

# Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

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To Mak,  
for his perseverance, patience and encouragement  
and  
in loving memory of my granny, Honoria Edmondson (née Fitzgerald),  
25th August 1919 – 21st November 2017.

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## 1. Introduction

In this section I introduce the present study, giving a brief overview of the concept of variation as it is understood in contemporary Middle Arabic and Judaeo-Arabic scholarship (§1.1). I then introduce the methodology employed throughout the thesis (§1.2), and the corpora on which the study is based (§1.3), before turning my attention to the aims and limitations of the research project (§1.4), and the structure of the ensuing chapters (§1.5).

### 1.1. Diglossia and Variation in Arabic

Before embarking on a detailed analysis of the findings of this research, it is first necessary to explain the term ‘variation’ in the context of Arabic in general and Judaeo-Arabic (henceforth JA) in particular.

Avid scholarly interest in variation as it occurs in Arabic may be traced to a series of publications<sup>1</sup> in the 1960s, among which is found Ferguson’s (1959) article entitled ‘Diglossia’. In this paper, Ferguson applies the term diglossia<sup>2</sup> to four case studies<sup>3</sup> in which he identifies a dichotomous linguistic situation; the ‘high’ written and spoken standardised form of a language co-existing with the ‘low’ dialectal spoken varieties (1959: 327).<sup>4</sup> With regard to Arabic, Ferguson identifies the ‘high’ variety – *‘al-fuṣḥā* (Classical Arabic, or present-day Modern Standard Arabic) – as the preserve of formal spoken and written manifestations of the language, acquired in educational settings,<sup>5</sup> while the ‘low’ variety refers to the regional dialects acquired by children from interaction with adults and other children (ibid.: 331).

A common criticism among Arabicists of Ferguson’s highly influential paper is that while he alludes to ‘uncodified, unstable, intermediate forms of the language’ (1959: 332), this reference is ill-defined and under-developed (cf. e.g., Hary 1992: 4–5). Furthermore, Ferguson refers only to a mixed *spoken*

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<sup>1</sup> Another publication which is credited with generating great interest in variation in spoken Arabic is Blanc’s (1960) study of dialectal variation between two native speakers of Arabic (Holes 1993: 13).

<sup>2</sup> The term ‘diglossia’ was first employed by Krumbacher (1903) and Marçais (1930) (Hary 1992: 3). By his own admission, Ferguson follows Marçais in defining ‘diglossia’ as a ‘kind of standardization where two varieties of a language exist side by side throughout the community, with each having a definite role to play.’ (1959: 325).

<sup>3</sup> Besides Arabic, the other languages discussed in this paper are Greek, Swiss German and Haitian Creole.

<sup>4</sup> Hary proposes new nomenclature, such as ‘multiglossia’ (1992) and ‘continuglossia’ (2009) in order to better encapsulate the fluid and multifarious nature of this linguistic situation, where the continuum between the two extremes becomes crucial in the comprehension and description of the concept.

<sup>5</sup> Ferguson refers to this ‘high’ variety as ‘superposed’: ‘[it] is not the primary, ‘native’ variety for the speakers in question, but may be learned in addition to this.’ (Ferguson 1959: 327).

form of Arabic; no allusion is made to an intermediate *written* variety.

Much of the subsequent debate concerns the degrees of variation found in contemporary spoken Arabic that exists between the ‘high’ and ‘low’ varieties defined by Ferguson (cf. e.g., Blanc 1960, 1964; Kaye 1972b; Badawi 1973; El-Hassan 1977; cf. Hary 1992: 6–15 for a comprehensive literature review; Al-Wer 2009, IV: 628). Within Arabic linguistics, variation has come to be examined from (i) internal and (ii) external perspectives. The former refers to the inherent linguistic constraints of the language, while the latter is concerned with social, geographical and stylistic factors that influence a speaker’s linguistic choices (Al-Wer 2009, IV: 627–8). Attempts have been made to identify discrete categories of variation existing between the two extremes, and to define the internal and external constraints that bind each category (cf. e.g., Badawi 1973; Meiseles 1980). For the most part, these studies (cf. Blanc 1960, 1964; Holes 1993, 1995; Elgibali 1993; Parkinson 1993; Behnstedt and Woidich 1985, 2005; Boussofara-Omar 2008; Al-Wer 2009) focus on spoken varieties of modern Arabic. Indeed, the term ‘diglossia’ was initially applied only to present-day Arabic. However, recent studies suggest that a diglossic situation has always existed in Arabic in much the same way as it does today (Lentin 2008, III: 216; Khan 2011: 817; cf. Hary 1992: 33-47).<sup>6</sup>

With regard to historical written data many of the external variables that can be assessed and evaluated in modern speech with certainty – such as age, gender, education, ethnicity, and social class – are lost to us. Furthermore, it is not always possible to ascertain the date of composition or geographical origin of a given text. Therefore, studies of historical written intermediate varieties of Arabic tend to focus on internal factors; the use of CA and colloquial Arabic features alongside ‘hybrid’ elements in a given text (Lentin 2008, III: 216; Khan 2011: 817).

In Blau’s (1981) seminal study of intermediate written forms of literary Arabic from the medieval period, he employs the term ‘Middle Arabic’ (henceforth MA)<sup>7</sup> to describe these varieties. However, confusion over the exact meaning and application of this term was widespread (cf. Hary 1989, 1992: 51–4; Lentin 2008, III: 215). It was unclear as to whether the term had chronological connotations, and whether or not it referred to both written and spoken intermediate forms of Arabic. In recent

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<sup>6</sup> In projecting the current diglossic situation onto the Arabic language of the past, the problematic chronological categorisation of Arabic into three vague periods – Old, Middle and New/Neo-Arabic – is avoided (Owens 2006: 74). Although Owens contends that this approach is not without its limitations (ibid.: 75).

<sup>7</sup> The term ‘Middle Arabic’ was first employed by Fleischer (1854) to refer to ‘the literary language which emerged in the early Islamic era in the lands outside the Arabian-peninsula (Owens 2006: 41). It therefore closely corresponds to Fischer’s chronological category of ‘post-classical Arabic’ (ibid.; Fischer 2002: 1-2), but was not employed originally as it is by Blau and in present-day scholarship to refer to texts which contain amalgamations of Classical Arabic, dialectal and ‘hybrid’ features.

years, scholars have made significant progress in clarifying the use of this term (cf. Lentin 1997, 2008, 2012; Lentin and Grand'Henry 2008; Khan 2011). It is no longer regarded as referring to a specific period of time (Lentin 2008, III: 216; Khan 2011: 817–8; den Heijer 2012b: 54) and is now generally used in relation only to written texts, both historical and modern (den Heijer 2012b: 55; Mejdell 2012: 237, 244–5).<sup>8</sup>

While studies of MA and JA tend to focus on internal linguistic features (cf. Blau 1980, 1981, 2002; Khan 1991, 1992, 2006, 2010, 2013; Hary 1992, 2009; Palva 2007–2008; Rosenbaum 2008; Wagner 2010; Hasson-Kenat 2016; Ørum 2017) of the written language, one external variable is consistently applied: religion. MA is categorised in contemporary scholarship into confessional varieties: Muslim MA, Christian MA and the Jewish variety, JA, forming their own independent disciplines.<sup>9</sup> This latter variety forms the central focus of this thesis.

Written JA<sup>10</sup> is Arabic composed in Hebrew characters.<sup>11</sup> It is often divided into three chronological periods; early (ninth–tenth centuries), classical (tenth–fifteenth centuries) and late (fifteenth–nineteenth centuries) (Khan 2007, II: 526; 2011: 825).<sup>12</sup> This categorisation is based predominantly on

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<sup>8</sup> Contemporary spoken varieties that exhibit similar ‘intermediate’ features are now often designated ‘Mixed Arabic’ (Lentin and Grand'Henry 2008; Khan 2011: 830; den Heijer 2012b: 55; Mejdell 2012: 237, 244–5). However, these terms and their definitions have not been universally accepted (den Heijer 2012c: 6) and credible resistance to them remains (cf. Hary 1989: 20; 1992: 52).

<sup>9</sup> This approach has been questioned in recent years with scholars calling for studies that examine these three confessional varieties in tandem, in order to better assess the viability of these confessional demarcations (cf. e.g., den Heijer 2012b: 66). A small scale, but meticulous study of confessional varieties of MA may be found in Dikken 2012: 51–81, in which he examines medieval versions of Saadya's Pentateuch written in (Yemenite) JA, (Coptic) Christian MA, Samaritan MA and Muslim MA. However, there has been a parallel growth in the number of scholars examining ‘the impact of religion on language’ (Hary and Wein 2013: 85). Hary proposes (1992) the term ‘religiolect’ to best describe denominationally-influenced forms of language varieties. Cf. Germanos and Miller 2014 for an exploration of the religious element in contemporary spoken Arabic language variation as represented in current scholarship; Versteegh (2017) also deals with the question of religion as a linguistic variable in Middle Christian Arabic.

<sup>10</sup> The distinction between written and spoken forms of JA is drawn with great clarity by both Khan (2007, II: 531–4) and Wagner (2010: 1–3) in their respective overviews of the matter. This thesis will concentrate predominantly on written forms of JA, with reference to dialectal features as they occur in the texts under consideration here. For detailed descriptions of Egyptian spoken JA cf. Blanc (1974); Rosenbaum (2002, 2003, 2006); and Hary (2017).

<sup>11</sup> Blau's somewhat restrictive definition of JA as a language composed exclusively by Jews, for Jews, and with strong Jewish connotations and influences (1981: 46) is also upheld by Hary (1992: 74; 2009: 29, 39). Such a definition precludes, for example, the inclusion of medical texts transcribed into Hebrew characters from JA (Blau 1981: 46; Hary 2009: 39). However, here we follow the more flexible definition provided by Khan of the written variety as ‘any form of Arabic written in Hebrew script’ (2007, II: 526), and adopted by Hary in his more recent works (Hary and Wein 2013: 90).

<sup>12</sup> Hary categorises JA into five chronological periods: (i) pre-Islamic JA; (ii) early JA; (iii) classical JA; (iv) later JA and (v) modern JA (Hary 1992: 75–82; 2009: 34–7). However, as Khan (2007, II: 526) and Wagner (2010: 6) remark, there is no evidence of a distinctive Jewish written form of Arabic prior to the ninth century; and Hary's periodisation obfuscates the important distinction between spoken and written forms of JA (ibid.).

orthographic developments that occur throughout the documented history of written JA.

Early JA orthography is generally termed ‘phonetic’ (cf. Hary 1992: 82–3; 1996b: 731; 1997a: 37–9). This refers to the tendency exhibited in pre-tenth-century documentary texts<sup>13</sup> to denote Arabic phonemes with their phonetic, as opposed to graphemic, cognates using the Hebrew alphabet (Blau and Hopkins 1984: 9–10).<sup>14</sup> One of the most commonly cited features of early JA orthography is the representation of Arabic *ḡād* with the Hebrew grapheme *dalet*: the voiced retroflex stop /dʒ/ pronunciation of *ḡād* being most closely related to the voiced alveolar stop /d/ of the Hebrew *dalet* (Blau and Hopkins 1984: 19–20; Hary 1996b: 731).

Classical JA orthography supplanted early JA spelling during the tenth century CE.<sup>15</sup> The adjustment

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For these reasons, I have chosen to follow Khan’s periodisation.

<sup>13</sup> The early JA corpus on which these comments are based comprise a small number of documentary papyri dated to c. ninth century, which are thought to have originated in Egypt. One of the texts (numbered XIII in Blau and Hopkins’ 1987 edition) was discovered at Ushmūn (text I was written by the same hand) and a couple of the texts (numbered VII, II in Blau and Hopkins’ 1987 edition) explicitly refer to Ushmūn. Thus, Blau and Hopkins speculate that all of the letters may originate from the same geographical location (1987: 91–2). Blau and Hopkins anticipate and dismiss the suggestion that these texts may, therefore, represent the specific orthographic practices of a specific community; they may not be representative of JA spelling conventions throughout Egypt (1987: 92). Indeed, Blau and Hopkins’ (2000) more recent work seems to suggest that this phonetic form of spelling was more widely (although not consistently) employed than may be inferred from this particular documentary corpus (Ackerman-Lieberman 2014: 138–9). Ackerman-Lieberman, however, attributes more significance to the discovery of these texts in a geographical location that, by virtue of being neither Cairo nor Alexandria, would have been considered ‘rural’ at the time (2014: 159–60). He suggests that the use of phonetic spelling was influenced neither by a lack of education nor insufficient knowledge of CA, but by geographical location: the urban communities favoured classical JA orthography, while the rural communities tended towards phonetic spelling (2014: 160; cf. Ackerman-Lieberman 2014: 159–63 for an in-depth discussion of this hypothesis).

<sup>14</sup> Blau and Hopkins originally termed the orthography of pre-tenth-century CE documentary texts ‘early vulgar JA spelling (EVJAS)’ (1984: 12) or ‘early phonetic JA spelling’. The term ‘Early JA (EJA)’ orthography used here has, however, prevailed.

<sup>15</sup> The widespread shift from early JA to classical JA spelling has consistently been attributed to Saadia Gaon’s translation of the Pentateuch into JA in which he favoured the graphical, rather than phonetic, representation of Arabic graphemes. Blau and Hopkins propose two explanations for why classical JA orthography superseded phonetic spelling: either (i) a degree of education in CA had been acquired by all communities of Arabic-speaking Jews, which led to the development and universal adoption of classical JA spelling; or (ii) a single text of profound religious and cultural significance composed in classical JA spelling gained widespread circulation, changing the course of JA orthographical conventions for centuries to come (Blau and Hopkins 1984: 13). Dismissing the former explanation, Blau and Hopkins turn their attention to the latter, designating Saadia Gaon’s translation of the Pentateuch the influential book that changed the course of JA orthography. This interpretation of the cause of this shift has gone unchallenged until Ackerman-Lieberman’s recent work. Through a systematic examination of the historical evidence concerning the level of familiarity with CA by Arabic-speaking Jews throughout the Arab world between the seventh and tenth centuries CE (cf. 2014: 145–57), he concludes that Blau and Hopkins’ division between ‘educated’ (users of classical JA spelling) and ‘uneducated’ (users of phonetic JA spelling) may be more aptly designated as an urban-rural dichotomy (2014: 157). Ackerman-Lieberman attributes the increased movement and interaction between urban and rural areas,

of the Hebrew script, which came to dominate JA between the tenth and fifteenth centuries is well documented as being founded on graphical principles. The representation of *ḏād* with *dalet*, so characteristic of early JA documentary texts, gives way to denotation with its graphic counterpart *ṣadeh* and a supralinear dot (ֿ). This period is often considered the apex of written JA. The number and types of texts composed during this period which survive to this day far outweigh those found in either the preceding or following eras.

The orthography of Late JA<sup>16</sup> – with which we are most concerned here – is often termed ‘Hebraized’ as a result of the perceived increase in Hebrew and Aramaic influences (Hary 1996c: 730; 2009: 36; Wagner 2010: 234). From the fifteenth century onwards, JA orthography is notable for its admixture of these Hebrew and Aramaic features, phonetic renderings of Arabic phonemes, and continued use of classical JA spelling practices. It is often remarked that during this period, *ḏād* is occasionally denoted with *dalet* as ‘the closest Hebrew realization of the respective Arabic phoneme’ (Hary 1992: 93) (cf. §2.1.3 for a discussion of this matter). There is a notable decrease in the extant number of texts and types of genres written during this period.

Much of the scholarship concerned with JA and MA focuses on the early (cf. e.g., Blau and Hopkins 1984, 1987; Blau 2002) and classical (Blau 1980, 1981; Gil 1997; Halkin 2007; Schippers 2008) periods of JA, something that Khan (1991, 1992, 2006, 2013), Hary (1992, 2009), and later Wagner (2010, 2014), have rectified in their respective examinations of late JA historical narratives, biblical translations (cf. Hary) and letters (cf. Khan; Wagner). Other recent contributions to late JA research are found in Palva (2007–2008a, 2008b), Hasson-Kenat (2016) and Ørum’s (2014, 2017) studies of JA folk tales.<sup>17</sup>

All previous studies focus on the interplay of CA, dialectal and ‘hybrid’ features as they occur within a given text, or a single genre, either synchronically or diachronically. As yet, no study has been conducted into whether there exists any stylistic consistency in the degrees of mixture of these three

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via developing trade routes in the early tenth century CE as the cause of the shift from early phonetic JA spelling to classical JA spelling, dismissing Blau and Hopkins’ suggestion that Saadya’s Pentateuch translation motivated the shift (cf. Ackerman-Lieberman 2014: 163–8 for a detailed discussion of the limitations of Blau and Hopkins’ suggestion).

<sup>16</sup> As Khan states the shift from classical to late written JA as described here coincided with a period of upheaval, during which the political make-up of the Near East changed. This was in part due to the expansion of the Ottoman empire, and – specifically in relation to the Jews of the Near East – the influx of Sephardi Jews to many regions of North Africa and the Levant (2007, II: 527). However, in other geographical regions this linguistic shift is thought to have occurred in the thirteenth/fourteenth century (i.e. in Iraq, (cf. Avishur (1986: 3) cited in Khan 2007, II: 527) or not at all (i.e. Yemen) (ibid.; Hary 1992: 77, n. 23).

<sup>17</sup> This study merely builds on these previous studies of late JA and owes a great debt to each and every one of them.

elements among genres of written JA. This thesis builds on the aforementioned studies in addressing this disciplinary desideratum.

## 1.2. Methodology

This study is limited to the examination of one literary<sup>18</sup> and one documentary genre<sup>19</sup> of written Egyptian JA from the Ottoman era. The methodology established by Blau (1981) and adhered to in all subsequent studies of JA centres on the identification of: (i) CA features, (ii) colloquial elements, and (iii) ‘hybrid’<sup>20</sup> features that conform neither to CA standards, nor present-day dialectal features. This approach is followed in the present study. For the most part, the study adopts a qualitative approach to the data collection and assessment. However, in specific instances such as the analysis of the diacritical dot (cf. §2.1.1), I have used quantitative data methods. The findings are not intended to be understood as indicative of the broader state of linguistic variation in JA beyond the corpora of texts and genres under consideration here. The corpora are examined for linguistic variation both synchronically and diachronically.

The two main complications I encountered in the course of this project were (i) the dating of folk tales, and (ii) ascertaining the geographical origin of an individual text. The dating of un-autographed literary manuscripts is notoriously difficult (cf. Wagner 2010: 25). Unless otherwise indicated, I have relied on other scholars’ datings of manuscripts which contain no explicit date. In terms of geographical location, all of the texts included here originate from the Cairo Genizah or Firkovitch collections, with the exception of Cairo JC 104 and BnF Hébreu 583.<sup>21</sup> However, while they are found in the Cairo Genizah collections, it does not necessarily follow that they were composed in Egypt, or more importantly by Cairene/Egyptian-Arabic-speakers.

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<sup>18</sup> Cachia (2008) employs the terms ‘elite’ and ‘folk’ in describing the two main literary traditions of the Islamic Arab world. We are concerned here with the latter. Folk literature has a strong oral history in the Islamic world, and this appears to have been adopted by the Jews of Arab lands, in both oral and written forms. The corpora assembled for this study contains secular and biblically-influenced folk tales side-by-side, and attests to the interaction of the Jewish community with the literature of their Muslim and Christian counterparts (e.g., the nineteenth-century versions of *qiṣṣat ’al-ḡumḡuma* ‘The Story of the Skull’).

<sup>19</sup> The term ‘genre’ is understood here in the following manner: ‘[t]he type of text that a piece of writing... belongs to from the point of view of its purpose, setting, and conventions of language use.’ (Aarts 2014). The study engages with the latter feature (i.e. ‘conventions of language use’) in great detail in order to ascertain whether we can indeed speak of distinct genre-related styles in written JA of the fifteenth–nineteenth centuries.

<sup>20</sup> These ‘hybrid’ features were originally designated ‘pseudo-corrections’ with subdivisions of ‘hyper-’ and ‘hypo-correct’ by Blau (1981: 27–9). These terms are avoided here due to their inherently pejorative connotation.

<sup>21</sup> The manuscript Cairo JC 104 is currently held in microfilm form in the National Library of Israel, Jerusalem. It forms part of a collection that was brought over to Israel from Cairo in the 1980s. The collection comprises approximately one hundred microfilms in Hebrew, Aramaic and JA. The majority of the JA texts are *šurūḥ*, although there are a small number of folk tales to be found among them (Hary 2010: 533).



The JA examples appear as they do in the original manuscripts, i.e. in Hebrew script. However, all CA, MA and Modern Cairene Arabic (henceforth MCA) examples are transcribed into Latin characters according to the orthographic (rather than phonetic) tradition (Brockelmann et al 1935: 9). Where JA examples are written in Latin letters, they are transliterated, as the exact vocalisation of the texts is often unknown.

### 1.3. Corpora

The manuscripts included in this study were chosen on the most pragmatic of bases: were transliterations or editions of the texts readily available? And was it possible to view in person or acquire a digital scan or microfilm version of the original manuscript? For five of the fifteen manuscripts transcriptions and translations into English or Hebrew were obtainable in print.<sup>22</sup> I produced all of the transcriptions and translations from the original manuscripts before checking each transcription against published versions, where these were available. The transcriptions and translations of the manuscripts are my own work, and therefore, any errors therein are entirely my responsibility.

The manuscripts are divided by genre and period into four corpora. There are two folk tale and two letter corpora. Two corpora contain folk tales and letters that can be approximately dated to the fifteenth/sixteenth century. The other two corpora comprise eighteenth/nineteenth-century folk tales and letters, respectively.

The motivation behind the temporal gap between the fifteenth/sixteenth-century and eighteenth/nineteenth-century corpora is twofold. Firstly, it permits the identification and assessment of any notable diachronic shifts. The second reason is more prosaic: there is very little material from the Cairo Genizah collections that can be confidently dated to the seventeenth century.

#### (i) Fifteenth/sixteenth-century folk tales

All three folk tales in this corpus are found in the first and second collections of the Firkovitch collection, National Library, St. Petersburg.<sup>23</sup> The first two folk tales in this corpus comprise different

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<sup>22</sup> Published transcriptions and translations are available for the following manuscripts: AIU VII.C.16 (Goitein 1972); BnF Hébreu 583 (Avishur 1992); Cairo JC 104 (Ørum 2014; 2017); Rylands L192 (Khan 2013); T-S 13J25.24 (Khan 2006).

<sup>23</sup> The Firkovitch collection comprises JA manuscripts collected from both the Karaite and Ben 'Ezra synagogues in Cairo (Palva 2008b: 373).

versions of the same tale: *ḥikāyat 'al-ḥarb bayn 'al-ṭuyūr wa- 'al-wuḥūš* 'The story of the war between the birds and the beasts' (Evr.Arab.II 852 and Evr.Arab.II 1528).<sup>24</sup> Palva follows Lebedev's identification of these two manuscripts, dating them approximately to the fourteenth/fifteenth and fifteenth/sixteenth centuries, respectively (2008b: 373–4). The earlier text, Evr.Arab.II 852,<sup>25</sup> comprises eighteen folios, the first eleven of which contain the tale examined here. Each folio has between 13 and 14 lines per recto and verso. With the exception of 9v. and 10r., which have suffered some damage, the manuscript is in excellent condition.

The second version of this tale is contained in the manuscript Evr.Arab.II 1528.<sup>26</sup> Unlike the previous manuscript, this tale is incomplete. It is missing both the beginning and end of the story. It comprises four folios, the first and last of which lack one leaf each. Each page contains between 39 and 40 lines. The final leaf (4v.) has suffered much damage.

The third and final folk tale examined in this corpus is found in the first section of the Firkovitch collection. Evr.Arab.I 2996<sup>27</sup> contains a tale from the famous *'Alf layla wa-layla* 'A Thousand and One Nights'. The manuscript is datable to the fourteenth/fifteenth century. It contains seventeen folios, of which the first (1v.) and last (17r.) are each missing one leaf. The story is, therefore, incomplete. However, the manuscript is in excellent condition on the whole. Each page contains 13 lines of writing.

It must be noted that the text in both Evr.Arab.II 852 and Evr.Arab.II 1528 is composed in rhymed prose, while the text in Evr.Arab.I 2996 is not.

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<sup>24</sup> I am indebted to Prof. Heikki Palva who kindly lent me his personal copy of a microfilm from the Firkovitch collection held at the National Library, St. Petersburg, which contained these two tales (cf. Palva 2008b for details of the folk tales). Without Prof. Palva's generosity, it would have been impossible to engage with folk tale material from this era with confidence or in detail. Folk tale manuscripts from the Firkovitch collection have now become available to view online at the National Library of Israel website. At the start of this research, however, none of these manuscripts was available online (cf. <http://web.nli.org.il/sites/nlis/he/manuscript>).

