it among them’;
- *nafsi-kum, nafsi-hum* (Thimm 1898: 42) ‘yourselves, themselves.’

15 For more information about these types of books, see Zack (2016 and 2017).

16 The transcriptions have been kept as in the original sources.

Some sources use both *u* and *i*:

- *tīqdar tohhot-tóhom tãhht el kursee au fil shâbakeh* (Sacroug 1874: 296) ‘you may put them under the seat or in the net’; *hoom’ma aandêhom* (Sacroug 1874: 249) ‘they have’;
- *aħadû nafsúhum* (Van Berchem 1889: 99) ‘they stood up’; *wêqâmet elmara gâbet elħadîde min ennâr wêkauwethum fi kaṣbihum* (Van Berchem 1889: 101) ‘the woman stood up, got the iron from the fire and ironed their heels’;
- *biddikum (auch buddükum) tiḍrabu* (Seidel 1896: 37) ‘you (PL) want to hit.’

Spitta’s and Seidel’s examples with *bidd* ‘to want’ are interesting because they show vowel harmony: besides *biddúhum*, a form *buddúhum* existed (Spitta 1880: 54) in which *bidd* has become *budd* under the influence of the vowel in the next syllable. Seidel’s (1896: 37) *biddikum/buddükum* shows the same phenomenon. I have not found any other examples except for these two with the word *bidd*.

Spitta (1880) is also interesting for another reason. Although his book is a very detailed, scholarly description of the grammar of Cairene Arabic, and lists numerous variations, it does not mention *î* as ‘Bindevocal’ for the suffixes *-kum* and *-hum* (see Spitta 1880: 54).

The last grammar which mentions the forms *-ikum* and *-ihum* is Marriott ([1930]). However, its date of publication is misleading because it is based on C. A. Thimm’s book that first appeared in 1897. It is very likely that this information was not updated in subsequent editions. Another late source which mentions these forms is Chagavat’s *Vocabulaire français-italien-arabe*, which has no year of publication but most probably dates from the early twentieth century.¹⁷ He mentions for instance *andékom, andêhom* (Chagavat s.d.: 305).

4.2 *-iha* and *-aha*

Whereas most sources give either the forms with *i* or those with *u* for the suffixes 2PL and 3PL, but not both, the situation is different when it comes to the suffix 3FSG. The majority of the sources from the nineteenth century give both options *-iha* and *-aha*, as can be seen in Table 3.

It is only at the beginning of the twentieth century that the suffix *-iha* falls into disuse, as the table shows. Mahmoud Salem still mentions *-iha* 1940, although it

17 Although undated, some information about its year of publication can be deduced from a list of other publications by the author mentioned at the end of the book. Of the 18 titles, only one can be found in WorldCat: *Mahomet et les Khalifes et l’Empire Ottoman* (see <http://www.worldcat.org/oclc/14992167>, accessed 30 April 2020). This book was published in 1912. Therefore, his *Vocabulaire* must have been published after that.

TABLE 3.
Distribution of the
suffixes *-iha* and *-aha*
in 30 texts.

	<i>-aha</i>	<i>-iha</i>
1844 Nolden		
1868 Cadri		
1869 Hassan		
1874 Nakhlah		
1874 Sacroug		
1879 Goldziher		
1880 Spitta		
1883 Spitta		
1884 Mosconas		
1884 Vaujany		
1886 Probst		
1887 Wied		
1890 Vollers		
1892 Haggemacher		
1895 Vollers-Burkitt		
1893 Dirr		
1893 Fiske		
1896 Seidel		
1898 Probst		
1898 Robertson- Ayrût		
1900 Nallino		
1901 Willmore		
1904 Fiske		
1906 Prüfer		
1912 Spiro		
1913 Klippel		
1917 Gairdner		
1927 Elder		
1928 Hug-Habachi		
1940 Salem		

needs to be noted that Salem is in many ways more conservative than most other sources and therefore is not a reliable source to establish when a certain feature became obsolete.¹⁸

Some examples with *-iha*:

- *anà farragtohoum alal madina kollihà* (Cadri 1868: 346) ‘I showed them the whole city’ (note also *farragtohoum* with *u*);

18 Salem’s 1940 publication is the second edition. It is unknown when the first edition was published. It could be much earlier and therefore account for some of the archaic features.

- *fālamā sāfhā ʕaly ḥabbīha* (Spitta 1880: 181) ‘when Ali saw her, he fell in love with her’;
- *kanit siḥḥitik izzayyi-ha min wa-t ma-chuftik?* (Salem 1940: 113) ‘how have you been since I saw you last?’

And some examples with *-aha*:

- *mā rouhtahāch aslan* (Cadri 1868: 246) ‘I’ve never been there’;
- *es-sāfa tāwwahā dāqqet t’lāte* (Hassan 1869: 32) ‘it has just struck three’;
- *issmaha ayh* (Nakhlah 1874: 97) ‘what is her name?’;
- *min waqtāha* (Haggenmacher 1892: 98) ‘since then’;
- *bint-ā-ha* (Nallino 1900: 29) ‘her daughter.’

Nallino remarks:

I vocaboli terminanti con due consonanti, davanti ai suffissi che cominciano per consonante devono prendere una vocale eufonica (§ 3), ossia *ā* od *ī* innanzi a *hā*, *ī* innanzi a *nā*, *ū* innanzi a *kum*, *hum*. Da *bint* figlia : *bint-ā-ha* la figlia di lei, *bint-ī-na* nostra figlia, *bint-ū-kum* la figlia vostra, *bint-ū-hum* la figlia loro. Al Cairo e nelle sue vicinanze si accentua (§ 4) *bintāhā*, *bintīna*, *bintūkum*, *bintūhum*. (Nallino 1900: 30)

The words ending with two consonants before suffixes beginning with a consonant must take a euphonic vowel (§ 3), namely *ā* or *ī* before *hā*, *ī* before *nā*, *ū* before *kum*, *hum*. For *bint* daughter: *bint-ā-ha* her daughter, *bint-ī-na* our daughter, *bint-ū-kum* your daughter, *bint-ū-hum* their daughter. In Cairo and its surroundings it is stressed (§ 4) *bintāhā*, *bintīna*, *bintūkum*, *bintūhum*.’ (translation by the author)

What is interesting here is that Nallino first confirms that both *a* and *i* can be used before the suffix *-ha*, but then twice mentions the example *bintaha* only, which implies that this was the preferred form at that time. This is corroborated by Spitta’s *Grammatik des arabischen Vulgärdialektes von Aegypten* (1880). In the following paradigm (Figure 1), we can see that although he does not mention the forms *-ikum* and *-ihum* (see section 3.1), he does mention both forms *-iha* and *-aha*:

4) Auf eine doppelt geschlossene kurze Silbe ausgehendes Substantiv: <i>ṣuġl</i> „Geschäft“.	
<i>ṣuġloh</i> sein Geschäft	<i>ṣuġlūkum</i> ihr Geschäft
<i>ṣuġlāha</i> (<i>ṣuġlīha</i>) ihr Geschäft	<i>ṣuġlūkum</i> euer Geschäft
<i>ṣuġlak</i> dein (m.) Geschäft	<i>ṣuġlīna</i> unser Geschäft.
<i>ṣuġlik</i> dein (f.) Geschäft	
<i>ṣuġly</i> mein Geschäft	

FIGURE 1. The suffixes after CC in Spitta (1880: 153).

The fact that the form *šugliha* is given between brackets indicates that for Spitta it was not the standard or preferred form. Spitta makes three statements about the vowel of the suffix 3FSG:

Ferner steht er [=e], obwohl gerade nicht häufig, vor dem Suffix der 3. P. sing. fem. *hâ*, wenn dieses an Formen gehängt wird, die mit zwei Consonanten eindigen. Beispiele: *šandêha* „bei ihr“ [...]. (Spitta 1880: 53)

On the same page, he mentions:

Der Zwischenvocal *â* kommt nur vor dem Suffix der 3. P. fem. sing. *hâ* (*ha*) vor, wenn dasselbe an Substantiva oder Verba tritt, die mit zwei Consonanten schliessen; er wechselt in dieser Function mit dem eben erwähnten *ê*, von dem er überhaupt schwer zu unterscheiden ist, und dem gleich zu besprechenden *î*. (Spitta 1880: 53)

And on the next page:

Der Zwischenvocal *î* kommt zunächst als Bindevocal vor dem Suffix *hâ* (*ha*) vor, z. B. 7, 2 *bardiha* „sie auch“; 7, 7 *šandîha* „bei ihr“, wo auch, wie eben erwähnt, *ê* und *â* stehen können. (Spitta 1880: 54)

Summarising Spitta's three statements, it can be concluded that *a* was the most common vowel for the suffix 3FSG. Besides these, the vowels *i* and *ê* were used as well, although the use of the latter was 'nicht häufig' ('not often').