<sup>25</sup> This manuscript can be viewed online:

[http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX\\_MANUSCRIPTS000160113-1#FL48386320](http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX_MANUSCRIPTS000160113-1#FL48386320)

<sup>26</sup> Evr.Arab.II 1528 is available to view online:

[http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX\\_MANUSCRIPTS000160741-1#FL48720262](http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX_MANUSCRIPTS000160741-1#FL48720262)

<sup>27</sup> This folk tale can now be viewed online:

[http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX\\_MANUSCRIPTS000154854-1#FL43677529](http://web.nli.org.il/sites/NLI/Hebrew/digitallibrary/pages/viewer.aspx?&presentorid=MANUSCRIPTS&docid=PNX_MANUSCRIPTS000154854-1#FL43677529)

(ii) Late fifteenth-century letters<sup>28</sup>

The first three manuscripts in this corpus are all housed at the Bodleian Library, Oxford. MS Heb.c.72/13, MS Heb.c.72/39 and MS Heb.c.72/18 were found in Alexandria, where they had been addressed to Mošeh ben Yehudah. A number of the manuscripts in this collection (which contains 54 fragments in total) addressed to this rabbi in Alexandria are dated explicitly to the late fifteenth century.<sup>29</sup> It is, therefore, safe to assume that the majority of these letters were composed at a similar time. Two of these three letters (MS Heb.c.72/13 and MS Heb.c.72/39) appear to have been written in Egypt, or at least by Egyptian hands, while the third is addressed to the Rabbi from Syracuse, Sicily and contains morphological and lexical features that indicate it was written by a Magribian trader.

MS Heb.c.72/13 is written on a single sheet of paper and contains 23 lines on the recto and a single line (an address) on the verso. It is in reasonably sound condition, with five lacunae, only one of which negatively impacts the reading of the text on the recto, and one on the verso.

MS Heb.c.72/39 is longer than the previous letter and was probably more extensive than it appears in its extant form. The top of recto (and bottom of verso) has been torn roughly across the top edge of the paper, while the bottom of recto shows a neat tear, on which a line of writing is half-concealed. It is possible that there was originally another page attached to the bottom of it. In its current form, the recto contains 23 lines, with an additional two lines written in the margin. The verso contains 21 lines of horizontal writing.

The final letter from the Bodleian collection is MS Heb.c.72/18. This letter is well-preserved, with only a few small lacunae that have no impact on the readability of the text. Recto comprises 20 lines of writing. The verso contains an address written across four lines. The writing on the verso is extremely faint, but just about legible.

The final letter from this corpus is from the Cambridge University Library's Cairo Genizah collections. T-S 13J26.7 is addressed to šayḥ 'Abd 'al-Laṭīf and has been identified by the Genizah Research Unit as a late fifteenth-century text. The letter is legible, except for five lines of text that are partially obscured by a tear which runs from the top left-hand corner diagonally towards the left margin. The recto contains 28 lines of horizontal writing, while the verso – in its extant form – is

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<sup>28</sup> All of the letters mentioned in this section may be viewed online at the Friedberg Genizah Project website: <https://fgp.genizah.org>.

<sup>29</sup> Dr. Dotan Arad and Dr. Esther-Miriam Wagner are currently preparing a critical edition of the manuscripts addressed to Mošeh ben Yehudah, entitled *Wisdom and greatness in one place: the 15th-c. Alexandrian trader Moses Ben Judah and his circle* (forthcoming).

blank.

(iii) Eighteenth/nineteenth-century folk tales

This corpus contains five texts. A transcription and English translation of the first of these texts (found in the manuscript AIU VII.C.16) was published by Goitein (1972), under the title, ‘Townsmen and Fellah: A Geniza text from the seventeenth century’. When examined against the original manuscript, however, it is apparent that there are number of transcription errors contained within this oft-cited work. I mention these errors only in so far as they are significant to the dating of the text. A number of features such as the marking of *peh* with a supra-linear dot, the consistent separation of the definite article from the substantive it precedes, and frequent *plene* spelling are obscured in Goitein’s transcription. The combination of these features with the handwriting may imply a later date of composition than that suggested by Goitein (1972: 257).<sup>30</sup> I refer to this manuscript throughout the thesis as a seventeenth/eighteenth-century (?) text. AIU VII.C.16 comprises one extant leaf. The recto contains 22 lines of text, while the verso has 24 lines. Despite its incomplete state, the manuscript is in excellent condition.

In this corpus are two versions of the same tale: both T-S Ar. 46.10<sup>31</sup> and BnF Hébreu 583,<sup>32</sup> contain a text, which tells the story of an episode in the life of Abraham ‘ibn ‘Ezra (c.1089–1167), the renowned Jewish Biblical scholar and polymath. The former manuscript from the Cambridge University Library is a fragment of a longer text and has suffered extensive damage. The manuscript (recto) is torn jaggedly along the top right-hand and bottom left-hand corner. However, the writing that remains is legible. It is datable to the late eighteenth/early nineteenth century. The tale which concerns us here begins on line 27 of recto, continuing onto verso (which has approximately 37 lines of writing). The latter manuscript BnF Hébreu 583<sup>33</sup> (dated to 1839) in contrast, is well-preserved. It contains, amongst other material, three Egyptian Judaeo-Arabic tales,<sup>34</sup> the third of which is discussed here. In this tale, Abraham ‘ibn ‘Ezra, brought from Cairo by two students at the urgent behest of a Rabbi, saves the life of the Rabbi’s son and secures the freedom of the Jewish community. The story

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<sup>30</sup> Goitein assigns the dating of this manuscript to the seventeenth century to Prof. Meir Benayahu (1972: 257). In querying this dating, I sought the advice of Dr. Esther-Miriam Wagner, who concurred that a later origin (perhaps eighteenth century) is probable. I am grateful to Dr. Wagner for her input in this matter.

<sup>31</sup> T-S Ar. 46.10 is available to view on the Friedberg Genizah Project website: <https://fgp.genizah.org>.

<sup>32</sup> This tale was first published by Avishur (1992) with a transcription and Hebrew translation. A revised transcription, transcribing and English translation of the tale may be found in Connolly (2018).

<sup>33</sup> This manuscript was kindly made available to me by the Département de la reproduction at the Bibliothèque nationale de France, Paris. As of 2016, the manuscript is available to view online at <http://archivesetmanuscrits.bnf.fr/ark:/12148/cc8500n>

<sup>34</sup> Versions of these three tales may be found in BnF Hébreu 583, ff. 135 r.–141 r. The first tale is found in ff. 135 r. 137 v.; ff. 137 v.–139 v. comprise the second tale; and ff. 139 v. 19–141 r. 20.

is found on ff. 139 v. 19–141 r. 20.

The final two manuscripts in this corpus contain two versions of the well-known folk tale *Qiṣṣat 'al-ḡumḡuma* 'The Story of the Skull'. The first manuscript (T-S Ar. 37.39) may be dated approximately to the late eighteenth century/early nineteenth century. The extant manuscript is lacking the beginning and end of the story. It comprises one single leaf and one bifolium, on which the recto and verso each contain between 20 and 25 lines of writing. With the exception of some small lacunae on 3v., the manuscript is in good condition. The second manuscript (Cairo JC 104) is dated to 1887. It is housed in the Cairo Collection at the National Library of Israel, Jerusalem. In contrast to its earlier variant, it is complete. It comprises 16 folios, which contain 13–15 lines on the recto and verso (ff. 2v.–15v.) and nine lines per recto and verso (ff. 16r.–16v.). This folk tale was examined by Ørum in his Master's thesis (2014). Ørum has since produced a monograph (2017), containing a full transcription and English translation of this text as found in this particular manuscript (Cairo JC 104).

#### (iv) Eighteenth/nineteenth-century letters

The first letter I examined in this corpus was Rylands L192 held in the Rylands Genizah collection at the John Rylands University Library, Manchester. This business letter is dated to 1808. It comprises a single folio. The main body of the letter, which contains 35 horizontal lines of writing and seven lines in the margin, is written on 1r. The address, which is four lines long, is found on 2v. There are a few sizable lacunae on the manuscript, but only one of these detrimentally impacts the readability of the text.

The second letter in this corpus is T-S 13J25.24, housed in the Cambridge University Library's Cairo Genizah collections. It is dated to 1806. As with Rylands L192, this letter is written on one leaf. The text is composed in three columns across 1r. and v., while the address is found on 2v. Columns one and two contain 43 and 45 lines of horizontal writing, respectively. The third column has twenty lines of writing. This is by far the longest letter found in this corpus. Khan has produced transcriptions and English translations of both Rylands L192 (2013) and T-S 13J25.24 (2006).

T-S 10J16.35 is the final letter in this corpus. It is dated to 1797. In keeping with the previous two letters, the text is written on a single leaf, on which the main body of the letter is composed across 1r. and v. The first 31 lines of the letter are written horizontally. The remaining 19 lines are written vertically across 1v. and 1r. The address is found on 2v. The letter is in excellent condition.

#### 1.4. Aims of this study

The purpose of this thesis is to produce a comparative typology of Egyptian JA grammatical features exhibited by folk tales and letters from the Ottoman period, with the aim of establishing the degree to which linguistic variation exists between two genres of written JA, and how it manifests itself.

The corpus on which this study is based is relatively small, but it is representative of variation of the two genres at different chronological periods. The size of the corpus was largely constrained by the need to apply exhaustive analysis to the material. In the analysis, in order to do justice to the many instances of orthographic, phonological and syntactic variation that I have encountered, I have omitted to include a section on morphological variation. This is in part due to the restricted amount of variation found in the inter-genre study of morphology, and in part the result of the word limit. In the future, I hope to produce a version of this thesis which includes a study of morphological variation, and which also contains references to a larger number of JA texts, both folk tales and letters alike.

#### 1.5. Thesis Structure

The present study is divided into two sections. In the first section, I examine the use of the diachronic developments in the use of the diacritical dot as it occurs in these late JA texts, before advancing to a more detailed discussion of the orthographic representations of *ǧīm* in written JA. The ensuing subsections are concerned with graphemic substitutions, and instances of *taḥḥīm* and *tarqīq*. I then turn my attention to representations of 'alif, *tā* 'marbūṭa and double *vav* and *yod* as they occur in these two genres. Defective and *plene* spelling of long and short vowels respectively is then examined. I conclude this first section with an examination of the motivations behind the development of the definite article into a separate entity in late written JA.

The second section is devoted to subordination. Here, I examine complement, adverbial and relative clauses in great detail. Looking not only at the frequency of these types of subordinate clause relative to each genre, but also at the types of complementisers, relative pronouns and subordinators used to introduce them.

## 2. Orthography and Phonology

### 2.1. Consonants

#### 2.1.1. The diacritical dot

The Hebrew alphabet has 22 characters, six fewer than the Arabic alphabet. In the modification of the Hebrew script for the purposes of written JA, this graphemic deficiency is resolved by the doubling of certain graphemes' functions with the addition of a supra- or sub-linear diacritic (Blau 1981: 34–5; Blau and Hopkins 1984: 10; Wagner 2010: 27). From the classical JA period onwards, the Hebrew graphemes ordinarily employed for this purpose are: *šadeh* for *ḏād* (𐤏) and *šād* (𐤎); *tav* for *tā'* (𐤐) and *tā'* (𐤑/𐤒); *dalet* for *dāl* (𐤃) and *dāl* (𐤄); *gimel* for *ḡīm* (𐤂) and *gayn* (𐤅); *kaf* for *ḥā'* (𐤊/𐤋) and *kāf* (𐤌); and *ṭet* for *ṭā'* (𐤓) and *ẓā'* (𐤔).<sup>35</sup> It is generally understood that these specific Hebrew consonants are chosen for either their phonetic or graphical similarity to the Arabic characters they denote. The motivation for the representation of Arabic *gayn* /g̃/, *ḥā'* /ħ/ and *tā'* /t/ with Hebrew *gimel* /g/, *kaf* /k/ and *tav* /t/, respectively, and a diacritical dot is attributed to their phonetic congruence with the spirantised allophones of these Hebrew phonemes ([ɣ], [χ] and [θ], respectively) (Blau 1981: 34–5; Hary 1996b: 730; Khan 2016a: 24). Conversely, the common denotation of *šadeh* with a supra-linear dot (𐤏) for *ḏād* (ض) is ascribed to the two consonants' graphical likeness (Blau 1981: 34; Blau and Hopkins 1984: 10; Hary 1996b: 730).

In its role of differentiating two Arabic graphemes represented by a single Hebrew grapheme from one another, the diacritical dot is often attributed phonetic significance (cf. Hary 1997a: 209).<sup>36</sup> It is generally understood to distinguish fricative from plosive phonemes (Blau and Hopkins 1984: 10). The interpretation of the diacritical dot as having phonetic value is most notable in discussions concerning the use of *gimel* to denote *ḡīm* (cf. Blau 1981; Hary 1996a, 1997a: 209), which plays a consequential role in the interpretation of *ḡīm*'s historical phonetic development in present-day scholarship (cf. §2.1.2.1).

Thus far, the use of the diacritical dot in JA orthography has generally been considered in relation to a single phoneme or grapheme or, in instances in which the diacritical dot is examined in relation to more than one grapheme, are looked at as isolated cases (cf. Palva 2007: 398). As yet, no detailed study of the general use of the diacritic in JA has been undertaken.<sup>37</sup> This section of the thesis

<sup>35</sup> The representations of Arabic graphemes with Hebrew equivalents referred to here is by no means a comprehensive list, nor is the placement (or indeed presence) of the diacritic conclusive.

<sup>36</sup> Blanc states that the diacritic may either indicate 'a phonetic modification, an abbreviation or a foreign word' (1981: 187, n. 6). He does not appear to consider the diacritic's potential graphical significance.

<sup>37</sup> The diacritic is generally afforded only a brief mention in studies of JA literary and documentary texts (cf.

addresses this oversight in the existing scholarship through a diachronic examination of the diacritic's application to *peh* for *fā*' (§2.1.1.1), *dalet* for *dāl* (§2.1.1.2), *kaf* for *ḥā*' and *kāf* (§2.1.1.3), and *gimel* for *gayn* (§2.1.1.4) and *ḡīm* (§2.1.2) in late JA letters and folk tales. The findings of this analysis challenge the established consensus regarding the diacritical dot's inherent phonetic value. It is proposed that the diacritic, while undeniably fulfilling a practical role, also has a graphical function in these late JA letters and folk tales. It appears to be employed to evoke and emulate the physical form of certain Arabic graphemes, as either the re-interpretation of an earlier trend – as in the case of *gimel* for *ḡīm* and *gayn* – or – as in the case of *peh* for *fā*'<sup>38</sup> – a novel phenomenon.

#### 2.1.1.1. *peh* for *fā*'<sup>39</sup>

In early and classical JA, *peh* for *fā*' appears without a diacritical dot and, in consonance with Hebrew orthographic practice, changes form in word-final position (ף < פ). These spelling practices are also evident in the fifteenth/sixteenth-century letter and folk narrative corpora; *peh* for *fā*' is written without a diacritical dot and is found in both initial/medial and final forms, depending on its position in a given word.

In the eighteenth/nineteenth-century JA corpora, however, a new representation of *fā*' develops. A supra-linear diacritic is increasingly inserted above *peh* for *fā*' in both letters and folk tales alike. This orthographic development occurs sporadically in seventeenth/eighteenth- and eighteenth/nineteenth-century folk tales: in AIU VII.C.16 *peh* for *fā*' appears with a diacritic in 26.8 per cent of occurrences, while in T-S Ar. 46.10 the diacritical dot is absent in 97.7 per cent of occurrences. The folk tale T-S Ar. 37.39 exhibits a diacritical dot above *peh* for *fā*' in 75.8 per cent of instances. The variation exhibited in these three (roughly) contemporaneous folk tales suggests that the inclusion of a supra-linear dot or dash with *peh* for *fā*' was an emerging phenomenon at the time of composition.

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e.g., Blau 1981: 34-35; Wagner 2010: 27).

<sup>38</sup> I tentatively suggest that the writing of a diacritic above *peh* for *fā*' may have been induced by changing palaeographical styles in the Arab world. The *magribi* script, in which *fā*' appears with a sub-linear diacritic is generally understood to have dominated in western parts of the Arab world in the late tenth century (Sijpesteijn 2008, III: 519). However, from the ninth century onwards, eastern traditions developed a new system, in which *fā*' was marked with a single supra-linear dot (in contrast to the homophone *qāf*, which was marked with two supra-linear dots) (Greundler 2006, I: 152). This eastern orthographic trend was adopted in the *nash* script used in Egypt during the Mamluk era (1250–1517) (Gacek 2008, III: 340). Perhaps the gradual inclusion of the single supra-linear dot in JA texts above *peh* for *fā*' was a consequence of this broader orthographic trend in Arabic? This would suggest greater awareness of Arabic palaeographic and orthographic practices on the part of JA writers than is generally assumed for this period (cf. e.g., Hary 1997a: 202).

<sup>39</sup> Khan (1992: 230), Hary (1996b: 730) and Wagner (2010: 27–8) all mention the use of the diacritic above *peh* for *fā*' as occurring in their respective late JA corpora without giving an explanation for the phenomenon. In later works, Hary suggests that the absence of the diacritical dot above *peh* for *fā*' 'may represent a literal tendency, as it could be an imitation of the Hebrew letter (פ) *fe*' (2012: 137; cf. 2009: 78). In this same passage, Hary asserts that, in contrast, the inclusion of the diacritic above *peh* for *fā*' 'represents the fricative



This intermittent use of the diacritic above *peh* for *fā'* is also reflected in the late eighteenth-century JA letters. Both letters Rylands L192 and T-S 13J25.24 display relatively low occurrences of *peh* for *fā'* with a supra-linear diacritic at 14.6 per cent and 6.8 per cent, respectively. However, in the letter T-S 10J16.35, the use of *peh* for *fā'* with a supra-linear diacritic rises to 42.2 per cent of cases. It is worth noting that in letters of this period, the form of the diacritic is somewhat changeable; in medial/initial form it alternates between a dot and a dash, while in final form a dash is most often found.<sup>40</sup>

In the nineteenth-century folk tales BnF Hébreu 583 and Cairo JC 104, the appearance of *peh* for *fā'* with a supra-linear diacritical dot is even more consistent. In BnF Hébreu 583, the diacritic is used in 95 per cent of occurrences, while in the later folk tale Cairo JC 104, the diacritic appears in 97.2 per cent of instances of *peh* denoting *fā'*.

The use of the diacritic above *peh* for *fā'* is notably more constant in nineteenth-century folk tales than in contemporaneous letters. This may indicate that the diacritic was regarded as a literary device, intended to raise the tone of the text as a whole.

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pronunciation of [f] rather than the stop [p]' (ibid.).

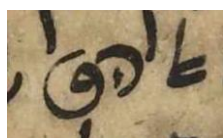
<sup>40</sup> The preference for a dash, rather than dot, in the eighteenth/nineteenth-century letters may be suggestive of greater Hebrew influence on the writers of letters than of folk tales.

Genre & Date	Classmark	peh for fā		Diacritic		Without diacritic
		initial form	final form	sub-linear	supra-linear	
15th c. folk tale	Firk. Evr.Arab.II 852	169	35	0	1	203
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	122/3	17	0	1	122/3
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	254	17	0	0	271
late 15th c. letter	Bodl. MS Heb.c.72/13	18	2	0	0	20
late 15th c. letter	Bodl. MS Heb.c.72/39	53	6	0	0	59
late 15th c. letter	CUL T-S 13J26.7	9	5	0	0	14
late 15th c. letter	Bodl. MS Heb.c.72/18	16	3	0	0	19
17th/18th c. (?) folk tale	AIU VII.C.16	56	?11	0	18 (1)	49 (10)
18th/19th c. folk tale	CUL T-S Ar. 37.39	80	11	0	68 (1)	22 (10)
18th/19th c. folk tale	CUL T-S Ar. 46.10	42	2	0	43 (2)	1
19th c. folk tale	BnF Hébreu 583	102 (3)	0	0	97 (3)	5
19th c. folk tale	Cairo JC 104	179 (15)	0	0	174 (15)	5
18th/19th c. letter	CUL T-S 13J25.24	73 (13)	0	0	5	68 (13)
18th/19th c. letter	Man. Rylands L192	48 (4)	0	0	7 (4)	41
18th/19th c. letter	CUL T-S 10J16.35	45 (2)	0	0	21 (2)	24

Table 1.1. *peh* for *fā* <sup>41</sup>

In keeping with the assertion of the diacritic's phonetic significance, Hary explicitly states that the diacritic above *peh* in the following late JA example 'represents the fricative pronunciation of [f] rather than the stop [p]', e.g., ערפֿן 'they knew you/they informed you' (2009: 78). Unlike its Hebrew cognate,<sup>42</sup> *fā* has only one reflex in Arabic: a voiceless labio-dental fricative /f/. There is no historical or contemporary evidence – except in loanwords – for the pronunciation of *fā* as a plosive in spoken or written forms of Arabic. The diacritical dot's inclusion above the grapheme *peh* when denoting *fā* has no discernible phonetic consequence. In relation to *peh* for *fā* the diacritic appears to function as a stylistic device, emulating the graphical form of its Arabic cognate *fā* (ف).

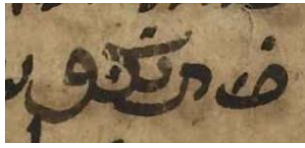
A further parallel – perhaps even interdependent – development in the representation of *fā* occurs in late JA texts, namely the writing of *peh* for *fā* in initial/medial form (פ) in word-final position. This burgeoning tendency towards the writing of *peh* for *fā* in initial/medial form at the end of a word is first apparent (in the corpora under examination) in the folk tale AIU VII.C.16. Here, the straight, vertical tail of *peh* in final form curves upwards towards the main body of the letter:



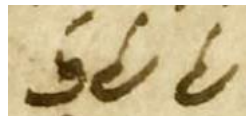
<sup>41</sup> The number in parenthesis () included here and elsewhere in the table refers to the number of the total figure which is in final-word position.

<sup>42</sup> The Hebrew grapheme *peh* is one of the six *bgdkft* letters, which are plosive [p], but which are fricativised [f]

‘אל ריפ’ ‘the countryside’ (AIU VII.C.16, 1r. 6)



‘פי תנציפ’ ‘in cleaning’ (AIU VII.C.16, 1r. 21)



‘אל אלפ’ ‘the thousand’ (Rylands L192, 1r. 20)



‘ואקף’ ‘standing’ (BnF Hébreu 583, 44)

The final form of Arabic *fā*’ has a long, horizontal stroke, e.g., *کتف katif* ‘shoulder’. The final form of the Hebrew equivalent, however, has a long vertical stroke, e.g., *כתף katef* ‘shoulder’. It seems that the writing of *peh* for *fā*’ in initial/medial form in word-final position results from the graphical imitation of its Arabic counterpart. This JA orthographic innovation further corroborates the interpretation of the diacritic as a graphic, rather than phonetic device in relation to *peh* for *fā*’.

#### 2.1.1.2. *dalet* for *dāl*

The Hebrew grapheme *dalet* is used in classical JA to represent both the Arabic graphemes *dāl* and *dāl*. In classical JA, *dāl* is sometimes distinguished from *dāl* by the addition of a supra-linear diacritic,<sup>43</sup> e.g., *אלדי* ‘that, which’. Where it occurs, this diacritic is generally interpreted by JA scholars as marking the voiced dental fricative /ð/ pronunciation of *dāl*, distinguishing it from *dāl*’s

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post-vocally.

<sup>43</sup> This practice is less common than is suggested by transcriptions or editions of classical JA texts, in which some scholars tend to add the dot in their transcriptions to aid understanding (cf. Blau 1981: 35, n. 2). This highlights the importance of examining original manuscripts alongside transcriptions, when looking into such phenomena.

voiced alveolar plosive /d/.<sup>44</sup>

In a phenomenon common to many vernacular forms of Arabic,<sup>45</sup> the pronunciation of *dāl* shifted from an interdental fricative to a dental or alveolar plosive [ð] > [d], rendering it phonetically indistinguishable from *dāl*. However, in the CA reading tradition the phonetic distinction between the two phonemes is consistently maintained.