Taking the evidence from the sources into consideration, it can be concluded that the forms with *-ikum* and *-ihum* disappeared from Cairene Arabic at the end of the nineteenth century. The form *-iha* was more common than *-ikum* and *-ihum* and seems to have survived longer: well into the twentieth century. However, even when the two forms existed side by side, the form with *a* seems to have been the preferred one.

4.3 The nineteenth century: appearance and disappearance of a suffix

As discussed in section 3, there are no texts that show the suffixes with *i* in Cairene Arabic before the nineteenth century. This does not mean that they did not exist at all, but merely that at the moment there is no evidence of their existence. The available texts do indicate that the forms with *a* and *u* were used at that time, and that the 3FSG suffix with strong *imāla* (*-ihî*) was stigmatised. The numerous attestations of suffixes with *i* in nineteenth-century sources is interesting considering their absence in the earlier texts.

The appearance of the forms with *i* coincides with the waves of mass immigration from the surrounding countryside to Cairo that took place during the nineteenth

century. Two devastating epidemics in 1831 and 1835 killed nearly a third of Cairo's population, but mass migration from the countryside made up for this loss, keeping the number of inhabitants stable.¹⁹ During the remainder of the nineteenth century, deaths continued to exceed births in the capital, so its growth was dependent entirely on the arrival of rural migrants.²⁰ Taking into consideration the influx of migrants from the countryside, it is not surprising that Cairo became a melting pot of different dialects, which accounts for the existence of different suffixes side by side. Peter Trudgill has shown that in situations of dialect contact, stigmatised forms tend to disappear in favour of unmarked forms.²¹ Woidich (1994: 504–505) uses this theory to explain the disappearance of another feature from Cairene Arabic in the second half of the nineteenth century, the pausal *imāla*:²²

As townsfolk tend to look down on the peasants and a strong *imāla* was certainly characteristic of peasant speech as it is today, the former avoided it and used the context form instead in order to be different and to avoid being ridiculous. On the other hand, rural speakers who wanted to adapt themselves to urban speech avoided *imāla* for the same reason. (Woidich 1994: 505)

This is likely also the reason why at the turn of the twentieth century, the suffixes with *i* disappeared: they were associated with rural speech. This is corroborated by the current distribution of suffixes with *i*, which shows that it is a feature found in the Delta, especially in the Minūfiyya province, located directly to the north of Cairo. The first generation of immigrants used these 'rural' suffixes, which is why they were recorded in the grammars and textbooks, and both sets of suffixes existed side by side. But the forms with *i* were stigmatised by the original inhabitants of Cairo due to their association with rural speech, and as the children of the immigrants took over the 'neutral' forms of Cairene Arabic, the forms with *i* disappeared.

5 The vowels: Case endings or epenthetic vowels?

The origin of the vowels *i*, *a* and *u* that come between CC and the following suffixes in Cairene Arabic is disputed. Some scholars, such as Harris Birkeland (1952) and Werner Diem (1991), claim that these vowels are remnants of old case endings. Others, such as Janet Watson (2002) and Jonathan Owens (2006), argue that they are the result of vowel harmony, in which the epenthetic vowel is influenced by the vowel of the

19 See Abu-Lughod (1971: 83 fn. 4).

20 See Abu-Lughod (1971: 115).

21 See Trudgill (1986: 11; 143).

22 See also Blanc (1973–1974).

following phoneme. This discussion is quite a significant one because it addresses the question of whether the modern Arabic dialects are descendants of a form of Arabic in which case endings still existed. In this section, I will analyse these two theories in further detail.