When one looks at the distribution of the diacritic with *dalet* for *dāl* in table 2, it is clear that, as with *peh* for *fā*, the frequent inclusion of the supra-linear diacritic is a recent phenomenon in late JA texts. With only two minor exceptions,<sup>46</sup> the diacritic is omitted in these folk tales and letters alike until the eighteenth/nineteenth century. Thereafter, a dot is found above *dalet* for *dāl* with varying degrees of frequency in both genres. In the former, the diacritic is inserted above *dalet* for *dāl* in 39 per cent (T-S 10J16.35) to 54.5 per cent (Rylands L192) of instances. In the latter genre, the diacritic appears in between 53 per cent (T-S Ar. 46.10) and 86 per cent (Cairo JC 104) of instances. The distribution of the diacritic above *dalet* for *dāl* is, as with *peh* for *fā*, greater in the folk tales than in the letters. This not only reflects the higher percentage of CA-influenced features found in literary texts, but also suggests that the diacritic may have been considered a literary or archaising feature.

<sup>44</sup> In relation to late JA letters, Wagner suggests that the inclusion of a diacritic above *dalet* for *dāl* may serve to differentiate the grapheme from *reyš*, which is often almost identical in form (2010: 27). However, in light of the findings in these literary and documentary corpora, Khan's observation that the diacritic above *dalet* for *dāl* occurs only in relation to words of CA origin appears a more fruitful line of enquiry (1992: 230).

<sup>45</sup> This is a characteristic trait of Maḡribi and Mašriqi dialects and one which is now established 'in Damascus, Beirut, Jerusalem, Cairo, Algiers and Rabat' (Al-Wer 2008, III: 604). The phonetic shift from /d/ > /d/ is thought to be an old feature of Arabic dialects from Arabia (El-Gindi 1983: 432-435).

<sup>46</sup> In the letter MS Heb.c.72/13 the following proper noun appears with a supra-linear diacritic above *dalet* for *dāl*; פֶּאֵד Fā'id/Fā'id (1r. 19). A central diacritic is also used once in the folk tale Evr.Arab.II 852; אָכַד 'he took' (5.v. 15) (CA: 'āḥaḍa). The latter example is found in a text with a high degree of Hebrew influence and may be regarded as a *dageš lene* (used to differentiate plosive from fricative forms in the Masoretic tradition). As such, it corroborates the reading of a plosive reflex of *dāl* in this fifteenth-century manuscript, common to vernacular forms of Arabic.

Genre & Date	Classmark	<i>dalet</i> for <i>dāl</i>	Diacritic		Without diacritic
			central	supra-linear	
15th c. folk tale	Firk. Evr.Arab.II 852	58	1	0	57
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	37	0	0	37
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	163	0	0	163
late 15th c. letter	Bodl. MS Heb.c.72/13	5	0	1	4
late 15th c. letter	Bodl. MS Heb.c.72/39	42	0	0	42
late 15th c. letter	CUL T-S 13J26.7	0	0	0	0
late 15th c. letter	Bodl. MS Heb.c.72/18	17	0	0	17
17th/18th c. (?) folk tale	AIU VII.C.16	13	0	0	13
18th/19th c. folk tale	CUL T-S Ar. 37.39	60	0	40	20
18th/19th c. folk tale	CUL T-S Ar. 46.10	17	0	9	8
19th c. folk tale	BnF Hébreu 583	37	0	23	14
19th c. folk tale	Cairo JC 104	107	0	92	15
18th/19th c. letter	CUL T-S 13J25.24	38	0	15	23
18th/19th c. letter	Man. Rylands L192	11	0	6	5
18th/19th c. letter	CUL T-S 10J16.35	31	0	12	19

Table 1.2. *dalet* for *dāl*

The addition of the diacritical dot is not, as it first seems, sporadic. In all the texts in which this phenomenon occurs, *dalet* for *dāl* is written with a supra-linear diacritic exclusively in words of CA origin, e.g., אַלִּי (Cairo JC 104, 6v. 3) (Khan 1992: 230), further corroborating the suggestion that the diacritic may have been regarded as a literary feature or archaising device in its emulation of the CA form.

The insertion of the diacritic above *dalet* for *dāl* in words of CA origin may lead one to assume that, as the fricative pronunciation of *dāl* is preserved in CA, the diacritic must indicate fricative pronunciation. However, as has been aptly demonstrated by Khan (2010), the orthographies of classical and late JA texts often conceal variant reading traditions. This is apparent in fully-vocalised manuscripts such as T-S Ar.54.63, a late JA folk tale entitled *Qiṣṣat Ḥanna*, in which the JA relative pronoun אַלִּי *ʾlady* is vocalised as follows:

אַלִּי ‘which’ *ʾeladī/ʾeladdī* (T-S Ar. 54.63, 1v.; CA: *ʾalladī*; MCA: *ʾillī*)

(example from Khan 2010: 213).

The Hebrew vocalisation present in this manuscript suggests a voiced alveolar stop [d] reflex for *dāl* as found in colloquial forms of Arabic. In light of both this and the insertion of a diacritic above *peh* for *fāʾ*, the primary function of the diacritic in this context appears to be literary or archaising, a

replication of the graphical form of its Arabic cognate *dāl* (د).

### 2.1.1.3. *kaf* for *ḥā'* and *kāf*

The Arabic graphemes *kāf* and *ḥā'* are both represented in written JA of all periods with the Hebrew grapheme *kaf*. The Arabic grapheme *ḥā'* is often differentiated from the Arabic grapheme *kāf* by the use of a supra-linear diacritic in initial/medial form (ح̣). While this phenomenon is commonly observed in analyses of late JA literary and documentary texts (cf. Khan 1992: 230; Palva 2007: 398; Wagner 2010: 27), thus far, only passing explanations have been attempted. Wagner echoes Khan (1992: 230) in suggesting that the use of the diacritic above *kaf* in late documentary material may result from a need to differentiate 'between *b* and *k*... which can be very similar in their form.' (Wagner 2010: 27).<sup>47</sup> Palva, in his brief examination of the phenomenon in relation to a late JA folk tale, alludes to Blanc's (1981) understanding of the diacritic as having phonetic (fricative) value (2007: 398).

When examined in isolation, these explanations regarding the use of the diacritic above *kaf* for *ḥā'* may appear sufficient. However, in light of the above-mentioned interpretations of the use of the diacritic in relation to *peh* for *fā'* and *dalet* for *dāl*, the issue demands more extensive consideration.

The diachronic examination of this phenomenon in the literary and documentary corpora under examination here reveals a distribution of the diacritic above *kaf* denoting *ḥā'*<sup>48</sup> similar to *peh* for *fā'* and *dalet* for *dāl*. With the exception of MS Heb.c.72/39,<sup>49</sup> in both the fifteenth/sixteenth-century letters and folk tales, the diacritic is present infrequently (e.g., Evr.Arab.I 2996, where it occurs in 2.3 per cent of instances), or omitted completely (e.g., Evr.Arab.II 1528, T-S 13J26.7 and MS Heb.c.72/13).

However, the use of diacritical dot above *kaf* for *ḥā'* in initial/medial form becomes increasingly uniform in folk tales from the seventeenth/eighteenth-century onwards. In the seventeenth/eighteenth-century manuscript AIU VII.C.16, *kaf* for *ḥā'* appears with a supra-linear dot in 79 per cent of cases. In the later folk tales, the inclusion of the diacritic increases from 88.9 per cent and 91 per cent in the

<sup>47</sup> Khan refers to the phenomenon found in some JA texts of marking both graphemes *bet* and *kaf* with a sub-linear and supra-linear dot, respectively, to help differentiate between the similarly formed graphemes (1992: 230, n. 34). There is no evidence of the marking of *bet* in any of the texts examined here.

<sup>48</sup> The percentages included here refer only to the use of the diacritic in relation to *kaf* for *ḥā'* in initial/medial form. The use of a diacritic above *kaf* for *ḥā'* in final form occurs only in MS Heb.c.72/39.

<sup>49</sup> The distribution of *kaf* for *ḥā'* in initial/medial form with a supra-linear dot in MS Heb.c.72/39 is (at 55 per cent) considerably higher than in contemporaneous letters or folk narratives (where it is more commonly

two eighteenth-century manuscripts T-S Ar. 46.10 and T-S Ar. 37.39, respectively, to 100 per cent in both nineteenth-century tales BnF Hébreu 583 and Cairo JC 104. The insertion of the diacritic above *kaf* for *ḥā'* is more variable in the contemporaneous letters, where it occurs in 18 per cent (Rylands L192) to 94.4 per cent (T-S 13J25.24) of instances.

Genre & Date	Classmark	<i>kaf</i> for <i>ḥā'</i>			Diacritic		Without diacritic
		initial form	final form	total	sub-linear	supra-linear	
15th c. folk tale	Firk. Evr.Arab.II 852	84	6	90	0	1	89 (6 final)
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	57	4	61	0	0	61
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	84	2	86	0	2	84 (2)
late 15th c. letter	Bodl. MS Heb.c.72/13	4	1	5	0	0	5
late 15th c. letter	Bodl. MS Heb.c.72/39	53	4	57	0	32 (3)	25 (1)
late 15th c. letter	CUL T-S 13J26.7	4	2	6	0	0	6
late 15th c. letter	Bodl. MS Heb.c.72/18	5	0	5	0	1 (dash)	4
17th/18th c. (?) folk tale	AIU VII.C.16	19	0	19	0	15	4
18th/19th c. folk tale	CUL T-S Ar. 37.39	46	2	48	0	43 (1)	5 (1)
18th/19th c. folk tale	CUL T-S Ar. 46.10	18	0	18	0	16	2
19th c. folk tale	BnF Hébreu 583	33	3	36	0	33	3 (final)
19th c. folk tale	Cairo JC 104	65	2	67	0	65	2 (final)
18th/19th c. letter	CUL T-S 13J25.24	36	0	36	0	34	2
18th/19th c. letter	Man. Rylands L192	11	0	11	0	9	2
18th/19th c. letter	CUL T-S 10J16.35	28	0	28	0	20	8

Table 1.3. *kaf* for *ḥā'*

There is nothing to suggest that the phonetic realisation of this grapheme as an unvoiced velar/uvular fricative has altered during the period under consideration. It would, therefore, seem plausible that the diacritic in relation to *kaf* denoting *ḥā'* is primarily a stylistic device deployed in imitation of the graphical form of its Arabic orthographic equivalent (خ). Its more consistent use in literary texts of the eighteenth-nineteenth century also suggests that, during this period, it may have been deemed a literary feature or archaising device.

The interpretation of the diacritic's function above *kaf* for *ḥā'* as resulting from the imitation of the graphical form of *ḥā'* is further substantiated by the representation of *kāf*. Whereas *kaf* for *ḥā'* generally remains unadorned in final form (ך) in texts where its initial/medial form contains a diacritic (see table 1.3), *kaf* for *kāf* is written with a central diacritic in word-final position (ך). This central diacritic mirrors the graphical form of Arabic *kāf* in final form (ك), while fulfilling the practical function of distinguishing it from *kaf* for *ḥā'*.

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omitted, e.g., T-S 13J26.7 and MS Heb.c.72/13).

2.1.1.4. *gimel* for *ḡayn*

The inclusion of a diacritical dot above or below *gimel* for *ḡayn* in fifteenth–nineteenth-century letters and folk tales is extremely variable. Not only is there a shift in the position of the diacritic between the late sixteenth–eighteenth centuries from supra- to sub-linear, the distribution of the diacritic synchronically, diachronically and within genres is far from uniform.

Genre & Date	Classmark	<i>gimel</i> for <i>ḡayn</i>	Diacritic		Without diacritic
			sub-linear	supra-linear	
15th c. folk tale	Firk. Evr.Arab.II 852	41	0	2	39
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	29	0	28	1
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	30	0	30	0
late 15th c. letter	Bodl. MS Heb.c.72/13	1	0	0	1
late 15th c. letter	Bodl. MS Heb.c.72/39	6	0	5 (dash)	1
late 15th c. letter	CUL T-S 13J26.7	2	0	0	2
late 15th c. letter	Bodl. MS Heb.c.72/18	4	0	0	4
17th/18th c. (?) folk tale	AIU VII.C.16	8	0	0	8
18th/19th c. folk tale	CUL T-S Ar. 37.39	22	18	0	4
18th/19th c. folk tale	CUL T-S Ar. 46.10	1	0	0	1
19th c. folk tale	BnF Hébreu 583	3	3	0	0
19th c. folk tale	Cairo JC 104	35	28	1	6
18th/19th c. letter	CUL T-S 13J25.24	8	8	0	0
18th/19th c. letter	Man. Rylands L192	6	0	0	6
18th/19th c. letter	CUL T-S 10J16.35	7	0	0	7

Table 1.4. *gimel* for *ḡayn*

In the fifteenth/sixteenth-century folk tales under examination, *gimel* for *ḡayn* occurs with a supra-linear dot between 10 per cent (Evr.Arab.II 852) and 100 per cent (Evr.Arab.I 2996) of instances. In the contemporaneous letters, the dot is omitted completely in three of the four letters examined here, while a supra-linear dash occurs in one of these texts in 83.3 per cent of cases (MS Heb.c.72/39).

The diacritical dot is absent above or below *gimel* for *ḡayn* in the seventeenth/eighteenth- and eighteenth/nineteenth-century folk tales AIU VII C.16 and T-S Ar.46.10. However, in the eighteenth-century folk tale T-S Ar. 37.39 (in 82 per cent of instances), the diacritic emerges again, this time in sub-linear position. Thereafter, a diacritic appears below *gimel* for *ḡayn* in both nineteenth-century folk tales BnF Hébreu 583 and Cairo JC 104. In the former, the use of the sub-linear dot in relation to *gimel* for *ḡayn* is ubiquitous. In the latter text, however, it is omitted in 17.1 per cent of instances and is written once as a supra-linear dot.



A still higher degree of variation is exhibited in the eighteenth/nineteenth-century letters. In two of the three letters examined here, there is no diacritical dot found in relation to *gimel* for *gayn* (T-S 10J16.35 and Rylands L192). However, in the contemporaneous letter T-S 13J25.24, a diacritic is found below *gimel*, denoting *gayn* in all instances.

The changes in the use and position of the diacritic in relation to *gimel* for *gayn* in these literary and documentary corpora correspond to the variation found in the use of the diacritic in the denotation of *ḡīm* (cf. §2.1.2.2.1). As with *ḡīm*, the diacritic appears to possess both practical and stylistic functions employed at the discretion of the individual writer or scribe. The shift from supra- to sub-linear position is also worthy of note. It occurs at roughly the same time at which the inclusion of the diacritic above *peh* for *fā'*, *dalet* for *ḏāl* and *kaf* for *ḥā'* becomes increasingly common. As such, it corroborates the suggestion that a shift occurred in the use of the diacritical dot in the seventeenth–eighteenth centuries, which may have been affected by Arabic orthographic trends.

### *Summary*

In this section, the perceived phonetic significance of the diacritical dot in JA is queried in light of new evidence. Contrary to established consensus, it is suggested that Arabic may have had some impact on orthographic trends that emerged in the late Ottoman period.

The inclusion of the diacritical dot above *peh* for *fā'* is found to be crucial to the general understanding of the use of the diacritical dot in late JA letters and folk tales. Khan's (1992) finding that a supra-linear dot is used with *dalet* for *ḏāl* in words of CA origin only is also shown to apply to all JA letters and folk tales after the eighteenth century. The increasingly consistent appearance of the diacritical dot above *kaf* for *ḥā'* in letters and folk tales is found to have become established practice in the seventeenth–eighteenth centuries, at a similar time to the inclusion of the diacritic above *peh* for *fā'* and *dalet* for *ḏāl*. While the writing of a dot above *gimel* for *gayn* precedes the inclusion of a dot above *peh* for *fā'*, there is evidence of a shift in the writing of the diacritical dot with *gimel* for *gayn* from supra- to sub-linear in the seventeenth–eighteenth centuries. This shift in the placement of the dot coincides with the inclusion of the dot above *peh* for *fā'*, *dalet* for *ḏāl* and *kaf* for *ḥā'*, suggesting that these developments in the use of the diacritic in the JA representation of Arabic graphemes may have been triggered by an external influence/factor.

What provoked this development in the use of the diacritical dot in relation to these graphemes? There

is no indication that the phonetic realisations of these graphemes altered between the seventeenth–eighteenth centuries when these changes occurred. Neither does Hebrew – the language to which most orthographic developments are attributed during this period – offer any obvious solutions.<sup>50</sup> It appears to be an orthographic innovation, which may have been borne of the desire to imitate the graphical form of the Arabic cognates. With regard to *kaf* for *ḥāʾ* and *gimel* for *ḡayn*, the importance of the practical function of the dot in differentiating between two graphemes must also not be underestimated. It is not suggested here that the diacritic is devoid of inherent phonetic value, merely that its primary functions appear to be stylistic (imitation of Arabic graphical forms) and practical (differentiating between two graphemes) and that the phonetic information that can be gleaned from the presence or absence of the diacritical dot or dash is more limited than has been previously supposed.

The relative frequency of the diacritical dot in letters and folk tales also bears consideration. In relation to all four graphemes examined here, the diacritical dot is used more extensively in folk tales than in letters, indicating that it may have been regarded as a literary feature.

### 2.1.2. *gimel* for *ḡim*

Any examination of the use of the diacritic in JA which omits a detailed study of its use in relation to *gimel* for *ḡim* would be wanting. Unlike the graphemes discussed above (section §2.1.1), the use of the diacritical dot above or below *gimel* denoting *ḡim* in JA has elicited much scholarly attention. Furthermore, while the diacritical dot is of paramount importance to this discussion, JA representations of *ḡim* extend beyond the *gimel* with a dot. Therefore, I have chosen to examine JA orthographic representations of *ḡim* in a separate section, in order to do the matter justice.<sup>51</sup>

The present-day variation in phonetic realisations of the Arabic *ḡim* has provoked much debate as to the phoneme's historical development. In contemporary spoken MCA, Lower Egyptian dialects and a few Yemeni and Central Arabian dialects *ḡim* is realised as a voiced velar stop [g]. In Upper Egypt, rural districts of the Levant, Northern Algeria and Yemen, *ḡim* has a voiced palato-alveolar affricate

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<sup>50</sup> It has been suggested that the use of the diacritic above *peh* for *fāʾ* may be attributed to the continuation of the *raphe*, a supra-linear dash introduced in Hebrew by the Tiberian Masoretes to differentiate fricative (with *raphe*) from plosive (with *dageš lene*) allophones of the six *bgdkft* letters. However, the inclusion of the diacritic above *peh* for *fāʾ* is not evident in JA manuscripts until the eighteenth century. Why, when the script used in JA was the Hebrew script, would the *raphe* have not been included above *peh* for *fāʾ* in JA texts from the tenth century onwards? The form of the diacritic is also worth considering in this context; in JA texts, the diacritic found above *peh* for *fāʾ* is most commonly a dot (in keeping with the Arabic practice), rather than a dash (as is the case with the *raphe*).

<sup>51</sup> This section of the thesis has been adapted into article format and accepted for publication in the *Journal of Semitic Studies* (Connolly 2019).

[dʒ] variant. A voiced palato-alveolar fricative [ʒ] reflex may be heard in the vast majority of urban areas in Syria and the Mağrib (Zaborski 2007, II: 494). The reflex of *ḡīm* in Sudanese dialects and some Upper Egyptian and South Arabian dialects is a voiced palatalised-velar stop [gʲ]. A voiced palatal glide [j] is found in the Gulf and Northern Arabian dialects. Mağribian JA dialects exhibit a voiced alveolar fricative [z] reflex for *ḡīm*. In Palmyra a voiceless palato-alveolar affricate [tʃ] is found, while a voiceless dental alveolar affricate [ts] typifies a small number of rural Syrian dialects (Zaborski 2007, II: 494; Watson 2002: 16; Woidich and Zack 2009: 43).

Such variation demands examination. Thus far, attempts to reconstruct *ḡīm*'s chronological development have produced two main schools of thought. The first, proposed by Haim Blanc (1969, 1981), asserts that the voiced velar stop reflex [g] heard in MCA is a relatively recent phenomenon, resurging as the dominant variant in Cairo (and its surrounding provinces) as late as 1800–1860 (1981: 191). Prior to this – certainly between the twelfth and seventeenth centuries – the prevailing pronunciation of *ḡīm* in Egypt was a voiced palato-alveolar affricate [dʒ]. The second theory, put forward by Peter Behnstedt and Manfred Woidich (1985), favours the understanding of the voiced velar stop [g] reflex as the established pronunciation of *ḡīm* in Egypt before the early nineteenth century: this variant has existed in areas of Lower Egypt along the Nile delta since the Arab conquests to the present-day in a diminishing but ultimately uninterrupted manner (Woidich 1996: 8, 19–20 (accessed online: 11/01/17)); Behnstedt 2006, I: 588–589; Woidich & Zack 2009: 56).

In his paper dealing explicitly with *ḡīm*'s realisation in Egyptian Arabic, Blanc (1981) refers to three JA texts<sup>52</sup> – as well as Muslim Middle Arabic sources<sup>53</sup> and eighteenth/nineteenth-century European travellers' accounts of Egyptian Arabic vernaculars – in defence of his view that MCA voiced velar stop [g] is a recent occurrence. Benjamin Hary (1996a) and Heikki Palva (2000, 2007, 2008a) also draw heavily on JA literary texts in support of Blanc's theory, focusing on the orthographic denotation of *ḡīm* as it appears in these texts. The most common representation of *ḡīm* in extant JA manuscripts of all genres is with the Hebrew grapheme *gimel*, which also serves as the Arabic grapheme *ḡayn*. A diacritic is often employed above or beneath *gimel* for *ḡīm* to distinguish it from *ḡayn*.<sup>54</sup> The use of the diacritic in conjunction with this Hebrew grapheme when indicating *ḡīm*,

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<sup>52</sup> The three JA texts referred to by Blanc are: the JA passages from the seventeenth-century text *Darxe No'am* (Venice, 1697); a purportedly seventeenth-century JA folktale published by Goitein (1972); and JA fragments dated and published by Lebedev (1965) (Blanc 1981: 185–6).

<sup>53</sup> The Muslim Middle Arabic sources Blanc refers to are: Yusuf al-Mağribi's *Daf' al-iṣr 'an kalām ahl miṣr*, dated to 1606 (Zack 2009); and al-Širbīnī's *Hazz al-quḥūf fī šarḥ qaṣīd 'Abī Šādūf*, (Būlāq 1857) (Davies 1981, 2004–2007) (Blanc 1981: 192–3).

<sup>54</sup> The Hebrew grapheme *gimel* is also often marked with a diacritic when representing *ḡayn*. It is generally reported as being written above the grapheme, although I argue that its marking is not as consistent as has previously been thought (see §2.1.1.4).

however, is thought to have altered over the millennium of documented JA writing. These changes in the use of the diacritic have been interpreted by scholars such as Blanc and Hary as significant not just orthographically, but also phonologically. The prevalent presence of the sub-linear diacritic is thought to indicate a voiced palato-alveolar affricate [dʒ] pronunciation, while the consistent omission of a dot is interpreted as a voiced velar stop [g] reflex (Blanc 1981: 189; Hary 1996a: 154).<sup>55</sup>

Blanc (1981) examines JA texts for (i) the consistent use or omission of a sub-linear diacritic with *gimel* when this grapheme is used to denote *ḡīm* and (ii) evidence of assimilation or metathesis, and the substitution of *gimel* for *ḡīm* with alternative Hebrew graphemes, such as *šin* or *zayin*. On these grounds, the prevailing consensus of *ḡīm*'s affricate pronunciation in twelfth–seventeenth centuries Egypt has become an established norm amongst scholars of JA.

In order to do justice to this matter, it must first be positioned within the broader context of the debate surrounding *ḡīm*'s historical development (§2.1.2.1). I then turn my attention to the specifics of JA orthographic representations of *ḡīm* from the ninth–nineteenth centuries (§2.1.2.2). Following the aforementioned methodology pioneered by Blanc, I examine the extent of, and levels of consistency in, the diacritic's appearance with *gimel* denoting *ḡīm* in both letters and folk tales in order to ascertain whether the assumption that the diacritic was intended to differentiate affricate from plosive pronunciation is well-founded (§2.1.2.2.1). Attention is then given to occurrences of assimilation, instances of metathesis and alternative graphemic representations of *ḡīm* referred to by Blanc, Hary and Palva, examining them in conjunction with new evidence (§2.1.2.2.2). This section of the thesis questions the phonetic significance attributed to the diacritic; queries the interpretation of an affricate pronunciation drawn from examples of metathesis and assimilation; and offers fresh insight into graphemic representations of *ḡīm*, which indicate a more complex and varied phonetic situation than has previously been indicated by scholars of JA. This leads to the conclusion that the orthographies of un-vocalised JA manuscripts have limited value in the study of Arabic phonology and should be treated with caution.<sup>56</sup>

#### 2.1.2.1. The origins of fronted *ḡīm* and its chronological development

The (Proto-)Semitic phoneme /g/ is thought to have been pronounced as a voiced velar stop [g]

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<sup>55</sup> Palva (2008a), and later Hasson-Kenat (2016), dismiss the diacritic as an indicator of phonetic value, focusing instead on occurrences of assimilation, metathesis and substitute denotations of *ḡīm* in their assessment of *ḡīm*'s historical development.