5.1 Theory 1: Vestiges of case endings

Proponents of the theory that the vowels are vestiges of case endings are Harris Birkeland (1952) and Werner Diem (1991). Carl Brockelmann (1908) already proposed that the vowels of the second person singular are remnants of the case endings. He writes about **kā̃*, **kī̃*:

In den neuarab. Dialekten sind die Vokale durchweg abgefallen, und die Geschlechter werden nur noch durch Erhaltung der dem ursprünglichen Suffixvokal entsprechenden Nominalendungen, die auch auf das Verbum übertragen werden, unterschieden: m. *ak*, f. *ik*. (Brockelmann 1908: 309)

Birkeland (1952) also focuses on the suffixes of the second person singular, stating that:

We must be allowed to [...] conclude that in *bētak* < **bētakā* it is the accusative which is preserved, in *bētik* < **bētikī* it is the genitive. The fact that an old case-ending appears as an auxiliary vowel is well-known. And that the quality of this vowel is determined by the following vowel is quite natural. (Birkeland 1952: 12)

Although Birkeland presents the use of old case endings as auxiliary vowels as a well-known fact, he does not actually cite sources supporting this. However, as shown above, Brockelmann (1908: 309) was a proponent of this view and was possibly the inspiration for Birkeland's theory.

Birkeland does not mention the auxiliary vowels of the suffixes *-ha*, *-kum* and *-hum* explicitly, but he does mention that '[t]he *u* in *ki'tābu* is not the *u* of *-hu*, but the auxiliary vowel, which before *u* was the original case-ending of the nominative [...]' (Birkeland 1952: 30). This shows that Birkeland extends his theory to the vowels of other suffixes.

Diem (1991: 301) supports Birkeland's view: while according to Diem the inserted vowel is originally a case ending, now become defunct, the choice of case ending was actually dependent on the next vowel. He constructs the reduction of the final vowels of the suffixes of the second person singular in three stages:

1. *bint-aka*, *bint-ikī*
2. *bint-ak*, *bint-ikī*
3. *bint-ak*, *bint-ik*

Diem argues that first the case system broke down, but that the dialect still kept the short vowels associated with the cases, and that therefore the choice of short vowels in the suffixes was due to vowel harmony. The final short vowels only disappeared after that, leaving the remnants of the case system in the vowels of *-ak* and *-ik*. As for the other suffixes, Diem states that:

„Vokalharmonie“ [...] zeigt sich auch bei anderen gebundenen Pronomina; vgl. etwa für den Dialekt von Kairo *bint-u* < **bint-u**hu*, *bint-aha*, *bint-ukum*, *bint-uhum*; nur *bint-ina* ist eine Ausnahme. (Diem 1991: 301)

Summarising, it can be said that both Birkeland and Diem claim that the auxiliary vowels can be traced back to old case endings, but that the choice of vowel was determined by vowel harmony, i.e. the vowel of the following syllable.

5.2 Theory 2: Vowel harmony

The second theory states that the vowels did not originate from a form of the language in which old case endings still existed; rather, they were epenthetic vowels whose quality changed because of vowel harmony. Proponents of this theory are, amongst others, Janet Watson and Jonathan Owens. Watson describes the system of vowel harmony in Cairene Arabic as follows:

Whenever three consonants are potentially juxtaposed within the utterance, epenthesis of [i] occurs between the second and third consonant. Within the word, but not across word boundaries, the epenthetic vowel is realized as [u] to the left of /u/. (Watson 2002: 64)

Watson explains the *a* in *-aha* as follows:

The [a] vowel in *ḥabbaha* ‘he loved her’ is due to assimilation of [guttural] from the following guttural consonant and guttural vowel. (Watson 2002: 183 fn. 6)

Owens has a similar view:

The epenthetic vowel is usually a high vowel whose precise value, front, back or mid, is determined by consonantal context. In a few dialects, including WSA²³ and Cairene, the value of the epenthetic vowel is determined by the nature of the following consonant formed by the pronominal suffix. There are three epenthetic vowel values, [i, u, a]. [u] occurs before a suffix with [u], [a] occurs before *-ha* and otherwise [i] occurs. (Owens 2006: 108)

23 Western Sudanic Arabic.

Owens objects to the idea that the vowels *u*, *i*, *a* are remnants of old case endings because this would imply that the Arabic dialects, and therefore also Cairene Arabic, are a direct descendant of Old Arabic with a case system, a notion that he rejects. He comments on Birkeland's (1952) theory of remnants of case endings:

[...] Birkeland offers no independent motivation for his explanation, other than, implicitly, the phonetic identity with CA case suffixes. There is no obvious explanation, for instance, as to why the genitive *-i* should have been preserved before *-na*, *-u* before *-hum*, nor does Birkeland explain how the case endings were converted to non-morphological epenthetic status. (Owens 2006: 235)

Even though both theories have a different starting point, an earlier variety of the dialect that either had, or did not have, case endings, the conclusion is the same: the choice of vowels in the suffixes is due to vowel harmony.