<sup>56</sup> This research does not presume to support one interpretation over the other. It is merely intended to question the applicability of JA orthographic practices in recreating historical Arabic phonology.

(Watson 2002: 3, 16; Blanc 1969: 2; Cantineau 1960: 287).<sup>57</sup> In a development that also occurs in Neo-Aramaic,<sup>58</sup> this phoneme moved forward, forming a voiced palatalised stop [gʲ], thus beginning a process of palatalisation and eventual affrication and fricativisation, which resulted in the following allophones that prevail in CA, Modern Standard Arabic and many Arabic dialects, today: [dʲ], [d], [dʒ], [ʒ], [j] and [z], to note but the most prevalent (Zaborski 2007, II: 494; Blanc 1969: 7). The current varied phonetic situation, however, suggests that this development may not have been universal within the Arabic-speaking world. It raises the question: does the MCA voiced velar stop [g] reflex constitute a continuation of the Semitic /g/, or is it a recent development, a ‘zurückverschoben’ (Bergsträßer 1928: 157 cited in Blanc 1981: 189) or ‘back-shifting’ of the fronted *ḡīm* from a voiced palatalised stop [gʲ] (and its variants) to a voiced velar stop [g] (Woidich & Zack 2009: 41-42; Zaborski 2007, II: 496)? This question cannot be satisfactorily addressed before an examination of the original shift of *ḡīm* from [g] > [gʲ] has been undertaken.

The origin, chronology and extent of the spread of the fronted *ḡīm* have been the source of much scholarly contention. Cantineau (1950, 1960) and Martinet (1959), and Blanc (1969) in their wake, all examine the fronting of *ḡīm* in relation to the voicing<sup>59</sup> of the phoneme *qāf* > [g]<sup>60</sup> with differing conclusions (Blanc 1969: 7). This connection is made on the basis that Proto-Semitic was characterised by triads of voiced, voiceless and emphatic or glottalised consonants (Watson 2002: 1-3). Thus, in Proto-Semitic a dorsal triad comprising the voiced /g/, voiceless /k/ and emphatic /q/ phonemes is found (Watson 2002: 2). The latter phoneme in this dorsal triad is thought to have been realised as a velar ejective [kʰ] (Bush 2016: 7; 33). In Arabic, however, emphatic or glottalised consonants tended towards pharyngealisation or velarisation. In the case of *qāf*, the resulting product was – through the loss of the glottal feature – a voice neutral uvular stop [q], which, Blanc argues, had both voiced and voiceless allophones determined by their immediate environment. The voiced

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<sup>57</sup> Zaborski challenges the established view that the Proto-Semitic phoneme /g/ was realised only as a voiced velar stop [g], stating that ‘[t]here is no need to assume, and actually there is no proof, that the fronted allophones of /g/ appeared within Semitic for the first time in Proto-Arabic, or in some pre-CA dialects.’ (2007, II: 495).

<sup>58</sup> The occurrence of the same phenomenon in some North-Eastern Neo-Aramaic dialects was pointed out to me in a discussion with the Prof. Geoffrey Khan (Michaelmas term, October 2016). In the Jewish Neo-Aramaic dialect of Sulemaniyya and Ḥalabja /g/ is generally pronounced as a voiced palato-alveolar affricate [dʒ], with allophonic variants that include the palatal glide [j] (Khan 2004: 21–2). The fronting of /g/ has also occurred in the Neo-Aramaic dialect of Qaraqosh (Khan 2002: 26), yet in the Jewish dialect of Arbel, the fronted variants of /g/ are generally limited to loanwords; /g/ is generally pronounced as a voiced velar stop [g] (Khan 1999: 24–6).

<sup>59</sup> The shift of *qāf* [q] > [G] > [g] is generally termed a matter of voicing, however, it may be more accurately defined as voicing *and* movement in place of articulation from uvular to velar.

<sup>60</sup> The voicing of the phoneme /q/ > [g] is implied in Akkadian by the consistent lack of distinction drawn between the phonemes /q/ and /g/, which Edzard proposes may indicate the existence of variant reflexes of the two phonemes akin to that attested in contemporaneous spoken Arabic (2009, IV: 1-2). This goes against Blanc’s assertion, later reiterated by Hary, that Arabic ‘is the only Semitic language to exhibit... a general voicing of Semitic q to [g]’ (1969: 7; Hary 1996a: 155).

allophone [G] is thought to have developed into an independent phoneme in some dialects (1969: 28–9). The proximity in the place of articulation between the voiced uvular and voiced velar stops threatened to disrupt the balance of this dorsal triad: *qāf* and *ǧīm* risked becoming phonetically indistinguishable from one another. Thus, *ǧīm* moved forward, becoming palatalised, and later affricated, in order to maintain the phonetic distinction between the two consonantal phonemes (Blanc 1969: 28–9).

On the assumption that the voiced reflex of *qāf* ([g]) was the dominant pronunciation in all Arabic dialects, Cantineau proposes that the fronting of *ǧīm* become necessary due to the untenable semantic confusion created by homophones. Cantineau asserts that the voiceless variants of *qāf* ([k], [ʔ], [q]), common in contemporary Arabic dialects, were borrowed as the result of language contact with Aramaic speakers (1960: 175;<sup>61</sup> Blanc 1969: 8–9).

Despite Cantineau's suggestion to the contrary, the voicing of *qāf* neither is nor was as widespread a phenomenon as the fronting of *ǧīm* in spoken Arabic (Blanc 1969: 8). Indeed, dialects in which the reflex [g] (and its variants) coexist(s) with voiceless allophones of *qāf* ([k]; [ʔ]; [q]) abound (Blanc 1969: 7). Martinet acknowledges its limited diffusion when he states that the voicing of *qāf* > [g] occurs only in Bedouin dialects (cf. Zaborski 2007, II: 495). His theory concerning the origins of the fronted *ǧīm* rests on the assumption of the early development of *gāl* dialects; the voiced velar stop reflex of *qāf* predates the fronting of *ǧīm*, which became necessary due to misunderstandings caused by homophonous forms. Once the palatalized and affricated reflexes of *ǧīm* were established among speakers of *gāl* dialects they spread to the predominantly sedentary *qāl* dialect speakers, who adopted it without recourse to the voicing of *qāf* (Blanc 1969: 9).

The limitations of Cantineau and Martinet's theories have been aptly stated by Blanc (cf. 1969: 10–11), who favours the explanation of internal phonetic changes mentioned above. Blanc's explanation may, however, be further developed through typological comparisons with contemporary North-Eastern Neo-Aramaic (NENA) dialects.<sup>62</sup>

In NENA dialects, the unvoiced pharyngeal fricative /ħ/ generally merges with the unvoiced velar fricative /x/ (cf. Khan 1999: 35–6; 2002: 40–1; 2004: 33–4; 2008: 53–4, 62; 2009: 26–7; 2016b: 118–9; Greenblatt 2011: 40–1). However, in many dialects – such as the Jewish dialects of Qaraqosh,

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<sup>61</sup> Cantineau's 1960 article was originally published in *Bulletin de la Société de Linguistique de Paris* 43 (1946), pp. 93–140. This paper refers to its re-published form found in *Études de linguistique arabe: mémorial Jean Cantineau* (Paris: Librairie C. Klincksieck 1960), 165–204.

<sup>62</sup> I am indebted to Prof. Geoffrey Khan for this idea and for his generosity in allowing me to write about it here.

Sanandaj and Amədyā – the unvoiced pharyngeal fricative /ħ/ is retained in words of Aramaic origin which contain an emphatic consonantal phoneme. This phenomenon extends to words which contain *qof* (/q/), suggesting that the latter consonantal phoneme contains a pharyngealised feature which causes the unvoiced pharyngeal fricative /ħ/ to be preserved, e.g. *raħoqa* ‘far’; *ħaziqa* ‘strong’ (examples from Greenblatt 2011: 40; Khan 2016b: 115–7). In dialects in which this phenomenon occurs, *gimel* (/g/) is neither palatalised nor affricated (except in loanwords), but retains its original voiced velar stop pronunciation. In a few NENA dialects – such as Christian Urmi and Barwar – in which the movement in place of articulation of /ħ/ > [x] is ubiquitous (except in words of foreign origin), *gimel* is palatalised and occasionally affricated (Khan 2008: 30, 62; 2016b: 101–2).<sup>63</sup> This would suggest that in these dialects, *qof* has lost its pharyngealised element and the palatalisation of /g/ is linked to this loss of pharyngealisation of /q/.

Although the changes evident in the Barwar dialect appear to be incipient, they may enlighten us as to the relationship in Arabic dialects between the voicing and shift in place of articulation of *qāf* and the fronting of *ǧīm*, providing insight into these phonetic shifts, which occurred in some Arabic dialects more than a millennium ago. Was the palatalisation of *ǧīm* prompted by the loss of *qāf*’s pharyngealised feature in Arabic, rather than its voicing, as suggested by Blanc? Both the voicing and transition in place articulation of *qāf* may then have occurred after the palatalisation of *ǧīm*, filling the void left by *ǧīm*’s fronting.

In terms of chronology, Blanc proposes that the fronting of *ǧīm* may have been underway in the pre-Islamic period, but that it was certainly established by the time Sībawayhi (d. c. 793/6) composed his famous work *al-Kitāb* (1969: 29–30).<sup>64</sup> In this grammar, we find descriptions of three different pronunciations of *ǧīm*, which are interpreted by Blanc as: a voiced palatalised-velar stop [gʲ], deemed the ‘correct’ pronunciation by Sībawayhi;<sup>65</sup> a voiced velar stop [g]; and a voiced palato-alveolar fricative [ʒ]<sup>66</sup> (1969: 12).<sup>67</sup> This reading of Sībawayhi’s account of the acceptable pronunciation of *ǧīm* is shared by Cantineau (1960: 58) and Schaade (1911: 73 cited in Watson 2002: 3) and Zaborski

<sup>63</sup> This is not to suggest that the velarisation of /ħ/ and the fronting of /g/ are phenomena contingent on one another, merely that they may both be indicative of the phonetic status of /q/ in some NENA dialects.

<sup>64</sup> Sībawayhi’s *al-Kitāb* is generally considered to be the first and most comprehensive description of the CA language (Al-Ani 2008, III: 602).

<sup>65</sup> It is worth noting that while Sībawayhi prescribes more social value to one allophone than the other two mentioned in his description, he does not anchor any of them in specific geographical locations (Blanc 1969: 11) or give details of the extent of each allophone’s use.

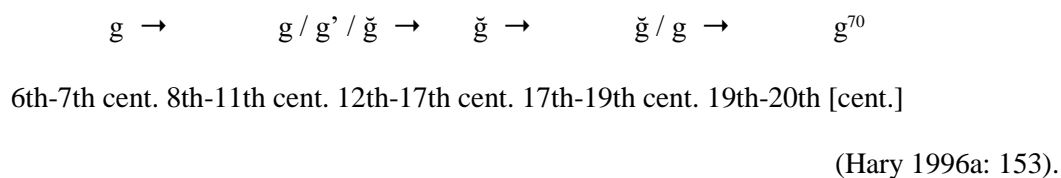
<sup>66</sup> Blanc uses the IPA symbol [ʒ] to denote a voiced palato-alveolar fricative (1969: 12), where here the symbol [ʒ] is used to denote the same phoneme.

<sup>67</sup> Blanc plays with the possibility that the two reflexes of *ǧīm* referred to by Sībawayhi may, in fact, be allophonic variants determined by their position within a word, rather than independent reflexes of *ǧīm* (1969: 12, n. 8; 18).

(2007, II: 495). Gairdner (1925: 23); Fischer and Jastrow (1980: 105); and Watson (1992: 73) (cited in Watson 2002: 3), however, favour the interpretation of a voiced palatal stop ([j]). Regardless of the slight dissonance in modern interpretations of this eighth-century description, it is apparent that the palatalisation of *ġīm* was not only established, but had also gained prestige among the Arab grammarians, at this time. The prestige of *ġīm*'s palatalised reflex is later reflected in the eleventh-century work of the Persian scholar and physician Ibn Sīna (Avicenna) (d. 1037), who refers to it as the standard pronunciation (Blanc 1969: 23). While the velar stop reflex of *ġīm* is attributed to a few geographical locations – namely in areas of Southern Yemen, Aden and Iraq – during the tenth–eleventh centuries, Blanc reports that no explicit mention is made of its occurrence in Egypt (1969: 23). This omission leads Blanc to assert that the voiced velar stop reflex in Egypt was superseded by the affricated and palatalized variants of *ġīm*.

Some twelve years after the publication of his influential 1969 paper, Blanc (1981) turns his attention to the specifics of the diachronic pronunciation of *ġīm* in Egyptian Arabic. This later paper centres its discussion of *ġīm* on its graphemic representation in the JA extracts of *Darxe No'am* (Venice, 1697). With reference to other JA literary texts published by Goitein (1972) and Lebedev (1965), contemporaneous Muslim Middle Arabic literary texts and eighteenth–twentieth-century European accounts of spoken Egyptian Arabic,<sup>68</sup> Blanc concludes that there is no evidence for the plosive pronunciation of *ġīm* in MCA between the twelfth and seventeenth centuries (1981: 192).<sup>69</sup> Blanc traces the development of the voiced velar stop reflex backwards from early twentieth-century sources to its burgeoning in the seventeenth century (1981: 191–193), yet omits an explicit linguistic explanation (such as migration, diffusion or language contact) for this phenomenon.

Blanc's interpretation of the pronunciation of *ġīm* in medieval Egypt is further developed by Hary (1996a), who offers the following chronology by way of explanation:



<sup>68</sup> Both Blanc (1981) and Hary (1996a) rely on European accounts of spoken Egyptian Arabic between eighteenth and nineteenth centuries. It is beyond the scope of this study to examine these accounts (cf. Woidich and Zack (2009) for a detailed exploration of the limitations of such material).

<sup>69</sup> Blanc arrives at this conclusion, in part, on the grounds that after the twelfth century the *gimel* for *ġīm* is written consistently with a sub-linear dot, the use of which becomes more sporadic after the seventeenth century, until the nineteenth century when it ceases to be used all-together (see Blanc 1981: 187, n.6). This generalisation regarding the application of the diacritic is challenged here.

<sup>70</sup> The symbols used by Hary to transliterate the reflexes of *ġīm* in the diagram, which is reproduced here, correspond to the following IPA symbols g = [g]; g' = [gʰ]; ġ = [dʒ] (1996a: 153).



As the above diagram demonstrates, Hary proposes that the variants of *ǧīm* were in a ‘state of fluctuation’ between the eighth and eleventh centuries (1996a: 156). This uncertain phonological situation was resolved, according to Hary, by the twelfth century, when the voiced palato-alveolar affricate [dʒ] allophone triumphed, becoming the universal pronunciation among Egyptian Arabic speakers until the seventeenth century. Unlike Blanc, Hary does provide a reason for this phonetic shift, suggesting that a small community of Egyptian Arabic speakers used the velar stop pronunciation in seventeenth-century Egypt. The pronunciation gained social value and was gradually, throughout the early to mid-eighteenth century, adopted in urban centres such as Cairo, Damietta and, eventually, Alexandria (1996a: 165). Where this community with its singular phonetic reflex may have sprung from is not elucidated.

In 1985, Behnstedt and Woidich produced the most comprehensive maps of Egyptian dialects published to date. Their findings reveal a ‘corridor’, stretching from Banī Swayf to Damietta in which the distinctive Cairene vernacular endures. This ‘corridor’ has been identified as a significant medieval trade route, leading from the capital Cairo to a major commercial hub, the seaport town of Damietta. This dialectal situation was initially interpreted by Behnstedt and Woidich (1985) within the framework of the diffusion model: the Cairene dialect spread from Cairo to Damietta via the commercial stopping places situated in between these two major urban centres. Then, once the distinctive Cairene dialect had become established in these areas, it was adopted by speakers in the surrounding provinces (Behnstedt 2006, I: 588–9). It has since been suggested that this ‘corridor’ may in fact constitute a ‘relic area’ (Woidich 1996: 20 (accessed online: 11/01/17); Behnstedt 2006, I: 589) in which the pronunciation of *ǧīm* as a voiced velar stop was ubiquitous. This phonetic uniformity was threatened from both the west<sup>71</sup> and east<sup>72</sup> by nomadic communities in which the affricate pronunciation of *ǧīm* predominated. Woidich suggests that the pressure of phonological change exerted on both the western and eastern fronts was successfully resisted along this trade route thanks to the social prestige and influence attached to the Cairene dialect (1996: 19 (accessed online: 11/01/17)).

Whether one favours the interpretation of ‘innovation’, in which the Cairene dialect spread to

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<sup>71</sup> Behnstedt states that the unceasing migration of Western Bedouin to and from Libya, Tunisia and the Mağrib between the twelfth and eighteenth centuries accounts for the fronted pronunciation of *ǧīm* in western areas of Egypt (2006, I: 588–9).

<sup>72</sup> There is substantial evidence – shown in map 552 in Behnstedt and Woidich 1985, and evident from Syro-Palestinian elements in eastern Egyptian dialects – to support the assertion of a constant flow of Bedouin migrants from Palestine to the eastern provinces of Egypt (Behnstedt 2006, I: 589). This would account for the presence of fronted variants of *ǧīm* in these areas.

commercially important urban areas, or of the preservation of the ‘original’ dialect brought to the region at the time of the Arab conquests, both explanations testify to the old and influential nature of the MCA dialect and the continuous phonetic realisation of *ḡīm* as a voiced velar stop (Woidich 1996: 19-20 (accessed online: 11/01/17)).

Behnstedt and Woidich’s theory constitutes an alternative interpretation of the historical development of *ḡīm*’s historical development in Egypt from those of Blanc and Hary. The linguistic situation described by Behnstedt and Woidich in Egypt between the eighth and eleventh centuries (and later) is not that of a ‘state of fluctuation’ brought to resolution with the dominance of the affricate reflex, but rather the concurrence of two (or more) different variants in a manner not dissimilar to that which we find today.

#### 2.1.2.2. JA orthographic representations of *ḡīm*

As has already been established, the dominance of the fronted reflexes of *ḡīm* between the twelfth and early nineteenth centuries in Egypt has been argued for partly on the basis of JA orthographic practices during those centuries and their potential phonetic implications.

The approach advocated by Blanc (1981) and Hary (1996a) is applied here across a sample corpus of JA letters and folk narratives, spanning a thousand years. In addition to the fifteenth–nineteenth-century letter and folk tale corpora studied in this thesis, this section examines two documentary texts and (where available) two literary texts<sup>73</sup> from the eighth/ninth century, eleventh century, and thirteenth century (§2.1.2.2.1) for the presence or absence of a diacritic below or above *gimel* denoting *ḡīm*.<sup>74</sup> In §2.1.2.2.2, substitutions of *gimel* for *ḡīm* with other Hebrew graphemes, instances of assimilation, and examples of metathesis are re-analysed in relation to new evidence. The purpose of this approach is twofold: to re-assess the phonetic significance of the diacritic in relation to *ḡīm*; and to redirect scholarly attention to those areas of orthography which may yield more definitive, if limited, phonological data.

##### 2.1.2.2.1. The diacritic

The most common representation of *ḡīm* in extant JA manuscripts of all genres is with the Hebrew grapheme *gimel*, which also serves to denote the Arabic grapheme *ḡayn* (cf. §2.1.1.4). A diacritic is often inserted below *gimel* for *ḡīm* to facilitate its differentiation from *ḡayn*. The use of the diacritic

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<sup>73</sup> Each manuscript referred to here has been examined in its original form, with transcriptions made from the original text and then, where possible, checked against existing transcriptions.

with this Hebrew grapheme when indicating *ḡīm*, however, has been shown to alter over the millennium of documented written JA. The variation in the use of the diacritic has been interpreted by scholars such as Blanc (1969, 1981) and Hary (1996a) as phonologically significant, reflecting the vernacular pronunciation of *ḡīm*. The prevalent presence of the sub-linear diacritic is thought to indicate a voiced palato-alveolar affricate [dʒ] pronunciation, while the consistent omission of a dot is interpreted as a voiced velar stop [g] reflex (Blanc 1981: 189; Hary 1996a: 154).

As such, the diacritic forms a fundamental facet of Blanc's (1981), and later Hary's (1996a) methodology for reconstructing the historical development of *ḡīm* in Egyptian spoken Arabic. It played a crucial role in establishing the now-prevailing consensus among JA scholars of *ḡīm*'s affricate pronunciation in Egypt in the twelfth–seventeenth centuries. The perceived trend for the increasing omission of the diacritic with *gimel* for *ḡīm* in JA texts from the seventeenth century onwards has contributed to the understanding among scholars of JA – although contested by Arabic dialectologists (cf. Woidich 1996: 8, 19–20 (accessed online: 11/01/17)); Behnstedt 2006, I: 588–589; Woidich & Zack 2009: 56) – that the contemporary voiced velar stop pronunciation of *ḡīm* dominant in many areas of Egypt today is a recent phenomenon.

The phonetic premise exhibited in the choice of Hebrew graphemes in the adaptation of the Hebrew script for the purposes of JA writing during the early JA period is also thought to apply to the representation of *ḡīm*. The use of an unadorned Hebrew *gimel* – the reflex of which is a voiced velar stop [g]<sup>75</sup> – to denote *ḡīm* in early JA documentary papyri is, therefore, often understood to indicate that the voiced velar stop reflex of the Hebrew phoneme was also the reflex of *ḡīm* during this period. If the phonetic reflex of *ḡīm* was fronted, then a combination of the Hebrew graphemes *dalet* and *šin*, *sin* or *zayin* in place of *gimel* would be expected (Blau and Hopkins 1987: 129). However, Blau and Hopkins, in their extensive analysis of early JA representations of *ḡīm* advise caution: the writers of these eighth/ninth-century letters may have been aware of the shared etymological heritage of the two graphemes *gimel* and *ḡīm*, which would explain their preference for *gimel* (Blau and Hopkins 1987: 130–1). In the choice of *gimel* for *ḡīm* in pre-tenth-century texts we perhaps witness the burgeoning of graphical representation that came to dominate JA writings for centuries to come. In light of the consistent phonetic renderings of other Arabic graphemes, this is undoubtedly speculative. However, the repeated appearance of *דשׁי* *dšyš* ‘ground, coarse wheat’ (CA: *ḡaššūn*) in one of the early business letters<sup>76</sup> casts doubt on the view that there was a single voiced velar stop [g] reflex for *ḡīm* in

<sup>74</sup> Numerals, reconstructions and Hebrew words have been excluded from the data.

<sup>75</sup> In Hebrew (according to the Tiberian reading tradition) *gimel* has two pronunciations: when written with *dageš* (גּ) it is realised as a voiced velar stop [g]; but when it is unmarked (ג) the reflex is a voiced uvular fricative [ʁ] (Khan 2013b) (accessed online: 31/10/16)).

<sup>76</sup> The early JA business letter referred to here is no. XIII, 5, 7, 9, 10, 18 in Blau and Hopkins, which

eighth/ninth-century Egypt. It suggests that the voiced alveolar stop [d] reflex for *ḡīm* may have been in circulation at the time of writing. While, Blau and Hopkins argue, the [d] is not synchronically incompatible with a voiced velar stop [g], it cannot be understood as evidence of affricated variants of *ḡīm*: it attests to an earlier phonetic shift of [ʒ] > [d] (Blau and Hopkins 1987: 130-31).<sup>77</sup> The denotation of *ḡīm* with *gimel* without a diacritic in pre-tenth-century JA writing cannot be unequivocally understood as indicating voiced velar stop pronunciation.

The adjustment of the Hebrew script, which came to dominate JA between the tenth and fifteenth centuries, is well documented as being founded on graphical principles. The denotation of *ḡīm* throughout this period and in the majority of genres is generally recorded as a *gimel* with a sub-linear dot (ֿ). This constitutes direct graphic imitation of the diacritic exhibited in the Arabic grapheme *ḡīm* (جيم). However, the two eleventh-century documentary texts T-S 8.18<sup>78</sup> and MS Heb.d.47/62<sup>79</sup> do not conform to this trend: in both letters the *gimel* representing *ḡīm* is always unmarked. The two contemporaneous narratives T-S AS 161.32 ('The Story of Baḥīra')<sup>80</sup> and T-S NS 298.55 ('The History of Yešū')<sup>81</sup> display more variation in their representations of *ḡīm*. In the former text, 40 per cent of occurrences of *gimel* for *ḡīm* are written without a dot, while 60 per cent are written with a supra-linear dot. In the latter, 90 per cent of the occurrences of *gimel* for *ḡīm* are written without a diacritic, while 10 per cent are marked with a supra-linear dot. The marking of *gimel* for *ḡīm* in these four eleventh-century texts may be regarded as somewhat sporadic. The position of the diacritic above, rather than below the grapheme, as is generally suggested, is also worthy of note.