6 Conclusion

In the nineteenth and beginning of the twentieth century, two sets of pronominal suffixes after CC existed side by side in Cairene Arabic: one in which the vowel varies (*a* or *u*, depending on the vowel of the following suffix), and another containing the epenthetic vowel *i*. It is hard to establish which set of suffixes is the oldest one, due to the scarcity of historical colloquial texts that display the vowels. It is possible that the system with the epenthetic vowel *i* is the oldest one, and vowel harmony thereafter resulted in the other set of suffixes. There is, however, no data to back this hypothesis. Texts from the fifteenth and eighteenth centuries display the suffixes *-aha*, *-ukum* and *-uhum*, but do not show suffixes with *i* that cannot be explained as the genitive case ending, except for the stigmatised suffix of the third person feminine singular with *imāla*: *-ihī*.

The suffixes with *i* are nowadays found in parts of the Delta. In the nineteenth century, there was a wave of mass migration from the countryside to Cairo. The suffixes with *i* could therefore be heard in the streets of Cairo, and were subsequently recorded in grammars and textbooks. It is possible that the original inhabitants of Cairo associated these with rural speech. The disappearance of the suffixes with *i* can therefore be explained by the wish of speakers of Cairene Arabic to dissociate themselves from these stigmatised forms.

As for the two theories about the origin of the extra vowels after CC, and whether these are remnants of case endings or epenthetic vowels whose quality changed due to vowel harmony, the current study has shown that vowel harmony does indeed play a role in the formation of the suffixes. This can be seen in the pausal form of the suffix *-aha*, which is *-ihe#* / *-ihī#* in some parts of the Delta. This goes back to a suffix

-*aha* that was pronounced with pausal imāla: -*ahe#* / -*ahi#*. The *e* or *i*-sound of the last syllable then influenced the vowel in the syllable to its left, turning it into *i*. This shows that vowel harmony can spread to the left, which makes it likely that the suffixes -*iha*, -*ikum* and -*ihum*, containing an epenthetic vowel *i*, were influenced in a similar style and became -*aha*, -*ukum* and -*uhum*. Additional proof of this is *budduhum* (< *bidduhum*), recorded by Spitta (1880), and *buddukum* (< *biddukum*) (Seidel 1896), which show that the vowel *u* of the suffix could even influence the vowel of the preceding noun.

ACKNOWLEDGEMENTS

An earlier version of this paper was presented at the conference ‘Semitic Dialectology: Community, Continuum and Change,’ Ruprecht-Karls-Universität Heidelberg, 2 July 2019. I thank the audience of the conference for their insightful comments. This paper is part of a research project titled ‘The making of a capital dialect: Language change in 19th-century Cairo,’ funded with a VENI grant from the Netherlands Organisation for Scientific Research (NWO), project no. 275-70-034.

ORCID®

Liesbeth Zack  <https://orcid.org/0000-0003-1075-5768>

References

Primary sources

- BAŠBUĠĀWĪ, ʿALĪ IBN SŪDŪN. 1998. *Nuzhat al-nufūs wa muḍḥik al-ʿabūs*. Edition in: Vrolijk, Arnoud. 1998. *Bringing a laugh to a scowling face: a study and critical edition of the “Nuzhat al-nufūs wa muḍḥik al-ʿabūs” by ʿAlī Ibn Sūdūn al-Bašbuġāwī (Cairo 810/1407 – Damascus 868/1464)*. Leiden: Research School CNWS, Leiden University.
- CADRI, MOHAMED. 1868. *Nouveau guide de conversation française et arabe, ouvrage élémentaire et classique, contenant une nouvelle method très-facile pour apprendre aux Indigènes à parler le français et aux Européens à parler l’arabe en peu de temps = al-Durr al-nafīs fī luġatay al-ʿarab wa-l-faransīs*. Cairo: Imprimerie de P. Cumbo.
- CHAGAVAT, MICHEL SALEH (نخلة صالح شغوات). s.d. *Vocabulaire français-italien-arabe, contenant les mots en français, en italien et en arabe, la prononciation figurée et les phrases les plus usitées de la conversation = Muṣṣḡam luġa faransāwī wa-ʿiṭālī wa-ʿarabī*. Cairo: Emin Hindīé.

- DIRR, ADOLF. [1893]. *Grammatik der vulgär arabischen Sprache für den Selbstunterricht: theoretisch-praktische Sprachlehre für Deutsche auf grammatischer und phonetischer Grundlage*. Wien, Pest and Leipzig: Hartleben.
- DULAC, H. 1889. 'Quatre contes arabes en dialecte cairote.' In M. Maspero (ed.), *Mémoires publiées par les membres de la mission archéologique au Caire. Tome 1*. Paris: Ernest Leroux, 55–112.
- ELDER, E. E. 1927. *Egyptian Colloquial Reader*. London: Oxford University Press.
- [FISKE, DANIEL WILLARD]. 1893/1311. *kilmât šaraby merattibe šala ḥasab tartyb alifbé maš agrūmyje muḥtašara*. Florence: maṭbaʿet landy.
- . 1904/1322. *agrūmyja mašry maktūba bil lisān el mašry we mašha amsila*. Florence: maṭbaʿet landy.
- GAIRDNER, W. H. R. 1917. *Egyptian Colloquial Arabic: A Conversation Grammar and Reader*. Cambridge: W. Heffer & Sons.
- GOLDZIHNER, IGNAZ. 1879. 'Jugend und Strassenpoesie in Kairo.' *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 33: 608–630.
- HAGGENMACHER, KARL. 1892. *Grammatik des ägyptisch-arabischen Vulgärdialektes*. Cairo: Boehme & Anderer.
- HASSAN, ANTON. 1869. *Kurzgefasste Grammatik der vulgär-arabischen Sprache mit besonderer Rücksicht auf den egyptischen Dialekt = Aḥsan al-nuxab fi mašrifat lisān al-šarab*. Vienna: K. K. Hof- und Staatsdruckerei.
- HUG, GEORGES, AND GUIRGUIS HABACHI. 1928. *Pour apprendre l'arabe: manuel de dialecte vulgaire d'Égypte: grammaire, vocabulaire, dialogues*. Paris: Geuthner.
- KAHLE, PAUL. 1930. *Der Leuchtturm von Alexandria. Ein arabisches Schattenspiel aus dem mittelalterlichen Ägypten*. Stuttgart: Kohlhammer.
- KLIPPEL, ERNST. 1913. *Betitkállim bil-šarabi? (Sprechen Sie Arabisch?). Handbuch der ägyptisch-arabischen Umgangssprache*. Dresden: Koch.
- MARRIOTT, R. A. [1930]. *Egyptian (Arabic) Self-Taught by the Natural Method with Phonetic Pronunciation: Thimm's system*. 6th ed. [rev.], with suppl. vocabularies by Negib Hindié. Reprod. of the 5th ed. (1921). London: Marlborough.
- MOSCONAS, DEMETRIUS. 1884. *English & Arabic Dictionary Accompanied by Dialogues & Useful Notes for the Use of the British Army of Occupation*. Cairo: s.n.
- NAKHLAH, YACOB. 1874. *New Manual of English and Arabic Conversation = al-tuḥfa al-murḍiya fi tašallum al-luġa al-ingiliziyya*. Cairo: The Khédive's Press.
- NALLINO, CARLO ALFONSO. 1900. *L'Arabo parlato in Egitto: grammatica, dialoghi, e raccolta di circa 6000 vocabili*. Milano: Ulrici Hoepli.
- NOLDEN, E. 1844. *Vocabulaire français arabe, dialecte vulgaire de l'Égypte, avec la prononciation exprimée en caractères français, à l'usage des étrangers arrivant en Égypte, suivi d'un petit extrait de grammaire et d'un appendix contenant les poids et mesures, monnaies, course de change, un petit almanach musulman, etc. etc.* Alexandria: s.n.