The two thirteenth-century letters GW VIII<sup>82</sup> and T-S 12.69<sup>83</sup> vary greatly in their use of the diacritic.

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corresponds to East Berlin ms 10599 (1987: 117–20).

<sup>77</sup> The CA form *ḡašš* has been completely supplanted by the colloquial form *dišš* in contemporary Egyptian Arabic (Hinds and Badawi 1986: 289).

<sup>78</sup> CUL T-S 8.18 is a business letter written from Nissīm b. Ḥalfon to Nhūrāy b. Nissīm dated to 1046. A transcription and Hebrew translation of the manuscript was produced by Gil (1997: II, no. 582). The letter, comprising one folio, was written on paper and is in good condition. The recto contains sixteen lines, while the verso contains fourteen lines, with writing in margins on both recto and verso.

<sup>79</sup> Bodl. MS Heb.d.47/62 is a business letter sent from Ephraim b. Ismā'īl in Alexandria to Joseph b. 'Awkal in Fustāṭ. Gil produced a transcription and Hebrew translation of the letter in his volume of traders' letters (1997: I, no. 184). The manuscript is well preserved. It comprises one folio with twenty-two lines on recto and three lines on verso.

<sup>80</sup> T-S AS 161.32: a JA version of 'The Story of Baḥīra', which has been dated to c. 1020–1045. This paper fragment comprises two folios of thirteen--fourteen lines on both recto and verso. However, it is quite badly damaged and difficult to read.

<sup>81</sup> T-S NS 298.55: This JA manuscript contains the tale entitled 'The History of Yešū'. It has been dated to c. 1000–1100. It comprises two folios of twenty-six and twenty-seven lines, respectively.

<sup>82</sup> GW VIII is a letter dated explicitly to the 8th of Marḥešwan 1543 (1231). The manuscript comprises three texts composed by three different hands. It was published with photographs, a transcription and translation by Gottheil & Worrell (1927).

<sup>83</sup> T-S 12.69: a letter from Solomon b. Elijah, the son of an Egyptian Jewish judge, to his father-in-law Abū al-

In GW VIII, *gimel* for *ḡīm* is never marked. However, in the letter T-S 12.69, 62.5 per cent of occurrences of *gimel* for *ḡīm* are marked with a supra-linear dot, while 37.5 per cent remain unmarked.<sup>84</sup>

Turning to the late fifteenth-century letters, in 66.7 per cent of occurrences of *gimel* for *ḡīm* in MS Heb.c.72/13 the grapheme is marked with a sub-linear dot, while in 33.3 per cent *gimel* is left unmarked. The contemporaneous letter T-S 13J26.7 displays the exact same distribution of the diacritic in relation to *gimel* denoting *ḡīm* (66.7 per cent) as the previous letter. Yet, in this letter, the diacritic is written above, rather than below, the grapheme. In MS Heb.c.72/39, however, the use of the diacritic – if not its position – is relatively consistent; the diacritic is omitted in only four per cent of instances. *Gimel* for *ḡīm* appears with a supra-linear dot in 88 per cent of occurrences, while in eight per cent the diacritic is written below the grapheme. The well-preserved Maḡribi letter MS Heb.c.72/18, written from Syracuse, Sicily, exhibits many features – such as the separation of the definite article from the noun it modifies and the frequent *plene* representation of the Arabic short vowel *ḍamma* with Hebrew *vav* – which are characteristic of eighteenth/nineteenth-centuries JA compositions. In this letter, *gimel* is always written without a sub- or supra-linear dot when representing either *ḡīm* or *ḡayn*, a practice that is often noted as characteristic of late texts. The difference in the denotation of *ḡīm* found in the contemporaneous letters MS Heb.c.72/18, as compared to MS Heb.c.72/13, T-S 13J26.7 and MS Heb.c.72/39, is noteworthy. It suggests that the conservative, graphical orthography favoured in Egypt up to and including the fifteenth century (and possibly sixteenth–seventeenth centuries) was superseded by the orthographical innovations of western JA writing habits, including the tendency evident in nineteenth-century documentary material to write *gimel* for *ḡīm* without a dot.

The roughly contemporaneous folk narratives Evr.Arab.II 852 and Evr.Arab.II 1528 and Evr.Arab.I 2996 differ noticeably in their respective representations of *ḡīm*. In the former, *gimel* is marked with a sub-linear dot in only 11.7 per cent of cases, while the remaining 88.3 per cent of occurrences are left unmarked. In the latter two texts the opposite occurs: *gimel* for *ḡīm* is marked with a sub-linear dot in 88.7 per cent of occurrences and 99 per cent, respectively. Furthermore, while Evr.Arab.II 852 displays infrequent marking of the *gimel* for *ḡīm*, it contains several examples in which the Hebrew graphemes *šin* and *zayin* are used to represent *ḡīm* in place of *gimel*. Yet, in Evr.Arab.II 1528 in which the *gimel* for *ḡīm* is regularly marked with a dot, *kaf* appears as a substitute for *gimel* (these examples are discussed below). From this one may infer that the presence of a dot above *gimel* for

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Faraḡ who was based in Alexandria. A transcription and English translation of this thirteenth-century letter may be found in Motzkin's PhD thesis (1965).

<sup>84</sup> Unfortunately, I have been unable to locate Egyptian JA folk narratives that can be confidently dated to the

*ḡīm* may be a purely graphical, rather than phonetic, phenomenon in these two literary texts.

The seventeenth/eighteenth-century folk tale AIU VII C.16 displays a fairly consistent marking of *gimel* for *ḡīm* with a supra-linear dot in 91.3 per cent of cases. In the folk tale T-S Ar. 37.39, however, a supra-linear diacritic appears in only 2.4 per cent of cases, while the remaining occurrences of *gimel* for *ḡīm* are unadorned. Neither the folk tale T-S Ar. 46.10 nor the later Cairo JC 104 exhibit a diacritic above or below *gimel* for *ḡīm*. However, the folk narrative BnF Hébreu 583 displays frequent, if not entirely consistent, marking of *gimel* for *ḡīm* with a supra-linear dot; 79.5 per cent of occurrences display a supra-linear dot, while 20.5 per cent are left unmarked.

The absence of the diacritic in the nineteenth-century letters Rylands L192, T-S 13J25.24 and T-S 10J16.35 is common to all three texts.

The most striking feature of these findings is the lack of the diacritic in the fourteenth/fifteenth-century folk narrative Evr.Arab.II 852, in which *gimel* for *ḡīm* is sometimes replaced by the Hebrew grapheme *šin*, indicating a fronted *ḡīm* reflex. This, when coupled with the more consistent use of the diacritic in the later fifteenth/sixteenth-century text Evr.Arab.II 1528 in which the Hebrew grapheme *kaf* is used to indicate *ḡīm*, is clear evidence against the interpretation of the diacritic as having fundamental phonetic significance.

The interpretation of the diacritic as serving a predominantly graphical rather than phonetic function is further compounded by the manner of its use in the seventeenth/eighteenth-century folk tales AIU VII.C.16, nineteenth-century folk narrative BnF Hébreu 583, and to a lesser extent, T-S Ar. 37.39, in which a supra-linear diacritic is inserted above *gimel* for *ḡīm*, a practice which is often said to have ceased by this period of JA writing. The inclusion of the diacritic in folk tales of this period and its omission in contemporaneous letters also suggest that, like the use of the diacritic in relation to *peh* for *fā'*, *kaf* for *ḥā'* and *dalet* for *ḏāl*, the diacritical dot may have been regarded as a literary device or archaising feature, rather than an indicator of phonetic value. The variation in the position of the diacritic in these texts is also worthy of note, suggesting that its use is a matter of personal discretion rather than a general rule.

Genre & Date	Classmark	<i>gimel</i> for <i>ġīm</i>	Diacritic		Without diacritic
			sub-linear	supra-linear	
9th c. letter	Vienna H33	6	0	0	6
9th c. letter	Vienna H34	19	0	0	19
9th c. folk tale	N/A				
9th c. folk tale	N/A				
11th c. letter	CUL T-S 8.18	12	0	0	12
11th c. letter	Bodl. MS Heb.d.47/62	11	0	0	11
11th c. folk tale	CUL T-S NS 298.55	20	0	2	18
11th c. folk tale	CUL T-S AS 161.32	5	0	3	2
13th c. letter	CUL T-S 12.69	16	0	10	6
13th c. letter	GW VIII	9	0	0	9
13th c. folk tale	N/A				
13th c. folk tale	N/A				
15th c. folk tale	Firk. Evr.Arab.II 852	120	14	0	106
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	71	62	1	8
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	113	113	0	0
late 15th c. letter	Bodl. MS Heb.c.72/13	8	6	0	2
late 15th c. letter	Bodl. MS Heb.c.72/39	25	2	22	1

late 15th c. letter	CUL T-S 13J26.7	9	0	6	3
late 15th c. letter	Bodl. MS Heb.c.72/18	16	0	0	16
17th/18th c. (?) folk tale	AIU VII.C.16	23	0	21	2
18th/19th c. folk tale	CUL T-S Ar. 37.39	83	0	2	81
18th/19th c. folk tale	CUL T-S Ar. 46.10	21	1	0	20
19th c. folk tale	BnF Hébreu 583	41	0	33	8
19th c. folk tale	Cairo JC 104	195	0	0	195
18th/19th c. letter	CUL T-S 13J25.24	26	0	0	26
18th/19th c. letter	Man. Rylands L192	10	0	0	10
18th/19th c. letter	CUL T-S 10J16.35	14	0	0	14

Table 1.5. *gimel* for *ġīm*

### *Summary*

The diacritic is absent in the letters examined here until its appearance in one of the thirteenth-century texts, T-S 12.69, where it is used erratically. A supra-linear dot appears in the eleventh-century folk narratives T-S AS 161.32 and TS NS 298.55, but, again, its use cannot be described as consistent. More striking is the lack of the diacritic in the fourteenth/fifteenth-century folk narrative Evr.Arab.II 852, in which *gimel* for *ġīm* is sometimes replaced by the Hebrew grapheme *šin*, indicating a fronted

*ḡīm* reflex, and the more consistent use of the diacritic in the later fifteenth/sixteenth-century text Evr.Arab.II 1528, in which the Hebrew grapheme *kaf* is used to indicate *ḡīm*, suggesting that the diacritic did not have phonetic significance, at least as it was used in these texts.

The interpretation of the diacritic as serving a predominantly graphical rather than phonetic function is further compounded by the manner of its use in the nineteenth-century folk narrative BnF Hébreu 583. A dot is frequently used above *gimel* to denote *ḡīm* in this text, a practice which is often said to have ceased by this period of JA writing. Furthermore, the grapheme *peh* representing the Arabic grapheme *fā'* is also written with a supra-linear dot in the three folk narratives referred to here (Cairo JC 104, BnF Hébreu 583 and AIU VII C.16) and infrequently in both the contemporaneous letters Rylands L192 and T-S 13J25.24.

This brief overview of the use of the diacritic with *gimel* to denote the Arabic grapheme *ḡīm* in Egyptian JA literary and documentary texts between the ninth and nineteenth centuries reveals a great degree of inconsistency in the use of the diacritic in all periods. While this study is limited in both the types of genre and number of texts examined, it casts serious doubt on the attribution of phonetic significance to the diacritic. The erratic nature of its use and the lack of discernible phonetic value point to its inaptness as a source from which to reconstruct the phonetic realisations of *ḡīm* in Egypt between the ninth and nineteenth centuries.

#### 2.1.2.2.2. Assimilation and metathesis

The second approach to the reconstruction of *ḡīm*'s historical development from JA sources relies on instances of assimilation, metathesis and graphemic substitutions.

The most commonly cited example in support of palatalised pronunciation of *ḡīm* is פַּי *wišš* 'face' (CA: *waḡhun*), which Palva refers to as being the 'result of reciprocal assimilation' (2008a: 95). This form, which occurs relatively frequently in Egyptian JA and Middle Arabic texts alike is also mentioned by Kaye (1972a: 37–8), Blanc (1981: 190), Davies (1981: 68–9), Hary (1996a: 160), Palva (2008a: 94–5) and Hasson-Kenat (2016: 83–5) in their respective analyses of *ḡīm*.<sup>85</sup> Blanc breaks down the process of assimilation as follows:

[wiḡh] > [wižh] > [wišh] > [wišš] (Blanc 1981: 190)

This phonetic development may be best described in two stages: (i) anticipatory devoicing from

<sup>85</sup> These scholars vary in the weight which they grant this phenomenon: Blanc (1981: 190) offers it confidently as evidence of affricated pronunciation, while Palva (2008a: 95) and Hasson-Kenat (2016) explicitly state its



/wižh/ > /wišh/ (the unvoiced glottal fricative [h] causes the voiced palato-alveolar fricative [ʒ] > an unvoiced palato-alveolar fricative [ʃ]); (ii) lag assimilation of /h/ to /š/ (/š + h/ > /šš/).<sup>86</sup> As is evident from both Blanc's diagram and the more detailed analysis offered here, the fronted pronunciation of *ḡīm* as the origin of this phonological development is generally assumed on the basis that assimilation between an unvoiced glottal fricative [h] and a voiced palato-alveolar fricative [ʒ] (Kaye 1972a: 37–8) is more probable than with a voiced velar stop [g] (Blanc 1981: 190). This form has, therefore, been referenced extensively as an indication of the prominence of fronted reflex(es) of *ḡīm* in Egyptian dialects, specifically by Blanc (1981: 189–90), Hary (1996a: 160) and Palva (2008a: 94–5) in support of the affricated pronunciation of *ḡīm*. However, this example and the majority of examples of assimilation referred to by these scholars indicate not the voiced palato-alveolar affricate [dʒ] reflex or palatalised velar stop reflexes [gʲ]~[dʲ] found in Upper Egyptian dialects, but the voiced palato-alveolar fricative [ʒ] variant of *ḡīm*, which is characteristic of contemporary Magribian, Tunisian and urban Syrian and Palestinian dialects. This perhaps lends greater credibility to the theory put forward by Behnstedt and Woidich (1985), Behnstedt (2006) and Woidich (1996), that the fronted reflexes of *ḡīm* found in some contemporary Egyptian dialects in the east, west and Upper Egypt are the result of migration from Libya, Tunisia and the Magrib in the west and Syria and Palestine in the east.

Attested in all the texts referred to by these scholars is the simultaneous occurrence of the original and dialectal forms of this noun (CA: *waḡhun*; Egyptian Colloquial Arabic (henceforth (ECA): *wagh*). As Palva points out, this situation – the concurrence of the sibilant and plosive forms – is also found in MCA (2008a: 95).<sup>87</sup> Thus, while occurrences of *wšš* undoubtedly suggest that fronted /g/ was present in Egypt during the medieval and late medieval periods, it is doubtful that it constituted the universal form of pronunciation. Palva suggests that the palatalised variant may be either the preservation of an inherited form of pronunciation, or a relic of language contact (2008a: 95). Kaye also intimates the latter suggestion when he speculates that it may be a loanword from a Syro-Palestinian dialect (1972a: 37). It seems safe to conclude that this dialectal form of pronunciation of the noun cannot be understood as concrete proof of the ubiquitous fronting of *ḡīm*.

Further evidence of the fronted *ḡīm* reflex in the form of assimilation is the representation of *ḡīm* with the Hebrew voiced alveolar fricative *zayin* [z], which occurs in the seventeenth/eighteenth-century

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limitations.

<sup>86</sup> I am grateful to Dr. Aaron Hornkohl for his generosity in discussing with me aspects of this, and other phonological and phonetic processes encountered in the course of writing this section of the thesis (Michaelmas term, 2016).

<sup>87</sup> Hinds and Badawi attest to the fact that both *wagh* pl. *wuḡūh* 'face, faces' (Hinds and Badawi 1986: 925); *wišš* pl. *wuššūš* (Hinds and Badawi 1986: 939) coexist in present-day MCA. Behnstedt and Woidich further illuminate the contemporary distribution of the two forms in their Egyptian dialect maps (1985: maps 480, 482).

folk narrative Evr.Arab.II 1536, e.g., עזוז 'zwz 'old woman' (Evr.Arab.II 1536, 2v.6) (CA: 'ağūzatur) (Palva 2008a: 95; cf. Lebedev 1965: 526; Blanc 1981: 190). Palva describes this phenomenon as 'the result of regressive assimilation of an affricated variant of *ḡīm* – either *ḡ* (j) [[dʒ]] or *ḡ* (ž) [[ʒ]] – to the last phoneme of the syllable' (2008a: 95). As with the previous example of assimilation mentioned by these scholars and examined here, either a voiced alveolar fricative [z] or voiced palato-alveolar fricative [ʒ] is implied here rather than the voiced palato-alveolar affricate [dʒ] reflex advocated by Blanc, Hary and Palva. The spelling 'zwzh for 'ağūza is attested in modern Tunisian and Libyan dialects and may therefore constitute a loanword or borrowing resulting from language contact. It does not occur in present-day MCA.

Another example frequently mentioned in analyses of *ḡīm* is the VIIIth form of the verb *ḡm* 'in which the *ḡīm* is represented by the Hebrew grapheme *šin*, 'štm 'to gather, meet' (CA: 'iğtama'a). This verb form occurs, albeit rarely, in eleventh-century Egyptian letters from the Cairo Genizah collections, e.g., נשתמע *nštm* 'We meet' (T-S 8J26.13, 19); אשתמע *'štm* 'I met' (Dropsie 399, 9); אלאשתמאע *'l- 'štm* 'the meeting' (T-S 13J17.11, 4) (examples from Wagner 2010: 35–6).<sup>88</sup> It is also found in the fourteenth-century folk narrative mentioned above, e.g., וואשתמע *w'štm* 'and he gathered' (Evr.Arab.II 852, 8r.9); פשתמע *fštm* 'then I gathered' (Evr.Arab.II 852, 12r.11) (examples from Palva 2008b: 387).<sup>89</sup> The use of *šin* in this context suggests that the intended reflex of *ḡīm* is a voiceless palato-alveolar fricative [ʃ], resulting from a process of devoicing caused by the following voiceless alveolar stop [t] (Zaborski 2007, II: 494). The assimilation exhibited here further supports the reconstruction of a voiced palato-alveolar fricative [ʒ] reflex for this period, rather than the affricate variant proposed by Blanc, Hary and Palva.

The CA verb *zāḡa*, *yazūḡu* 'to get married' is found in MCA (*zwg*) alongside the metathesised form of the root: *gwz*. The folk narrative Evr.Arab.II 1536 contains examples of both the original and metathesised forms, e.g., אגוז 'ḡwz 'I marry off' (Evr.Arab.II 1536, 2v.16; 6v.9); ואגוזזה *w'ḡwzh* 'and he married her' (Evr.Arab.II 1536, 8v.14); and אזוג *'azwḡ* 'I marry off' (Evr.Arab.II 1536, 3r.2). Palva cites these examples as further evidence of affricate pronunciation (2008a: 95), doubtless on an aural or perceptual basis; two sounds that are alike in terms of manner or place of articulation, or sonorancy are sometimes prone to metathesis (Hume 2006: 507). Palva's use of this example, therefore, both presumes and perpetuates the reading of a universal fronted pronunciation of *ḡīm*. There are other

<sup>88</sup> According to Wagner's diachronic analysis of JA letters from the Cairo Genizah collections, the representation of *ḡīm* with *gimel* and a diacritic occurs only in the eleventh-century Egyptian letters and the unidentified corpus of the same period. It is not recorded as occurring at all in the later texts examined in her extensive documentary corpus (2010: 36; 40).

<sup>89</sup> Davies mentions a different example of the same phenomenon in a Middle Arabic text in which the *ḡīm* is replaced by a *šin* in the VIIIth form: *ištarr* (CA: 'iğtarra) 'to chew the cud' (i.e. 'to ruminate') (example from Davies 1981: 69).

motivations for metathesis, however, which may be equally apt in this context. An initial weak consonant – such as a fricative or sonorant – is more prone to be displaced by a strong consonant – such as a plosive – on the basis that a strong consonant is less susceptible to ambiguity (Hume 2006: 508). If the *ḡīm* of the CA form *zwḡ* was pronounced as it is in MCA ([g]), then as a strong, plosive sound its metathesis to the word-initial position, replacing the weaker voiced alveolar fricative [z] reflex to avoid ambiguity, may also be regarded as a plausible explanation. Neither interpretation is definitive. Yet, the continued coexistence of the original and metathesised forms of the root in MCA suggests that the latter is just as probable as the former.<sup>90</sup>

There is one occurrence in the fifteenth/sixteenth-century folk narrative Evr.Arab.II 1528 in which the *gimel* for *ḡīm* is substituted not with a sibilant fricative but with the Hebrew voiceless velar stop *kaf* [k]; אלתאך 'l-t'k 'the crown' (3r.7), corresponding to אלתאג 'l-t'g 'the crown' (Evr.Arab.II 852, 10r.8) (CA: *al-tāḡu*). The denotation of *ḡīm* with *kaf* in this fifteenth/sixteenth-century manuscript suggests that the voiced velar stop [g] reflex is older in Egypt than has previously been thought.

The evidence suggested by these variant representations of *ḡīm* indicate the existence of fricative reflexes of *ḡīm*, rather than the affricated variant proposed by Blanc, Hary and Palva. It is worth noting, however, that these occurrences are limited to eleventh-century letters and two fifteenth/sixteenth-century folk narratives (Evr.Arab.II 852 and Evr.Arab.II 1536), and do not necessarily preclude the coexistence of the voiced velar stop [g] reflex, as demonstrated by the use of *kaf* to denote *ḡīm* in the folk narrative Evr.Arab.II 1528. In light of these various representations of *ḡīm*, I tentatively suggest that the linguistic situation in Egypt with regard to the phonetic realisation of *ḡīm* as represented in JA texts was more varied and complex than is implied in previous analyses of the issue.<sup>91</sup>

### 2.1.3. Graphemic substitutions, *tafḥīm* and *tarqīq*

The orthography of JA offers occasional glimpses into the phonology of spoken Arabic, or more accurately, the reading tradition of a given text. Deviations in the representation of Arabic graphemes, in which the expected Hebrew character is replaced with another, may hint at the historical phonetic

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<sup>90</sup> The phonological metathesis of the form *zwḡ* > *ḡwz* is also attested in Levantine Arabic (albeit less frequently than in MCA), in which *ḡīm* is predominantly pronounced as a voiced palato-alveolar affricate [dʒ] or as a voiced palato-alveolar fricative [ʒ].

<sup>91</sup> One possible reason for the variations in the representations of *ḡīm* found in these texts may be that they represent the variant reading traditions from different geographical regions in Egypt. In the case of folk narratives, this is difficult to assess, as the geographical and temporal origin of a given narrative are extremely difficult to ascertain with any confidence.

realisations of individual phonemes, segments of a word, or occasionally an entire phonological word. Variations in graphemic representations and their potential phonetic implications are explored in §2.1.3.1. The contrasting phenomena of *tafḥīm* and *tarqīq* are also often revealed in written JA through just such graphemic substitutions. *Tafḥīm* (cf. §2.1.3.2) (also referred to as *mufahḥama*) is a term employed by the Arab grammarians to describe the diffusion of ‘emphasis’ (in contemporary scholarship this is now also referred to either as a pharyngealised, velarised or uvularised secondary feature) from a single ‘emphatic’ phoneme to adjacent vowel(s) and consonant(s). The direction of this emphatic diffusion may be either regressive or progressive, affecting the pronunciation of an adjacent syllable or of an entire word (Davies 1995: 466; 2009, IV: 637; Watson 1999: 289-90). *Tarqīq* (cf. §2.1.3.3) (or *muraqqaq*) refers to the opposing phenomenon in which ‘emphasis’ is lost.

In CA there are four primary emphatic phonemes: /s, d, t, ð (z)/ (Al-Ani 1970: 44; Fischer 2002: 19, §31). The exact nature of the secondary articulation of the emphatics is by no means a decided matter (Tamimi and Heselwood 2011: 166); it is variably described in contemporary scholarship as velarisation [s<sup>v</sup>, d<sup>v</sup>, t<sup>v</sup>, ð<sup>v</sup> or z<sup>v</sup>] (Fischer 2002: 19, §31), pharyngealisation [s<sup>ɕ</sup>, d<sup>ɕ</sup>, t<sup>ɕ</sup>, ð<sup>ɕ</sup> or z<sup>ɕ</sup>] (Davies 1995: 465; Watson 2002: 43) or uvularisation (Zawaydeh and de Jong 2011: 257).<sup>92</sup> In recent descriptions of MCA emphatic coronals, /s, d, t, z/ have been identified as the extant phonemes and described as pharyngealised (Watson 2002: 43).

Each of these emphatic coronal consonants has a ‘plain’ counterpart /s, d, t, ð/. In modern dialectal Arabic, there is much variation in the realisation of these phonemes and in the number of phonemes regarded as emphatic (Tamimi and Heselwood 2011: 165-6). In MCA, the emphatic interdental fricative phoneme /z/ (CA: *ẓā* /ð/) has merged with the emphatic dental stop phoneme /d/ and is realised as [d<sup>ɕ</sup>], and its earlier variant [z<sup>ɕ</sup>] is seldom heard (Watson 2002: 15). The non-emphatic interdental fricative /ð/ has also merged with its non-emphatic plosive counterpart /d/ and is realised in MCA as [d], but like *ẓā*, is also infrequently realised as a voiced dental-alveolar fricative [z] (ibid.).

The emphatic consonants are joined by three ‘secondary emphatics’ in most dialects: the sonorant /r/ > [r], the lateral /l/ > [l] (Davies 2009, IV: 637) and the unvoiced uvular stop /q/ (cf. §2.1.2.1 for a discussion of the various reflexes of *qāf*). The former two phonemes may be realised with or without a pharyngealised element, depending on their immediate phonetic environment. When /r/ is in close proximity to pharyngealised consonants or to the open back vowels /a/ and /a:/, it is realised as [r].

<sup>92</sup> The emphatic coronals encountered here are referred to as ‘emphatic’ or ‘pharyngealised’, with the terms being used interchangeably. As there can be no indication within a written document as to the precise phonetic realisation of these phonemes, where it is necessary to indicate their phonetic value the IPA symbol [ɕ] (e.g., [dɕ

When preceded by the open back unrounded vowels /a/ and /ɑ:/ and the closed back vowel /u/, /l/ is realised as [ɬ] (Al-Nassar 1993: 48–9 in Bakalla 2009, IV: 423).

In written Arabic the four phonemes /s, d, t, ð/ correspond to the graphemes *ṣād*, *ḍād*, *ṭā'* and *ẓā'*, respectively. These consonants' graphical representation in written JA, established during the classical JA period, continues for the most part into the late JA period, with *ṣād* denoted with *ṣadeh*, *ḍād* with *ṣadeh* (+ dot), *ṭā'* with *ṭet* and *ẓā'* with *ṭet* (+ dot). The plain counterparts of these emphatic phonemes /s, d, t, ð/ correspond to Arabic *sīn*, *dāl*, *tā'* and *ḍāl*, respectively. In turn, these plain graphemes are generally denoted with Hebrew *samekh*, *dalet*, *tav* and *dalet* (+ dot), respectively (cf. §2.1.1). *Tafḥīm* and *tarqīq* are made evident by the inversion of these consonants, e.g. *ṣadeh* for Arabic *sīn* (*tafḥīm*) or *samekh* for Arabic *ṣād* (*tarqīq*).

The phonetic information gained from the vast majority of written JA texts is severely restricted; texts are rarely vocalised and, as such, the phonetic insight gained is mainly limited to consonantal changes. Late JA texts, which contain a higher frequency of *plene* vowels, may offer greater insight than those of the preceding period, but this information is not necessarily consistent across genres.

#### 2.1.3.1. Graphemic Substitutions

##### *Fifteenth/sixteenth-century folk tales*

##### 2.1.3.1.1. *gimel* for *sīn*

In the fourteenth/fifteenth-century folk tale Evr.Arab.II 852, we find one instance in which the Arabic grapheme *sīn* is represented with the Hebrew grapheme *gimel*, e.g., גאגוש 'a spy' (CA: *ḡāsūsūn*) (Evr.Arab.II 852, 4r. 9). Such a substitution implies a voiced alveolar or post-alveolar fricative reflex [z ~ ʒ] for Arabic *ḡīm* (cf. §2.1.2.2.2 for examples from this text that further support this realisation of *ḡīm*). The final consonant *sīn* in this word is also denoted with Hebrew *sin/šīn*, rather than the expected Hebrew *samekh* (cf. §2.1.3.1.6 for a discussion of this phenomenon; for alternative representations of *ḡīm* cf. §2.1.2.2.2).

##### 2.1.3.1.2. *ṭet/ṭet* + dot for *ḍād*

It is not uncommon in the fifteenth/sixteenth-century folk tales Evr.Arab.II 1528 and Evr.Arab.I 2996 to come across instances in which the Arabic grapheme *ḍād* is denoted with the Hebrew grapheme *ṭet*, or *ṭet* + dot. The former is found in Evr.Arab.II 1528, e.g., אלכטרא 'the verdure' (CA: *ḥuḍratun*) (2r.

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z/ ʒ; s; ṭ]) indicating pharyngealisation *or* velarisation is used.

29), while the latter appears in Evr.Arab.I 2996, e.g., כְּטֶרֶה ‘green’ (CA: *ḥuḍratun*) (2v. 20); אֶלְטֶרִיה ‘the tomb’ (CA: *ḍarīḥun*) (8r. 2; 9r. 9). While the first instance may be indicative of either a devoicing of *ḍād* from /ḍ/ > [t] or [x] (it is not uncommon in fifteenth-century texts for the supra-linear diacritical dot to be omitted), the second two occurrences appear to indicate a voiced pharyngealised interdental fricative variant [z] of *ḍād*.

#### 2.1.3.1.3. *ṣadeh/ṣadeh* + dot for *zā’*

The representation of the CA voiced pharyngealised interdental fricative /ðʕ/ /ð/ is generally realised in MCA as a voiced pharyngealised dental-alveolar stop [dʕ], thus *ḍād* and *zā’* are often said to have merged (Watson 2002: 15).<sup>93</sup> In the following examples from fifteenth/sixteenth-century folk tales, we find much evidence to support the plosive realisation of /z/ through its common denotation with the Hebrew grapheme *ṣadeh* (+ dot), which is more traditionally employed in JA to denote its orthographic cognate *ḍād*, e.g., אֶלְצֶרִיפָה ‘the elegant’ (CA: *zarīfatun*) (Evr.Arab.II 1528, 3v. 9); עֲצָמָהֶם ‘their bones’ (CA: *‘izāmūn*) (Evr.Arab.II 852, 4r. 3); תִּנְצֹר ‘you will see’ (CA: *tanzūru*) (Evr.Arab.II 852, 6v. 28); וְנִצְפָהֶם ‘and he cleaned them’ (CA: *nazẓafa*) (Evr.Arab.I 2996, 2v. 14); יִסְתַּיֶּקֶץ ‘he wakes’ (CA: *yastayqīzu*) (Evr.Arab.I 2996, 5v. 25, 13r. 4); גִּיֶּצָא ‘wrath’ (CA: *ḡayẓun*) (Evr.Arab.I 2996, 9v. 18) (cf. Blau 1981: 76, 126).

#### 2.1.3.1.4. *tav* for *dāl*

The Hebrew grapheme *tav* replaces *dalet* in the representation of *dāl* in the following example from the fourteenth/fifteenth-century folk tale Evr.Arab.II 852, e.g., אֱלֹהֵת־אֶהָת ‘the hoopoes’ (CA: *hadāhidun*) (Evr.Arab.II 852, 8v. 15). This suggests the devoicing of the voiced dental-alveolar stop /d/ from [d] > [t]. In the equivalent passage in the later text Evr.Arab.II 1528, the traditional orthographic representation of *dalet* for *dāl* is retained in this word.

#### 2.1.3.1.5. *dalet* for *tā’*

הִזָּיְתָהּ ‘(he) prepared (himself)’ (CA: *mutaḡahhizun*) (Evr.Arab.II 852, 6v. 20).<sup>94</sup>

#### 2.1.3.1.6. *sin/šin* for *sīn*

In the fourteenth/fifteenth-century text Evr.Arab.II 852, it is very common (although by no means

<sup>93</sup> MCA also has a voiced pharyngealised alveolar fricative reflex of *zā’* that is not uncommon (Watson 2002: 15).

<sup>94</sup> { } are used throughout to indicate words or letters that have been inserted above the line by the original scribe or writer of the text.

consistent) to find Hebrew *sin/šin* denoting Arabic *sīn*, e.g., ואשתכדם ‘and he employed’ (CA: *istahdama*) (Evr.Arab.II 852, 2r. 4; 7v. 21); ובאש ‘and he kissed’ (CA: *bāsa*) (Evr.Arab.II 852, 2v. 13); ולשאבק ‘and the former’ (CA: *sābiqun*) (Evr.Arab.II 852, 3r. 6; 7r. 6); בעשאכרה ‘in his armies’ (CA: *‘asākiron*) (Evr.Arab.II 852, 2v. 17); אלפרדוש ‘Paradise’ (CA: *al-firdawsu*) (Evr.Arab.II 852, 4v. 22); ואשתדעה ‘and he called’ (CA: *istad‘ā*) (Evr.Arab.II 852, 3v. 14; 5v. 27; 7r. 7).

#### *Late fifteenth-century letters*

##### 2.1.3.1.7. *ṣadeh* + dot for *zā*’

Evidence for the merger of *zā*’ into *dād* is also evident, although to a lesser extent, in fifteenth-century letters, e.g., זָהַר ‘he appeared’ (CA: *zahara*) (MS Heb.c.72/39, 1r. 20).

#### *Eighteenth/nineteenth-century folk tales*

##### 2.1.3.1.8. *ṣadeh* + dot for *zā*’

As with the fifteenth/sixteenth-century corpora, the most common graphemic substitution to occur is *ṣadeh* + dot for *zā*’, rather than its orthographic cognate *ṭet* (+ dot), e.g., תנזר ‘you see’ (CA: *tanẓuru*) (AIU VII C.16, 1r. 6); פִּי תנזִּיר ‘in cleaning’ (CA: *tanẓīfun*) (AIU VII C.16, 1r. 21); אל נזִּירי ‘the view’ (CA: *‘al-naẓaru*) (AIU VII C.16, 1r. 11); תנזִּיר ‘you will see’ (CA: *tanẓuru*) (AIU VII C.16, 1r. 14); תנזִּיריהא ‘you see it’ (CA: *tanẓuru-hā*) (AIU VII C.16, 1v. 12, 13); ואנזִּיר ‘and I see’ (CA: *‘anẓuru*) (AIU VII C.16, 1v. 16); ינזִּיר ‘he sees’ (CA: *yanẓuru*) (T-S Ar. 37.39, 1v. 17, 18, 19; Cairo JC 104, 7r. 10, 12, 14); זָהֲרִי ‘my back’ (CA: *zahrī*) (T-S Ar. 37.39, 3v. 7; Cairo JC 104, 10v. 7); עוֹצָאֲמִי ‘my bones’ (*‘uzāmun*) (T-S Ar. 37.39, 3v. 4); נִזְרַת ‘I saw’ (CA: *naẓartu*) (T-S Ar. 37.39, 2v. 17; Cairo JC 104, 14r. 4); עֲזִימָה ‘great’ (CA: *‘aẓīmatun*) (Cairo JC 104, 14v. 12). אלנִזֵּר ‘the appearance’ (CA: *‘al-naẓaru*) (Cairo JC 104, 4r. 14).

##### 2.1.3.1.9. *zayin* for *dāl*

In the following example, we find an instance of a rare phenomenon common in MCA, in which the interdental stop /d/ (*dāl*) is realised as a dental-alveolar fricative [z], e.g., יֶאֱזֵן ‘he permits’ (CA: *‘aḏina*) (Cairo JC 104, 11v. 10).

##### 2.1.3.1.10. *samekh* for *šin*

סגרא ‘a tree’ (CA: *šagaratun*) (T-S Ar. 37.39, 3v. 20).

*Eighteenth/nineteenth-century letters*2.1.3.1.11. *ṣadeh* + dot for *zā'*

The substitution of *ṣadeh* + dot for *zā'* in place of *ṭet* occurs in two of the three late-eighteenth/early nineteenth-century letters T-S 13J25.24 and T-S 10J16.35, e.g., ונצורו 'and see!' (CA: *wa-nzurū*) (T-S 13J25.24, 1v. 30); נציפה 'clean' (CA: *naẓīfatun*) (T-S 13J25.24, 1v. col. 2, 32); and נצר 'he saw' (CA: *naẓara*) (T-S 10J16.35, 1r. 11); ואל האצה 'and the fortunate one' (CA: *hazzatun*) (T-S 13J25.24, 1v. col.3, 4).

2.1.3.1.12. *zayin* for *dāl*

As with the fifteenth-century folk tales, there are a few instances in one of the letters in which /d/ is represented phonetically with Hebrew *zayin* rather than its orthographic cognate *dāl*, e.g., תזכיר 'you will mention' (CA: *yaḏkuru*) (T-S 10J16.35, 1r. margin 6); תזכרת 'I remembered' (CA: *taḏakkartu*) (T-S 10J16.35, 1r. margin 11; 1r. 8); ותזכרתו 'you bore (it) in mind' (CA: *taḏakkartum*) (T-S 10J16.35, 1r. 6).

2.1.3.1.13. *zayin* for *dād*

The phonetic shift /d/ > [zʕ] occurs occasionally in MCA (cf. Watson 2002: 15) and is in evidence here, e.g., מזבוט 'exact(ly)' (CA: *maḏbūṭun*) (T-S 10J16.35, 1r. 19).

2.1.3.1.14. *tav* for *dād*

In the following instance, *tav* is used to denote *dād*, which suggests simultaneous devoicing of the dental-alveolar stop and loss of emphasis; יתחכו עלא 'they laugh about' (CA: *yaḏhakūna*) (T-S 13J25.24, 1r. col. 2, 42).

*Summary*

Graphemic substitutions occur most often in the folk tale corpora. The most frequently re-occurring substitution common to all corpora is *ṣadeh* + dot for *zā'*. This is indicative of the colloquial plosive realisation of *zā'* and its phonetic merging with *dād*. Whereas graphemic substitutions are rare in late fifteenth-century letters, they are common in the eighteenth/nineteenth-century texts of the same genre.

2.1.3.2. *tafḥīm*



### *Fifteenth/sixteenth-century folk tales*

#### 2.1.3.2.1. *ṣādeh* for *sīn*

The most common occurrence of *tafḥīm* found in the fifteenth/sixteenth-century folk tales is *ṣādeh* denoting *sīn*. It is found in words which contain a primary emphatic such as *tā'* (denoted with *ṭet*), indicating regressive spread, e.g., צלטאן 'a sultan' (CA: *sulṭān*) (Evr.Arab.II 852, 5v. 17); אצטרה 'his lines' (CA: '*aṣṭurun*') (Evr.Arab.II 1528, 3r. 25); וטאוון 'and a peacock' (CA: *tāwūsun*) (Evr.Arab.II 852, 11r. 6). It also appears in words which contain secondary emphatics, such as /r/, e.g., וצאר 'and he traveled' (CA: *sāra*) (Evr.Arab.II 852, 5v. 15); צפרי 'my journey' (CA: *safarun*) (Evr.Arab.II 852, 5v. 18); אלהרצייה 'the life-guard' (CA: *ḥarasīyatun*) (Evr.Arab.II 852, 8v. 25); and /l, q/ or /l, r/, e.g., ואלמצאליק 'and the broths' (CA: *masāliqun*) (Evr.Arab.I 2996, 8r. 8); צלבדאר 'master of the booty' (CA: *salabḍār*) (Evr.Arab.II, 1528, 3r. 4). All instances of *tafḥīm* found in these tales are regressive in nature.

### *Late fifteenth-century letters*

#### 2.1.3.2.2. *ṭet* for *tā'*

There is only one explicit occurrence of *tafḥīm* in the fifteenth-century letter corpus. It occurs in the Maḡribian letter and involves the denotation of *tā'* with Hebrew *ṭet*, e.g., מטגר 'business' (CA: *matḡarun*) (MS Heb.c.72/18, 1r. 12). The only discernable cause of this phonetic shift is the phoneme /r/, which is most probably preceded here by an /a/ vowel (although this cannot be verified as the text is unvocalised).

### *Eighteenth/nineteenth-century folk tales*

*Tafḥīm* is notably more present in the later folk tale corpus than in the earlier corpus of the same genre. Yet, it is limited to the eighteenth-century folk tale T-S Ar. 37.39 and the late nineteenth-century folk tale Cairo JC 104, and entirely absent from the other two texts in the corpus. *Tafḥīm* is evident not only in regard to /s/ > [s], indicated with Hebrew *ṣadeh* for *sīn*, and /t/ > [t], expressed with *ṭet* for *tā'/tā'* *marbūṭa* but also in relation to /d/ > [d].

#### 2.1.3.2.3. *ṣadeh* for *sīn*

In the first two examples, there is evidence of the regressive spread of the pharyngealised feature from the pharyngealised coronal /ṭ/ to the coronal /s/, e.g., וצטה 'its middle' (CA: *waṣṭun/wasaṭun*) (T-S Ar. 37.39, 2r. 19); וצטה 'its middle' (CA: *waṣṭun/wasaṭun*) (Cairo JC 104, 12v. 13). The root *s-l-ṭ* is rendered *ṣ-l-ṭ* frequently in both texts in a variety of nominal forms, e.g., צלטנתי 'my sultanate' (CA:

*sulṭanatun*) (T-S Ar. 37.39, 3r. 16); צולטאן ‘a sultan’ (CA: *sulṭān*) (Cairo JC 104, 3v. 12); צלטנט ‘a sultanate of...’ (CA: *salṭanatun*) (Cairo JC 104, 4r. 10); צלטנתי ‘my sultanate’ (CA: *salṭanatun*) (Cairo JC 104, 4r. 11). This particular manifestation of *tafḥīm* is most probably caused by the regressive spread of the pharyngealised element of the emphatic coronal /t/. However, it may also be attributed to the allophonic variation of the secondary emphatic /l/ > [ḥ], which is in closer proximity to the initial radical /s/ and is preceded by a short /u/ vowel (made evident in the *plene* spelling of *ḍamma* with Hebrew *vav* in at least one of the examples). Regardless of the exact cause, the diffusion of the pharyngealised feature is, yet again, regressive. A further example is found in which the spread of the pharyngealised element appears to extend regressively beyond a single word boundary. In this example, the nominal form *ʾllh* ‘God’ (CA: *ʾallāhu*), in which /l/ is realised as [lʰ~lʰ̥] [alʰːɑː~ alʰːɑː] in the majority of modern Arabic dialects (Watson 2002: 16), occurs after the nominal form *ṣwbḥʾn* ‘praise’ (CA: *subḥān*) in the common Arabic set phrase *subḥāna ʾallāh* ‘God be praised!’; צובהאן אללה (T-S Ar. 37.39, 3r. 14). The representation of Arabic *sīn* with Hebrew *ṣadeh*, indicates emphatic pronunciation, for which the only plausible explanation is the regressive spread of emphasis from the pharyngealised /l/ in the following word. There is also evidence in these folk tales of *tafḥīm* caused by the secondary emphatic /r/ > [ṛ], e.g., כצרה ‘it broke’ (CA: *kasara*) (T-S Ar. 37.39, 2v. 20); ואל צוחרה ‘and the sorcerers’ (CA: *saḥaratun*; *suhḥārun*) (T-S Ar. 37.39, 2r. 11). Yet again, regressive spread appears to be more common than progressive spread, although there is one example in which the spread of progressive emphasis is found; וכרצוני ‘and they silenced/gagged me’ (CA: *ʾaḥrasa*) (T-S Ar. 37.39, 2r. 4).<sup>95</sup>

#### 2.1.3.2.4. *ṭet* for *tā*’

There is only one example in which *tafḥīm* occurs with regard to a phoneme other than /s/ > [s]. In this instance, /t/ is denoted with *ṭet*; באל טוראב ‘in the earth’ (CA: *turābun*) (Cairo JC 104, 8v. 13). Once more, regressive spread from the secondary emphatic /r/ > [ṛ] appears to be the most probable cause of this sound change.

#### 2.1.3.2.5. *ṣadeh* + dot for *dāl*

In three instances in T-S Ar. 37.39, *dāl* is represented with *ṣadeh* + dot, rather than *dalet*, as is most often the case, e.g., קאציר ‘I am able’ (CA: *qādirun*) (T-S Ar. 37.39, 2v. 13); אקציר ‘I am able’ (CA: *ʾaqdiru*) (T-S Ar. 37.39, 3r. 9); and יעבצו אל אצנאם ‘they worship false gods’ (CA: *yaʾbudūna*) (T-S Ar. 37.39, 2r. 14). In the first two cases, it is unclear whether this phonetic shift is caused by the preceding uvular stop /q/ or the following secondary emphatic /r/. There is no explicit indication of the realisation of Arabic *qaf* in this, or any other text found in these corpora. Unlike in some JA

<sup>95</sup> Here a form I verb is used with form IV meaning.

genres (cf. Hary 1992, 2009), *qaf* is never denoted with an *'alef*, indicating the glottal stop pronunciation found in many (including MCA) modern Arabic dialects. However, its consistent representation with the Hebrew grapheme *qof* cannot simply be interpreted as evidence of the uvular stop reflex's retention. With regard to the second example, we seem to be faced with another instance in which the regressive spread of the pharyngealised element extends across word boundaries.

#### *Eighteenth/nineteenth-century letters*

Evidence for the spread of emphasis from emphatic to non-emphatic coronals is rife in late eighteenth/nineteenth-century letters, most particularly in the letter T-S 13J25.24.

##### *2.1.3.2.6. ṣādeh for sīn*

In all letters examined in this corpora, we find the plural form of the substantive *s'r*, *'s'r* 'prices' (CA: *si'run*, *'as'ārun*) in which the first radical *sīn* is denoted with *ṣadeh*, e.g., אַצְעָאָר (T-S 13J25.24, 1v. col. 1, 39; col. 3, 4; T-S 10J16.35, 1r. 27); בִּיל אַצְעָאָר 'with the prices' (Rylands L192, 1r. 8). This is indicative of the regressive spread of emphasis from the pharyngealised allophone of /r/ > [r̥].

As with one of the contemporaneous folk tales (T-S Ar. 37.39), there is evidence of *tafḥīm* potentially caused by the secondary emphatic /q/ in one of the eighteenth/nineteenth-century letters, e.g., יִקְצָמוּ לָנָה 'you should give us a share (of it)' (CA: *qasama*) (T-S 13J25.24, 1v. 29); יִקְצָם 'it is distributed' (CA: *yuqsamu* (pass.), *yaqsimu*) (T-S 13J25.24, 1v. col. 3, 3). Unlike the cases found in the contemporaneous folk tale T-S Ar. 37.39, there is no alternative cause of the *tafḥīm* found in this late letter. This perhaps suggests that, at least for this one letter, the uvular stop pronunciation of *qāf* was retained. In both instances, the spread of the pharyngealised element to /s/ > [s̥] is progressive.

##### *2.1.3.2.7. ṭet for tav*

In the letter T-S 13J25.24, two instances of /t/ > [ṭ] are found. In both cases, the allophonic variant of the secondary emphatic /t/ > [ṭ] is preceded by a short /a/ vowel, causing the extension of the pharyngealised element to spread to the preceding non-emphatic coronal /t/, e.g., אַכְטָר 'more' (CA: *'akṭarun*) (T-S 13J25.24, 1v. col. 1, 7) and יִשְׁטָרָךְ 'he cooperates (with us)' (CA: *yaštariku*) (T-S 13J25.24, 1v. col. 1, 11).

##### *2.1.3.2.8. ṣadeh + dot for dāl*

The progressive spread of the pharyngealised feature in the following three examples, in which *dāl* is denoted with *ṣadeh* + *dot*, appears to be caused by /s/ in one instance and the secondary emphatic [r] in the other two, e.g., וקצצנה ‘and we intended’ (CA: *qaṣadnā*) (T-S 13J25.24, 1v. col. 2, 15); בארץ ‘severe’ (lit. cold) (CA: *bāridun*) (Rylands L192, 1r. 35); פיל בנצור ‘in the commercial town’ (CA: *bandarun*) (T-S 13J25.24, 1v. col. 2, 38).