- PROBST, FRIEDRICH. 1898. *Arabischer Sprachführer in ägyptischem Dialect: ein Leitfaden der arabischen Conversation für Reisende, Kaufleute u.s.w. in Afrika*. New ed. Giessen: J. Ricker'sche Verlags-Buchhandlung (1st ed. 1892).
- PRÜFER, CURT. 1906. *Ein ägyptisches Schattenspiel*. Erlangen: Univ. Buchdruckerei.
- ROBERTSON, F. E., AND LÛTFI YÛSSEF AYRÛT. 1898. *An Arabic Vocabulary for Egypt, the Arabic by Lûtfi Yûssef Ayrût*. London: Crosby Lockwood and Son.
- SACROUG, GABRIEL. 1874. *The Egyptian Travelling Interpreter*. Cairo: s.n.
- SALEM, MAHMOUD MOHAMED. 1940. *L'arabe parlé par conversations, Spoken Arabic by Conversations: Mohadaçat Français – Anglais – Arabe*. 2nd ed. Cairo: Imprimerie Kawa.
- SEIDEL, AUGUST. 1896. *Praktisches Handbuch der arabischen Umgangssprache ägyptischen Dialekts, mit zahlreichen Übungsstücken und einem ausführlichen ägypto-arabisch-deutschen Wörterbuch*. Berlin: S. Calvary & Co.
- SPIRO, SOCRATES. 1912. *A New Practical Grammar of the Modern Arabic of Egypt*. London: Luzac.
- SPITTA, WILHELM. 1880. *Grammatik des arabischen Vulgärdialektes von Aegypten*. Leipzig: Hinrichs'sche Buchhandlung.
- SPITTA, GUILLAUME. 1883. *Contes arabes modernes: recueillis et traduits*. Leiden: Brill, Paris: Maisonneuve.
- THIMM, CARL ALBERT. 1897. *Egyptian Self-Taught (Arabic). With the English Phonetic Transliteration of Every Word. Prepared for Practical Use by Travellers, etc*. London: Marlborough.
- . 1898. *Egyptian Self-Taught (Arabic). Containing Vocabularies, Elementary Grammar. Idiomatic Phrases and Dialogues, Travel Talk*. 2nd ed. London: Marlborough.
- VAUJANY, H DE. 1884. *Vocabulaire français-arabe (dialecte vulgaire de l'Égypte) avec la prononciation figurée contenant un petit abrégé de grammaire arabe, des exercices de conversation, les poids et mesures, un tableau des monnaies, les principales fêtes musulmanes, etc. Edition revue et corrigée par Moustapha-Bey Radouan = Qāmūs faransāwī wa-šarabī*. Cairo: Imprimerie Nationale de Boulaq.
- VAN BERCHEM, MAX. 1889. 'Conte arabe en dialecte égyptien.' *Journal asiatique* 8^e série, tome XIV: 84–110.
- VOLLERS, KARL. 1890. *Lehrbuch der Aegypto-arabischen Umgangssprache*. Cairo: s.n.
- VOLLERS, KARL, AND FRANCIS CRAWFORD BURKITT. 1895. *The Modern Egyptian Dialect of Arabic: A Grammar with Exercises, Reading Lessons and Glossaries, from the German of Dr K. Vollers with Numerous Additions by the Author. Translated by F. C. Burkitt*. Cambridge: University Press.
- WIED, CARL. 1887. *Betitkállim bi?l-šarabī? (Sprechen Sie Arabisch?)*. *Arabischer Sprachführer, enthaltend eine kurze Grammatik, Gespräche und Lesestücke*. Leipzig: Koch.
- WILLMORE, J. S. 1901. *The Spoken Arabic of Egypt: Grammar, Exercises, Vocabularies*. London: David Nutt.