### Summary

In these corpora, *tafḥīm* is discernible most frequently in relation to the non-emphatic coronals /s, t, d/. In so far as can be ascertained, the spread of emphasis is generally caused by the emphatic coronals /ṭ, ṣ/, or the secondary emphatics /r, l, q/. In particular, the pharyngealised reflex of /r/, [r] when preceded by either a long /a:/ or short /a/ vowel, appears to be a common trigger of emphasis spread. In terms of directionality, instances of regressive spreading far outnumber those of progressive diffusion. This ties in with findings in contemporary scholarship regarding spoken Arabic, in which regressive spreading is also found to occur more frequently than progressive spreading in many dialects (Davies 2009, IV: 637). Moreover, diffusion of emphasis often occurs beyond the adjacent syllable, and occasionally beyond a word boundary. This is also in keeping with contemporary findings in MCA, in which the spread of pharyngealisation is said to often affect an entire phonological word (Davies 1995: 466).

#### 2.1.3.3. *tarqīq*

##### *Fifteenth/sixteenth-century folk tales and late fifteenth-century letters*

##### 2.1.3.3.1. *samekh* for *ṣād*

Orthographic evidence for the loss of emphasis in the fifteenth/sixteenth-century corpora is rare, occurring only once in the folk tale Evr.Arab.II 1528, and once in the Maḡribian letter MS Heb.c.72/18. In both instances *samekh* replaces *ṣadeh* in the representation of Arabic *ṣād*, resulting in the allophone /s/ > [s]; אלאסואת ‘sounds’ (CA: *ʿaṣwāt*) (Evr.Arab.II 1528, 3v. 34); נסראני ‘a Christian’ (CA: *naṣrānī*) (MS Heb.c.72/18, 1r. 10).

##### 2.1.3.3.2. *dalet* for *dād*

In the fourteenth/fifteenth-century manuscript, Evr.Arab.II 852, we find a number of instances in which *dalet* replaces *ṣadeh* (+ dot) in the depiction of *dād*, e.g., כאדעון ‘obedient’ (CA: *ḥāḍīʿun*, pl. *ḥuḍʿānun*) (Evr.Arab.II 852, 3v. 24); כאדעין (Evr.Arab.II 852, 9v. 17); אלדרגאם ‘the lion’ (CA: *dirḡāmun*) (Evr.Arab.II 852, 3r. 13, 3v. 24). This is generally interpreted as denoting loss of emphasis (Blau 1981: 76, §1; Wagner 2010: 34) or the growing phonetic influence on JA spelling practices

(Hary 1996b: 732; 1997b: 38).

#### *Late fifteenth-century letters*

There are no instances of *tarqīq* in this corpus.

#### *Eighteenth/nineteenth-century folk tales*

##### *2.1.3.3.3. samekh for šād*

Šād's loss of emphasis occurs in the seventeenth/eighteenth-century folk tale AIU VII C.16, the eighteenth-century folk tale T-S Ar. 37.39 and the late nineteenth-century folk tale Cairo JC 104. In the latter two manuscripts, this shift occurs mainly in the root *š-d-r* > *s-d-r* 'chest' (CA: *šadrun*), which appears very frequently, e.g., סדר אחמר וסדר אביץ 'a red breast and white breast'; (CA: *šadrun*) (T-S Ar. 37.39, 1v. 10); סדרהו 'his chest' (CA: *šadrun*) (T-S Ar. 37.39, 1v. 13, 19); סדרה 'its breast' (CA: *šadrun*) (T-S Ar. 37.39, 2r. 18); סדרה 'her chest' (CA: *šadrun*) (Cairo JC 104, 12v. 12); סדר אחמר וסדר אביץ 'a red breast and a white breast' (CA: *šadrun*) (Cairo JC 104, 6v. 10); סדרו 'his breast' (CA: *šadrun*) (Cairo JC 104, 6v. 13, 7r. 14); רכיס 'cheap' (CA: *rahīṣun*) (AIU VII C.16, 1v. 22); סרתו 'you became' (CA: *šāra*; *šartum*) (T-S Ar. 37.39, 2v. 3).

##### *2.1.3.3.4. tav for ṭā'*

The *ṭā'* of the root *ṭ-b-q* is denoted with *tav* in one of the first occurrences of this root in the following example. However, in the following repetition of the substantive (and in all other uses of it throughout the text), *ṭā'* is represented with its graphical cognate *ṭet*, suggesting that its pharyngealised element has been retained, e.g., תבקה פֹּק טבקה 'layer on layer' (CA: *ṭabaqatun*) (T-S Ar. 37.39, 2r. 9).

##### *2.1.3.3.5. dalet for ḏād*

The occurrence of *dalet* for *ḏād* in the folk tale corpora is limited to the following two examples, one of which is found in the seventeenth/eighteenth-century folk tale AIU VII C.16, and the other in the late nineteenth-century folk tale Cairo JC 104, e.g., בדיקת 'in poverty' (CA: *ḏayqatun*) (AIU VII C.16, 1r. 10); ודיקה 'and weakness' (CA: *ḏīqun*) (Cairo JC 104, 4v. 12).

#### *Eighteenth/nineteenth-century letters*

##### *2.1.3.3.6. samekh for šād*

As with the previous instances seen in these corpora, evidence for loss of emphasis in the late letter corpus occurs most commonly in relation to *ṣād*, which is denoted with Hebrew *samekh*. This manifestation of *tarqīq* occurs only in the letter T-S 13J25.24, e.g., בוסול ‘with (the) arrival of...’ (CA: *wuṣūlun*) (T-S 13J25.24, 1v. 4); חסל ‘he obtained’ (CA: *ḥaṣṣala*) (T-S 13J25.24, 1v. 8); בסולחנה ‘in our settlement/compromise’ (CA: *ṣulhun*) (T-S 13J25.24, 1v. 14); בורסה ‘exchange rate’ (CA: *burṣatun*) (T-S 13J25.24, 1v. 23); וסולהא ‘its arrival’ (CA: *wuṣūlun*) T-S 13J25.24, 1v. col. 2, 2); לסחבכום ‘for your associates’ (CA: *ṣaḥbun*) (T-S 13J25.24, 1v. col. 2, 18); ותחלסו ‘and you should deliver...’ (CA: *taḥallaṣa*) (T-S 13J25.24, 1v. col. 2, 29); יוסלכום ‘it will/should arrive (with) you’ (CA: *yasilu-kum*) (T-S 13J25.24, 1v. col. 2, 40; col. 3, 12); סאפ ‘net (profit/weight)’ CA: *ṣāḥḥin*) (T-S 13J25.24, 1v. col. 2, 29).

#### 2.1.3.3.7. *zayin* for *zā*’

*Zayin* denotes the emphatic coronal *zā*’ in two instances in these late letters; זוהור ‘it emerged’ (CA: *zāhara*) (Rylands L192, 1r. 29) (see §2.2.3.3 for a discussion of vowel shift /a/ > /u/) and עזימה ‘great’ (CA: *‘aẓīmatun*) (T-S 13J25.24, 1v. col. 2, 36).

### Summary

*Tarqīq* occurs most frequently in the eighteenth-nineteenth-century folk tale and letter corpora, but not in all of the texts from these corpora. It is conspicuously absent from the two eighteenth-nineteenth-century folk tales T-S Ar. 46.10 and BnF Hébreu 583.

The substitution of *dalet* for *ḍād* is often cited as a key characteristic of late JA orthography (Hary 1996b: 732; 1997b: 38). But its appearance is rather limited (in so far as I can ascertain) in these late JA corpora. Its most regular appearance is found in the fourteenth/fifteenth-century folk tale Evr.Arab.II 852, where it occurs three times. Other than that, it appears once in an eighteenth-century, and once in a nineteenth-century folk tale. It is not at all a regular feature of late JA letters. This is corroborated by the findings of both Khan (1992: 230; 2006: 50; 2013: 242) and Wagner (2010: 34) in their examination of eighteenth/nineteenth-century JA letters, where *dalet* for *ḍād* does not seem to occur at all.<sup>96</sup>

#### 2.1.3.4. Simultaneous *tafḥīm* and *tarqīq*

<sup>96</sup> Khan (1992: 231) and Wagner (2010: 34) cite only one (and the same) example in which *ḍād* is denoted with *tav*, e.g., בחיחך ‘you are laughing’ (CA: *ḍaḥika*, *taḍḥaku*) (T-S AS 209.274). A similar example from the late letter corpus is cited here in §1.3.1.14.

A phenomenon that occurs infrequently in both fifteenth/sixteenth-century and nineteenth-century folk tales and eighteenth/nineteenth-century letters is the co-occurrence of *taḥīm* and *tarqīq* within a single word.

#### *Fifteenth/sixteenth-century folk tales*

In the following example, which occurs in the fourteenth/fifteenth-century folk tale Evr.Arab.II 852, *tā' marbūṭa* in the construct state is denoted with *ṭet*, while the original *ṭā'* of the root *ṭ-r-f* is written with *tav*, e.g., תרפט עין '(in) the twinkling of an eye' (CA: *bi-ṭarfāt 'aynin*) (Evr.Arab.II 852, 4v. 15-16).

#### *Eighteenth/nineteenth-century folk tales*

In among the many instances in which the root *s-l-ṭ* displays consistent regressive emphasis spread in the folk tales Cairo JC 104, is a single occurrence in which the first radical *sīn* is represented with Hebrew *ṣadeh*, while the emphatic coronal *ṭā'*, is denoted with Hebrew *tā'*, e.g., צלתנתי 'my sultanate' (CA: *saṭṭanatun*) (Cairo JC 104, 15v. 10). This may suggest that the spread of pharyngealisation, which causes /s/ to be realised as [s], originated not in the primary emphatic *ṭā'*, but in the secondary emphatic /l/, which is here preceded by a short /u/ vowel. It may also simply be a spelling mistake.

#### *Eighteenth/nineteenth-century letters*

Two instances of this phenomenon are found in the letter T-S 13J25.24. In the first occurrence, the 2.m.sg. prefix *t-* (CA: *tu-*) of the prefix conjugation is realised as *ṭā'*, while the *ṣād* of the root *w-ṣ-l* is denoted with a *sīn*; טוסלכום 'it arrives (with) you' (CA: *tuwaṣṣilu-kum*) (T-S 13J25.24, 1v. col. 2, 5). The loss of emphasis of the second radical of this root may be attributed to the combination of the following short vowel /i/ + the following consonant /l/. However, it is worth noting that loss of the pharyngealised element of this root is common in this particular text in instances where the vowel preceding /l/ appears to be both long /ū/ and short /u/.

In the second case, the second radical of the root *q-ṣ-d*, appears to lose its pharyngealised element when it is realised as *sīn*, while the third radical *dāl* appears to gain emphasis as it is denoted with a *ṣadeh* + dot, e.g., וקסצנה 'and we intended' (CA: *wa-qaṣadnā*) (T-S 13J25.24, 1v. col. 2, 10). The glottal stop allophone of *qāf* is recorded as being present in MCA of the eighteenth/nineteenth-century. Although there is no explicit orthographical evidence in these texts to support this, the loss of emphasis to the second radical exhibited here may be indicative of a glottal stop pronunciation of *qāf* in this context. Yet again, however, it may also be merely an orthographic error. Perhaps Blau's

explanation for an analogous manifestation of this phenomenon provides sufficient explanation: ‘In another case (v. Diqduq, p. 35) the writer uses *waṣaṭ* ‘middle’ instead of Classical *wasat* and true Middle Arabic *waṣaṭ*... knowing that in CA only one of the last two consonants was emphatic, he attempted to use the CA form, but confused the two consonants’ (1981: 28).

#### 2.1.4. *Tā’ marbūṭa*

##### 2.1.4.1. Non-construct state *tā’ marbūṭa*

###### *Fifteenth/sixteenth-century folk tales*

*Tā’ marbūṭa* is usually represented in the fifteenth-century folk tale Evr.Arab.II 852 with *heh*, its Hebrew graphical equivalent. However, in two instances in this manuscript, *heh* is supplanted by ‘*alef*’ in the denoting of *tā’ marbūṭa*, e.g., אללביא ‘the lioness’ (CA: ‘*al-labwatu*’) (Evr.Arab.II 852, 7v. 24); אבו אלפרוא ‘the father of abundance’ (CA: ‘*abū ’al-farwa*’)<sup>97</sup> (Evr.Arab.II 852, 8v. 24). These instances constitute early examples of the interchangeability of ‘*alef*’ and *heh* in the representation of *tā’ marbūṭa*, a phenomenon commonly found in later folk tales (see below). In one instance, non-construct state *tā’ marbūṭa* is written with two supra-linear dashes, a practice usually reserved in these folk tales for *tā’ marbūṭa* in the construct state (cf. §2.1.4.2.2), e.g., אלחלה ‘the dappled garment’ (CA: ‘*al-ḥullatu*’) (Evr.Arab.II 1528, 3r. 26-7). All three representations are also recorded by Hasson-Kenat in her analysis of late JA folk tales (2016: 72).

###### *Late fifteenth-century letters*

There are no instances in fifteenth-century letters of *tā’ marbūṭa* being represented with ‘*alef*’. Instead, the most commonly used grapheme is *heh*, occasionally written with two supralinear dots in imitation of its Arabic graphical form, e.g., אלשלוּם אלכרימה ‘(My) kindly greetings’ (CA: ‘*al-karīmatu*’) (MS Heb.c.72/13, 1r. 2); ללגהּהּ אלמעלומה ‘to the known direction (i.e. address)’ (CA: ‘*al-ḡīhatu ’al-ma’lūmatu*’) (MS Heb.c.72/13, 1r. 8); אלבפתהּ אלמתחצלה ‘the incoming calico’ (CA: ‘*al-baḥḥatu ’l-mutaḥaṣṣilatu*’) (MS Heb.c.72/13, 1r. 8); האגהּ ‘a thing’ (CA: *ḥāḡatun*; MCA: *ḥāga*) (MS Heb.c.72/13, 1r. 20); אלדכירה ‘the suppl(ies)’ (CA: ‘*al-ḍaḥīratu*’) (MS Heb.c.72/39, 1r. 8, 12, 17, 18, 1r. margin 2, 1v. 3); אלכואגהּ ‘the (foreign) sir’ (CA: ‘*al-ḥawāḡatu*’) (MS Heb.c.72/39, 1r. 12, 1v. 2, 8); באלואקעהּ ‘in reality’ (CA: ‘*l-wāqi’atu*’) (MS Heb.c.72/39, 1r. 14); ועאפיהּ ‘and (good) health’ (CA: ‘*āfiyatun*’) (T-S 13J26.7, 1r. 9); אל בארכהּ ‘yesterday’ (CA: ‘*al-bāriḥatu*’) (MS Heb.c.72/18, 1r. 4);<sup>98</sup> סכנדריייהּ

<sup>97</sup> In CA, ‘*abū ’al-farwati*’ means ‘sweet; chestnut’. However, in this particular context this does not seem an apt interpretation of the phrase.

<sup>98</sup> In this example, we come across the unusual form אל בארכהּ which I have interpreted to mean ‘yesterday’ (CA: ‘*al-bāriḥatu*’), understanding the *kaf* to be an error on the part of the writer. However, it is possible that *b’rḥh* refers to a form of (small) boat. As yet, I have been unable to find such a lexical item in the dictionaries I have consulted.



‘Alexandria’ (CA: *’al-’iskandarīya*) (MS Heb.c.72/18, 1r. 12).

#### *Eighteenth/nineteenth-century folk tales*

There are a number of instances in which *’alef* replaces *heh* in the representation of *tā’ marbūṭa* in two of these late folk tales, e.g., מרא ‘a time’ (CA: *marratun*) (T-S Ar.37.39, 3r. 13, 3v. 5); ‘a tree’ (T-S Ar.37.39, 2r. 20); חייא ‘a life’ (CA: *hayātun*) (T-S Ar.37.39, 3v. 6); אל סכרא ‘the agony (of death)’ (CA: *sakratun*); (T-S Ar.37.39, 1r. 13); רשווא ‘a bribe’ (CA: *rašwatun*); (Cairo JC 104, 8v. 6); שגרא (CA: *šaḡaratun*) (T-S Ar.37.39, 3r. 6; Cairo JC 104, 13r. 13); טבקה ‘a layer’ (CA: *ṭabaqatun*) (T-S Ar. 37.39, 2v. 10, 11, 12, 12, 13, 14; Cairo JC 104, 12r. 11, 12, 13, 12v. 3, 3, 5, 6);<sup>99</sup> ואגנחא “ללנקמה” ‘and wings for revenge’ (CA: *’aḡniḥatun*) (Cairo JC 104, 6v. 9); ושהק שהקא עצימה ‘and he sighed very deeply’ (lit. ‘he sighed a great sigh’) (CA: *šahaqa šahaqatan ’aẓīmatan*) (Cairo JC 104, 14v. 12).

Otherwise, non-construct state *tā’ marbūṭa* is denoted with an unadorned *heh*, e.g., אל נקמה ‘revenge’ (T-S Ar.37.39, 1v. 10); אל צוחרה ‘sorcerers’ (CA: *saḥaratun*; *suḥḥārūn*) (T-S Ar.37.39, 2v. 11); אל טיבה ‘the good’ (T-S Ar.37.39, 1v. 3, 3v. 19); ארבעה ‘four’ (T-S Ar.37.39, 3v. 13); טבקה ‘a layer’ (T-S Ar.37.39, 2v. 10); לואחדה ‘for one’ (T-S Ar.37.39, 2v. 2); סנה ‘a year’ (CA: *sanatun*) (T-S Ar.37.39, 3r. 22, 3v. 13; T-S Ar. 46.10, 1r. 27, 29, 30, 31, 33; BnF Hébreu 583, 139v. 20, 23, 140r. 1, 3, 141r. 18; Cairo JC 104, 4r. 12, 14v. 5, 15v. 4); אל סנה אל אתייה ‘the following year’ (BnF Hébreu 583, 139v. 22); אל דעווה ‘the appeal’ (BnF Hébreu 583, 140r. 9, 17, 19, 140v. 5); פאל סכה ‘in the road’ (T-S Ar. 46.10, 1v. 3; BnF Hébreu 583, 140r. 15); אל כליה ‘the wilderness’ (T-S Ar. 46.10, 1v. 18; BnF Hébreu 583, 140v. 2, 3); זכיבה ‘sack’ (BnF Hébreu 583, 141r. 3, 4, 5, 6); אל כניסה ‘the church’ (BnF Hébreu 583, 141r. 7, 8-9); אל כבירה ‘the large’ (BnF Hébreu 583, 141r. 9); אל סכינה ‘the knife’ (BnF Hébreu 583, 141r. 10, 11).

#### *Eighteenth/nineteenth-century letters*

It is rare for *tā’ marbūṭa* to be denoted with *’alef* in later letters, e.g., קטעא ‘a part’ (CA: *qit’atun*) (T-S 10J16.35, 1r. 16, margin 8). Far more widespread is the standard denotation of *tā’ marbūṭa* with *heh*, e.g., אל דורה ‘the maize’ (CA: *ḍuratun*; MCA: *dura*) (T-S 10J16.35, 1r. 26; T-S 13J25.24, 1r. col. 1, 37; Rylands L192, 1r. 28-29); לנובה אוכ’רה ‘for another instance’ (CA: *nawbatun*) (T-S 10J16.35, 1r. 14); ואל תאנייה ‘and the next’ (CA: *’al-tānī/tāniyatun*) (T-S 10J16.35, 1r. 18); אל לדקיה ‘Latakia’ (CA: *’al-lāḍiqiya*) (T-S 10J16.35, 1r. 25); אל פצה ‘the silver’ (CA: *fiḍḍatun*) (T-S 10J16.35, 1r. 30).

<sup>99</sup> The plural form of this noun used throughout is *ṭabaqātun*, e.g., סבע טבקהא ‘seven layers’ (Cairo JC 104, 12r. 10). This suggests that the singular form *ṭabaqatun* (with *tā’ marbūṭa*), rather than *ṭabaqun* (without *tā’*)

### Summary

With only one exception found in the letter T-S 10J16.35, non-construct state *tā' marbūṭa* is denoted with Hebrew *heh* in both the late fifteenth- and eighteenth/nineteenth-century letter corpora. This is in keeping with the graphical representation of *tā' marbūṭa*, which occurs in classical JA texts. Occasionally, *heh* for non-construct state *tā' marbūṭa* is adorned with two supra-linear dashes (cf. MS Heb.c.72/13, 1r. 8).

With regards to folk tales, *'alef* more commonly supplants *heh* as the representative of *tā' marbūṭa*, both in the fifteenth-century folk tale Evr.Arab.II 852 and the eighteenth- and nineteenth-century folk tales T-S Ar. 37.39 and Cairo JC 104. However, *'alef* for *tā' marbūṭa* is conspicuously absent from the contemporaneous folk tales T-S Ar. 46.10 and BnF Hébreu 583. The use of *'alef* – which is indicative of phonetic realisation – may be symptomatic of a less detailed knowledge of Arabic orthographic standards, or it may simply be suggestive of a tendency towards phonetic representation demonstrated elsewhere in late JA (cf. §2.2.2 for a discussion regarding vowel shortening).

#### 2.1.4.2. *Tā' marbūṭa* in construct state

##### 2.1.4.2.1. *heh/'alef* for *tā' marbūṭa* in construct state

The least common representation of *tā' marbūṭa* in the construct state is that of an unadorned *heh*, i.e. ה. The choice of this grapheme goes some way towards emulating the graphical form – as opposed to the phonetic realisation – of *tā' marbūṭa* in construct state, but stops short of the more frequent use of two supra-linear dots (cf. §2.1.4.2.2).

#### *Fifteenth/sixteenth-century folk tales*

There are only three examples of *tā' marbūṭa* denoted with unmarked Hebrew *heh* in the construct state in the fifteenth/sixteenth-century folk tales, e.g., בזירה אלהנד 'on the island of India' (Evr.Arab.II 852, 1v. 20) (cf. §2.1.2.2.2 for a discussion of alternative graphemic representations of *ḡīm*); וצביה אלפרך 'and the young of the chicken' (Evr.Arab.II 1528, 4r. 16); מדינה אלטיאר 'the city of the birds' (Evr.Arab.II 1528, 3r. 2).

#### *Late fifteenth-century letters*

The use of Hebrew *heh* representing *tā' marbūṭa* in the construct state is limited to the following instance in late fifteenth-century letters, e.g., במביעה אלממ ובמביעה זין אלדין 'in the bill of sale of the

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*marbūṭa*) was intended here.

servant (abb.) and in the bill of sale of Zayn 'al-Dīn' (CA: *mubāy'atun*; MCA: *mubay'a*) ((MS Heb.c.72/39, 1r. 9).

#### *Eighteenth/nineteenth-century folk tales*

There are no instances in the eighteenth/nineteenth-century folk tale corpus of either *heh* or *'alef* denoting *tā' marbūṭa* in the construct state.

#### *Eighteenth/nineteenth-century letters*

In rare occurrences in this corpus, we find *tā' marbūṭa* in the construct state expressed with the Hebrew grapheme *'alef*, rather than *heh* or *tav*; גמעה ערילים 'a group of uncircumcised (people)' (CA: *ḡamā'atu*) (T-S 10J16.35, 1r. margin 1); גמעה תגאיר 'a group of traders' (T-S 10J16.35, 1r. margin 6). *Tā' marbūṭa* is also written with a *heh* in the construct state in one instance in the contemporaneous letter T-S 13J25.24; גמעה אצחבנה 'a group of our friends' (col. 1, 22).

##### *2.1.4.2.2. heh + " for tā' marbūṭa in construct state*

In the construct state, *tā' marbūṭa* is often represented by Hebrew *heh* and two supralinear dots or dashes, i.e., ךּ rather than simply *heh* on its own. This is in the result of direct imitation of the graphical form of *tā' marbūṭa* in Arabic, which is *hā'* and two supralinear dots (borrowed from the letter *tā'*), i.e. ؤ (Fischer 2002: 9, §13).