Secondary sources

- ABU-LUGHOD, JANET. 1971. *Cairo, 1001 Years of the City Victorious*. Princeton, NJ: Princeton University Press.
- BEHNSTEDT, PETER, AND MANFRED WOJDICH. 1985a. *Die ägyptisch-arabischen Dialekte. Band 1: Einleitung und Anmerkungen zu den Karten*. Wiesbaden: Reichert.
- . 1985b. *Die ägyptisch-arabischen Dialekte. Band 2: Dialektatlas von Ägypten*. Wiesbaden: Reichert.
- BIRKELAND, HARRIS. 1952. *Growth and Structure of the Egyptian Arabic Dialect*. Oslo: i komm. Hos Jacob Dybwad.
- BLANC, HAIM. 1973–1974. ‘La perte d’une forme pausale dans le parler arabe du Caire.’ *Mélanges de l’Université Saint-Joseph* 48: 375–390.
- BROCKELMANN, CARL. 1908. *Grundriss der vergleichenden Grammatik der semitischen Sprachen. Band I: Laut- und Formenlehre*. Berlin: Reuther & Reichard.
- CASPARI, CARL PAUL, AND WILLIAM WRIGHT. 1862. *A Grammar of the Arabic Language, Translated from the German of Caspari, and Edited, with Numerous Additions and Corrections, by William Wright*. London: Williams and Norgate.
- DAVIES, HUMPHREY, AND MADIHA DOSS. 2013. *al-ʿĀmmiyya al-miṣriyya al-maktūba: muxtārāt min 1401 ʾilā 2009. ǧamʿ wa-taqdīm Madīḥa Dūs wa-Humfrī Dīwīz*. Al-Qāhira: al-Hayʾa al-Miṣriyya al-ʿĀmma li-l-Kitāb.
- DIEM, WERNER. 1991. ‘Vom Altarabischen zum Neuarabischen. Ein neuer Ansatz.’ In Alan Kaye (ed.), *Semitic Studies in Honor of Wolf Leslau on the Occasion of His Eighty-Fifth Birthday*. Wiesbaden: Harrassowitz, 297–308.
- KAHLE, PAUL. 1930. *Der Leuchtturm von Alexandria. Ein arabisches Schattenspiel aus dem mittelalterlichen Ägypten*. Stuttgart: W. Kohlhammer.
- OWENS, JONATHAN. 2006. *A Linguistic History of Arabic*. Oxford etc.: Oxford University Press.
- TRUDGILL, PETER. 1986. *Dialects in Contact*. Oxford: Blackwell.
- VROLIJK, ARNOUD. 1998. *Bringing a Laugh to a Scowling Face: A Study and Critical Edition of the “Nuzhat al-nufūs wa muḍḥik al-ṣabūs” by ʿAlī Ibn Sūdūn al-Bašbuǧāwī (Cairo 810/1407 – Damascus 868/1464)*. Leiden: Research School CNWS, Leiden University.
- WATSON, JANET. 2002. *The Phonology and Morphology of Arabic*. Oxford: Oxford University Press.
- WOJDICH, MANFRED. 1994. ‘Cairo Arabic and the Egyptian Dialects.’ In Dominique Caubet and Martine Vanhove (eds.), *Actes des premières journées internationales de dialectologie arabe de Paris*. Paris: Institut National des Langues et Cultures Orientales, 493–507.
- . 2006. *Das Kairensch-Arabische. Eine Grammatik*. Wiesbaden: Harrassowitz.
- ZACK, LIESBETH. 2012. ‘*Lifb al-manār*, an Egyptian Shadow Play. Some Comments on Orthography, Morphology and Syntax.’ In Johannes Den Heijer, Paolo La Spisa and

Laurence Tuerlinckx (eds.), *Autour de la langue arabe. Études présentées à Jacques Grand'Henry à l'occasion de son 70^e anniversaire*. Louvain-la-Neuve: Institut Orientaliste de Louvain, 333–351.

- . 2016. 'Arabic Language Guides Written for the British Army During the British Occupation of Egypt, 1882–1922.' In Daniel Schmidt-Brücken, Susanne Schuster and Marina Wienberg (eds.), *Aspects of (Post)Colonial Linguistics: Current Perspectives and New Approaches*. 'Koloniale und Postkoloniale Linguistik' 9. Berlin: De Gruyter, 1–26.
- . 2017. 'Vulgar and Literary Arabic in Nineteenth-Century Egypt: A Study of Three Textbooks.' In Nora S. Eggen and Rana Issa (eds.), *Philologists in the World: A Festschrift in Honour of Gunvor Mejdell*. Oslo: Novus Press, 233–260.
- . 2019. 'Historical Arabic Dialectology: Interpreting the Sources.' In Werner Arnold and Maciej Klimiuk (eds.), *Arabic Dialectology: Methodology and Field Research*. Wiesbaden: Harrassowitz, 207–238.