#### *Fifteenth/sixteenth-century folk tales*

This particular depiction of *tā' marbūṭa* in construct state is most common in fifteenth/sixteenth-century folk tales, e.g., אלטיר ךּ מדינה 'the city of the birds' (Evr.Arab.II 852, 7r. 2; Evr.Arab.II 1528, 3r. 14-15); {אלאטיאר} ךּ מדינה 'the city of the birds' (Evr.Arab.II 852, 6v. 20); פי קאעה ךּ אלגלוס 'in the reception hall' (Evr.Arab.II 852, 7v. 22); עין ךּ טרפה '(the) blink/glance of an eye' (Evr.Arab.II 1528, 2r. 8); גישי ךּ וכתרה 'the majority of my troops' (Evr.Arab.II 1528, 2v. 37);

#### *Late fifteenth-century letters*

The marking of Hebrew *heh* for *tā' marbūṭa* in construct state with two supra-linear dots or dashes is adhered to only in one of the late fifteenth-century letters (namely MS Heb.c.72/39) examined here, e.g., מן גהה ךּ תספירה אלמאצי 'on account of his last journey' (MS Heb.c.72/39, 1r. 5-6); מן גהה ךּ ידי זין 'on behalf of my lord, Zayn al-Dīn and on behalf of the servant (abb.)...' (MS

Heb.c.72/39, 1r. 10-11); מן גֵּהָה אֶלְפֶּרֶט 'on account of the interest' (MS Heb.c.72/39, 1v. 9); קִצִּייהָ אֶלְאֲנִלָּא 'the matter of the rugs' (MS Heb.c.72/39, 1v. 11).

#### *Eighteenth/nineteenth-century folk tales*

There are no instances of *heh* + " for *tā' marbūṭa* in construct state in this corpus.

#### *Eighteenth/nineteenth-century letters*

There are no instances of *heh* + " for *tā' marbūṭa* in construct state in this corpus.

#### 2.1.4.2.3. *tav* for *tā' marbūṭa* in construct state

While the orthographic depiction of *tā' marbūṭa* does not change in the construct state in Arabic, its phonetic realisation shifts from /a/ > /t/. In Hebrew, this phonetic shift is made explicit in the standardised orthography, in which *heh* is replaced with *tav* when the first term of the construct state ends in the f.sg. ending, e.g., אִשְׁתַּ הַמֶּלֶךְ 'the king's wife'.<sup>100</sup> In many JA texts, *tā' marbūṭa* in the construct state is also commonly denoted with Hebrew *tav*. This may either be indicative of its phonetic realisation, or in imitation of the Hebrew orthographic practice (Wagner 2010: 39).

#### *Fifteenth/sixteenth-century folk tales*

The phonetic depiction of *tā' marbūṭa* in the construct state occurs in Evr.Arab.II 852 and Evr.Arab.II 1528, while the graphical imitation is favoured in Evr.Arab.I 2996, e.g., לְכַדְמַת אֶלְמֶלֶךְ 'for the service of the king' (Evr.Arab.II 852, 3v. 25); בְּכַתְרַת אֶלְצִיָּאָה 'with the multitude of screaming' (Evr.Arab.II 852, 4r. 2-3); בְּקוֹת בְּטָשִׁי 'with the strength of my brutes' (Evr.Arab.II 1528, 2v. 36-37); צִרְכַּת אֶלְגִּזָּב 'the scream of anger' (Evr.Arab.II 852, 11r. 10); כְּלֶעַת אֶלְוָקָאָר 'the robe of dignity' (CA: *ḥil'atu 'al-waqāri*) (Evr.Arab.II 852, 1v. 21); בְּחָאגַת אֶלְמֶלֶךְ 'with the desire/need of the king' (Evr.Arab.II 852, 4r. 10).

In one instance in the early folk tale, Evr.Arab.II 852, the first term of the construct state, which in CA ends in *'alif mamdūda* is written with a *tav*; בְּאֶמְרַת דּוֹלְתָהּ 'with the princes of his state' (CA: *bi-'umarā'i dawlatihī*) (Evr.Arab.II 852, 3v. 14). This suggests that *'alif mamdūda* in this context has become confused with the *tā' marbūṭa* (as we see in another example, below). This confusion may have arisen through the loss of *hamza*, and the shortening of *'alif mamdūda* in colloquial speech from /a:/ > /a/ evident in this particular plural nominal form; CA: *'umarā'* > MCA: *'umara*, resulting in a

<sup>100</sup> There is also a precedent in early Arabic documentary papyri for the writing of the f.sg. substantive ending with *tā'* rather than *tā' marbūṭa* (i.e. *-(a)t*) (Kaplony 2008: 96).

striking phonetic resemblance to the pronunciation of *tā' marbūṭa*.

#### *Late fifteenth-century letters*

With the exception of MS Heb.c.72/39, the letters in this corpus all favour the phonetic representation of *tā' marbūṭa* in the construct state, e.g., בכרת אלשוק 'with great longing' (MS Heb.c.72/13, 1r. 2); גהת שריכה מנצור 'on behalf of his partner, Mansūr' (MS Heb.c.72/39, 1r. 4-5); במקאבלת אלעבד 'with the confrontation of the servant' (MS Heb.c.72/39, 1v. 7); גהת אלעתל 'on account of the load/burden' (MS Heb.c.72/13, 1r. 4-5); חצרת אלולד 'the presence of the boy' (T-S 13J26.7, 1r. 2).

In another example similar to that found in the (approximately) contemporaneous folk tale Evr.Arab.II 852, *'alif mamdūda* of the first term of the construct state is rendered with *tav*; עשאת אללאכיר 'the last evening' (lit. reads 'the evening of the latter') (CA: *'iṣā*) (T-S 13J26.7, 1r. 10). As with the preceding example, it is possible that this is the result of the shortening of *'alif mamdūda* from /a:/ to /a/ in the nominal form (MCA: *'iṣa*), causing it to become phonetically indistinguishable from *tā' marbūṭa*.

#### *Eighteenth/nineteenth-century folk tales*

In eighteenth/nineteenth-century folk tales, *tā' marbūṭa* in the construct state is expressed exclusively with its phonetic equivalent *tav*, e.g., ארבעית סאעאת 'four hours' (T-S Ar. 46.10, 1v. 11);<sup>101</sup> נחיית אל 'the edge of the wilderness' (T-S Ar. 46.10, 1v. 16); ארבע מאיית וסבעין 'four hundred and seventy (years)' (T-S Ar. 37.39, 1r. 11-12); סכרית אל מות 'the agony of death' (T-S Ar. 37.39, 1v. 2); צורת מלך 'the image of the angel of death' (T-S Ar. 37.39, 1v. 7-8); בוקעת לענה 'a stamp of a curse' (T-S Ar. 37.39, 2v. 17-18).

#### *Eighteenth/nineteenth-century letters*

As with the eighteenth/nineteenth-century folk tales, the most common representation of *tā' marbūṭa* in the construct state is with the Hebrew grapheme *tav*, e.g., פי וכאלת תוגאר 'in an agency of merchants' (T-S 10J16.35, 1r. margin 5); קטעית בון 'a portion of coffee' (T-S 10J16.35, 1r. margin 15); מית אלף 'a hundred thousand' (T-S 13J25.24, 1v.col. 1, 18); שוויית חריר 'a little silk' (T-S 13J25.24, 1v.col. 1, 20); מן קלית אל ביע 'due to the lack of selling' (Rylands L192, 1r. margin 3).

<sup>101</sup> There are a small number of examples in these later folk tales, in which the f.sg. *tā' marbūṭa* ending is preceded by *yod*, perhaps indicating the short /i/ vowel now associated with present-day Levantine Arabic pronunciation of *tā' marbūṭa*, -eh, -et, e.g., ארבעית סאעאת 'four hours' (T-S Ar. 46.10, 1v. 11); סכרית אל מות 'the agony of death' (T-S Ar. 37.39, 1v. 2); וטורשית אוודנהום ועמיית עניהום ובוטלת איידיהום ורגליהום 'the deafness of

The use of *tav* in this context may have been influenced by either the phonetic realisation of *tā'* *marbūṭa* in the construct state /t/ or the Hebrew spelling of the f.sg. ending, which is written *heh* in the non-construct state, but *tav* in the construct state.

In two instances in T-S 13J25.24, the f. sg. *tā'* *marbūṭa* ending is omitted on the first term of the construct state, and appears written phonetically (as *tav*) attached to the following noun; בעשר תיזאם 'in ten days' (col. 2, 2); עשר תכיאם 'ten sacks' (col. 1, 32). This is an established phenomenon in MCA relating (generally) to the substantives 'ayyām 'days' and 'uṣṣur 'months', in which 'the construct state after numerals 3 – 10 is *tayyām* and *tuṣṣur*' (Abdel-Massih, Abdel-Malek and Badawi 2009: 80–1).

### Summary

The representation of *tā'* *marbūṭa* in the construct state develops over time. In the fifteenth/sixteenth-century corpora, graphical (*heh* and *heh* + two dots) and phonetic (*tav*) representation co-occur. However, within these two corpora there are notable differences; graphical representation is more consistent across texts in the folk tale corpus, whereas phonetic representation has already become the norm in the letter corpus.

In the eighteenth/nineteenth-century corpora, phonetic denotation of *tā'* *marbūṭa* in the construct state abounds. There are no instances of *heh* in the folk tale corpus, and only a few instances to be noted in the letter corpus. In this regard, letters display a greater (if somewhat infrequent) tendency towards conservative orthography than contemporaneous folk tales.

### 2.1.5. 'alif

#### 2.1.5.1. 'alif maqṣūra

In addition to functioning as the long vowel /ī/ and the consonant /y/, the grapheme *yā'* is also used alongside 'alif *tawīla* (i.e., י) to denote the long vowel /a:/ in CA. This letter was referred to by the Arab grammarians as 'alif *maqṣūra* – 'the 'alif that can be shortened' (Wehr 1979: 900) – in order to differentiate it from 'alif *mamdūda* – the extended 'alif, which is followed by a *hamza* (cf. 1.6.3). During the classical JA period, the equivalent Hebrew graphical form *yod* was generally employed to denote 'alif *maqṣūra* (י for /a:/). The representation of 'alif *maqṣūra* with *yod* continues into the late JA period (§2.1.5.1.1). However, in the fifteenth/sixteenth-century corpora, there is also evidence of the burgeoning trend – which later becomes established practice – towards representing 'alif *maqṣūra*

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their ears, the blindness of their eyes, and the uselessness of their hands and feet' (T-S Ar. 37.39, 2v. 21-22).

with *'alef* (§2.1.5.1.2). There is also limited evidence in one of the folk tales from this period of the writing of *'alif maqṣūra* with *heh* rather than *'alef* (cf. §2.1.5.1.3).

#### 2.1.5.1.1. *yod* for *'alif maqṣūra*

##### *Fifteenth/sixteenth-century folk tales*

The classical JA practice of denoting *'alif maqṣūra* (ﺀ /a:/) with its Hebrew graphical cognate *yod* is evident in all fifteenth/sixteenth-century JA folk tales examined here. It is also by far the most common rendering of *yā'* for *'alif maqṣūra* (ﺀ /a:/) in all three texts, in part due to the prevalence of the prepositions *'ilā* 'to' and *'alā* 'on, upon', both of which are written with *yod* throughout, e.g., ראי 'he saw' (CA: *ra'ā*) (Evr.Arab.II 852, 5r. 10; Evr.Arab.I 2996, 3v. 20; Evr.Arab.II 1528, 2r. 32; 3v. 20); גרי 'it happened' (CA: *ḡarā*) (Evr.Arab.II 852, 5v. 18); פמא גרי 'Then, what happened...' (Evr.Arab.I 2996, 10v. 14-15, 14r. 9); ואקרי 'and stronger' (CA: *'aqwā*) (Evr.Arab.II 852, 5v. 23); חתי 'until' (CA: *ḥattā*) (Evr.Arab.II 852, 9r. 13; Evr.Arab.I 2996, 5r. 5, 6v. 15, 7r. 9, 11v. 23, 12v. 18); ואתי 'and he came' (CA: *'atā*) (Evr.Arab.I 2996, 2r. 6, 3r. 2); מתי 'when' (CA: *matā*) (Evr.Arab.I 2996, 10v. 14); והעאלי 'and almighty' (CA: *tu'ālā*) (Evr.Arab.I 2996, 12r. 6); אלי 'to, toward' (CA: *'ilā*) (passim); עלי 'on, upon' (CA: *'alā*) (passim).

##### *Late fifteenth-century letters*

*'Alif maqṣūra* is primarily denoted with *yod* in fifteenth-century letters, e.g., אלי 'to, toward' (T-S 13J26.7, 1r. 2, 13, MS Heb.c.72/39, 1r. 2); עלי 'on, upon' (T-S 13J26.7, 1r. 22; MS Heb.c.72/13, 1r. 19; MS Heb.c.72/39, 1r. 7, 8, 14, 16, 1v. 2, 2, 10, 17); מוסי 'Moses' (T-S 13J26.7, 1r. 22, 25).

In the late fifteenth-century letter MS Heb.c.72/39, there occur a couple of instances in which *yod* denoting *'alif maqṣūra* (ﺀ) is adorned with a supralinear dash, most probably in order to differentiate it from *yod* for the long vowel /ī/, e.g., א'לי 'to, toward' (MS Heb.c.72/39, 1r. 15); ח'תי 'until' (MS Heb.c.72/39, 1v. 5).

##### *Eighteenth/nineteenth-century folk tales*

*'Alif maqṣūra* (ﺀ) is seldom represented with *yod*, its orthographic cognate, in the later folk tale corpus. I have found only two examples in which *yod* denotes *'alif maqṣūra* (ﺀ) in the earliest texts in this eighteenth/nineteenth-century folk tale corpus, e.g., אלי 'to, toward' (T-S Ar. 46.10, 1v. 31); ב'כי 'he wept' (CA: *bakā*; MCA: *baka*) (T-S Ar. 37.39, 3v. 3).

*Eighteenth/nineteenth-century letters*

As with the contemporaneous folk tale corpus, *yod* is confined to the representation of the long vowel /ī/ and consonantal /y/ in the late letter corpus, with two exceptions; אַלי 'to, toward' (T-S 10J6.35, 1r. margin 10, 13).

## 2.1.5.1.2. 'alef for 'alif maqṣūra

*Fifteenth/sixteenth-century folk tales*

The substitution of *yod*, the Hebrew graphical equivalent of 'alif maqṣūra (ﺀ), with 'alef occurs in all three texts to some extent, but is more notable in the two fifteenth/sixteenth-century folk tales as opposed to the earlier fifteenth-century folk tale (Evr.Arab.II 852), e.g., לֹא יִחְצֵא 'innumerable' (CA: *lā yuḥṣā*) (Evr.Arab.II 852, 5v. 22; Evr.Arab.II 1528, 2v. 10); אֵלַא 'to' (CA: 'ilā; MCA: 'ila) (Evr.Arab.II 1528, 2v. 1); מֵא גָרָא לִי 'what happened to me' (CA: *ḡarā*; MCA: *gara*) (Evr.Arab.II 1528, 2v. 5); וְלֹא יִקְוֵא 'but he is not mighty' (CA: *yaqwā*; MCA: *yi'wa (yiqwa)*) (Evr.Arab.II 1528, 2v. 11); וַיַּעֲלֵא 'and he rises' (CA: 'alā, ya'lū; MCA: 'ili, yi'la) (Evr.Arab.II 1528, 3v. 3; Evr.Arab.II 852, 7v. 21); וַנִּאֲדֵא 'and he summoned' (CA: *nādā*; MCA: ) (Evr.Arab.II 1528, 3v. 22); אֲדַעַא 'he called' (CA: *da'ā*; MCA: *da'a*) (Evr.Arab.I 2996, 14v. 19).<sup>102</sup>

The use of 'alef in the final example from these folk tales may be interpreted in one of two ways; either as a *plene fathā* /a/, or as 'alef representing 'alif maqṣūra; וְלֹא יִבְקֵא אֵלַא 'and he only stayed...' (CA: *lam yabqa*). When one considers that it is extremely rare for the rules of *lam* + jussive to be observed in these texts, the latter seems a more probable interpretation, but the former explanation should not be dismissed out of hand.

*Late fifteenth-century letters*

In keeping with the trend apparent in fifteenth/sixteenth-century folk tales, 'alif maqṣūra is also denoted in contemporaneous letters with 'alef, e.g., בִּקֵּא 'he was' (CA: *baqā*; MCA: *ba'a, (baqa)*) (MS Heb.c.72/39, 1v. 14, MS Heb.c.72/18, 1r. 9); אַמְשָׂא מִן 'He walked from' (CA: 'amšā) (T-S 13J26.7, 1r. 14); יִסְוֵא 'he is equal' (CA: *yaswā*; MCA: *yiswa*) (MS Heb.c.72/18, 1r. 12, 13); בַּעַד 'After perfect greetings to you, to your mother, to your wife, and his grandmother...' (CA: 'alā; MCA: 'ala) (T-S 13J26.7, 1r. 20-22).

*Eighteenth/nineteenth-century folk tales*

<sup>102</sup> This is a IV form verb used with a form I meaning.



The most common representation of *'alif maqṣūra* (ﺀ) in the later folk tales is with the Hebrew grapheme *'alef*, e.g., עלא 'on, upon' (CA: *'alā*; MCA: *'ala*) (passim); אלא 'to, toward' (CA: *'ilā*; MCA: *'ila*) (passim); חתא 'until, even' (CA: *ḥattā*; MCA: *ḥatta*) (T-S Ar. 37.39, 3v. 9; Cairo JC 104, 3r. 14, 15r. 10); לחתא 'so that...' (T-S Ar. 37.39, 2r. 17, 3r. 13, 3v. 15; Cairo JC 104, 15v. 7); גרא/גרא 'it happened' (CA: *ḡarā*; MCA: *gara*) (T-S Ar. 46.10, 1v. 28, 31; BnF Hébreu 583, 140v. 13, 16); ובכא 'and he wept' (CA: *bakā*; MCA: *baka*) (T-S Ar. 37.39, 2v. 7).

#### *Eighteenth/nineteenth-century letters*

*'Alif maqṣūra* is often represented in late letters with *'alef*, e.g., עלא 'on, upon' (T-S 10J16.35, 1r. 8, 9; T-S 13J25.24, 1v. col:1, 17, 23, 24, 31, 39, 42, col. 2: 16, 29, 33, 42, col. 3: 7, 8; Rylands L192, 1r. 17, 28, 33, margin 1, 3); חתא אלה 'until' (T-S 10J16.35, 1r. margin 3); תעאלא 'the Almighty' (Rylands L192, 1r. 5); אלא 'to, towards' (T-S 10J16.35, 1r. margin 7, 8).

#### *2.1.5.1.3. heh for 'alif maqṣūra*

##### *Fifteenth/sixteenth-century folk tales*

There are no occurrences of *heh* for *'alif maqṣūra* in this corpus.

##### *Late fifteenth-century letters*

In one rare occurrence, *heh* is used to represent *'alif maqṣūra* in the fifteenth-century letter MS Heb.c.72/18, e.g., תועאלה 'Almighty' (CA: *tu'ālā*; MCA: *tu'āla*) (1r. 3).

##### *Eighteenth/nineteenth-century folk tales*

The representation of *'alif maqṣūra* with *heh* is a frequent phenomenon in a couple of the eighteenth/nineteenth-century folk tales. However, it is rare in T-S Ar. 46.10, and entirely absent from BnF Hébreu 583, e.g., בכא 'he wept' (CA: *bakā*; MCA: *baka*) (T-S Ar. 37.39, 3v. 4); ותעאלה 'and Almighty' (Cairo JC 104, 2v. 12, 4v. 10, 11r. 6); תועאלה '(the) Almighty' (Cairo JC 104, 11v. 6, 12v. 7, 14r. 7, 15v. 5); עלה 'on, upon' (CA: *'alā*; MCA: *'ala*) (T-S Ar. 37.39, 1v. 12; Cairo JC 104, 4r. 6, 4v. 4, 5, 5v. 6, 6v. 11, 7r. 4, 6, 8, 8r. 4, 8v. 5, 9r. 3, 7, 9v. 6, 6, 12, 10r. 4, 10v. 4, 6, 11r. 8, 11r. 12, 11v. 3, 12r. 4, 13r. 6, 13v. 8, 12, 13, 14r. 7, 15r. 10, 15v. 8, 12); אלה 'to, toward' (CA: *'ilā*; MCA: *'ila*) (Cairo JC 104, 10r. 8, 13r. 13, 13v. 10, 14v. 6); אורכה 'another' (CA: *'uḥrā*; MCA: *'uḥra*) (Cairo JC 104, 10r. 7); לחתה 'until' (CA: *ḥattā*; MCA: *ḥatta*) (Cairo JC 104, 13v. 12); תועטה 'you (will) be granted...' (CA: *tu'ḡā*) (T-S Ar. 46.10, 1v. 34); ליסעה 'let him strive' (CA: *sa'ā*, *yas'ā*; MCA: *sa'a*, *yas'a*) (Cairo JC 104, 15r. 7).

*Eighteenth/nineteenth-century letters*

The representation of *'alif maqṣūra* with *heh* is less common in eighteenth/nineteenth-century letters than the use of *'alef* for the same purpose, e.g., יבקה 'it remains' (CA: *yabqā*; MCA: *yibqa*) (T-S 13J25.24, 1v. col. 1, 13); ולם ראצה 'he was not pleased' (CA: *lam yarḏa*, *mā raḏiya*; MCA: *mā riḏi*, *riḏa*) (T-S 13J25.24, 1v. col. 1, 14); אלה 'to, toward' (T-S 13J25.24, 1v. col. 1: 14, 28, 34, col. 2: 4, 24, 39, col. 3: 1); עלה 'on, upon' (T-S 10J16.35, 1r. 25, margin 3, 3, 12); גרה לנה 'it happened to us' (CA: *ḡarā*; MCA: *gara*) (T-S 13J25.24, 1v. col. 2, 9); סויה 'other than' (CA: *siwan*; MCA: *siwa*, *siwā* + pronoun suffix) (T-S 13J25.24, 1r. col. 2, 38).

*Summary*

*'Alif maqṣūra* is generally denoted with its Arabic graphical equivalent *yod* in the fifteenth/sixteenth-century corpora. It is not uncommon in both letters and folk tales of this era for *'alef* to replace *yod* in representing *'alif maqṣūra*. However, while *heh* is used once to denote *'alif maqṣūra* in the late fifteenth-century letter MS Heb.c.72/18, it never appears for *'alif maqṣūra* in the contemporaneous folk tales.

In the eighteenth/nineteenth-century corpora, *yod* has been all but abandoned in the representation of *'alif maqṣūra*. It is primarily supplanted by *'alef*. Yet, *heh* is also used for the same purpose. The interchangeability of *heh* and *'alef* to denote *'alif maqṣūra* is an oft-discussed phenomenon of eighteenth/nineteenth-century JA texts (cf. Hary 1996b: 732). The use of *heh* is generally ascribed to the influence of Hebrew spelling, while the choice of *'alef* is regarded as indicative of the influence of the Babylonian Talmud (Hary 1997b: 732).

2.1.5.2. *'alif ṭawīla*2.1.5.2.1. *heh* for *'alif ṭawīla**Fifteenth/sixteenth-century folk tales*

In one of the folk tales in this fifteenth/sixteenth-century corpus (Evr.Arab.II 852), there are a number of instances in which *'alif ṭawīla* (Ⲁ) is represented with the Hebrew grapheme *heh*, e.g., ואסתדעה 'and he summoned' (Evr.Arab.II 852, 8r. 7); כלאצנה 'our salvation' (CA: *ḡalāṣu-nā*; MCA: *ḡalās-na*) (Evr.Arab.II 852, 3v. 17); נחמדה עלי מא אולאנה מן אלנעם 'We thank him for what he has bestowed on us in terms of blessings' (CA: *'awlā-nā*; MCA: *'itwallā-na*) (Evr.Arab.II 852, 1r. 6); ונשכרה עלי מא עפאנה 'and we are grateful to him for what he has forgiven us...' (CA: *'afā-nā*; MCA: *'afa-na*) (Evr.Arab.II 852, 1r. 6-7).

In this same manuscript, the m.sg. demonstrative pronoun appears in an invariable form, *hdh* (CA: *hādā*). *Heh* is also used here to denote 'alif *ṭawīla*, e.g., {אלכבר} הדה 'this news' (Evr.Arab.II 852, 3r. 12, 3v. 16, 4r. 1); בהדה אלכתאב 'with this letter' (Evr.Arab.II 852, 6r. 4); הדה אלגואב 'this answer' (Evr.Arab.II 852, 7v. 19); and הדה אלברג 'this tower' (Evr.Arab.II 852, 8r. 6). The same phenomenon occurs in the slightly later version of this folk tale Evr.Arab.II 1528, yet here dagger 'alif is often written in *plene* (cf. also §2.2.1.1), e.g., האדה אלכבר 'this news' (Evr.Arab.II 1528, 1v. 13, 17); הדה אלכבר 'this news' (Evr.Arab.II 1528, 1v. 30); האדה אלכלאם 'these words' (Evr.Arab.II 1528, 1v. 14); האדה אלמקאם 'this place' (Evr.Arab.II 1528, 1v. 14-15); הדה אלקום 'this nation' (Evr.Arab.II 1528, 1v. 38); בהדה אלכתאב 'with this letter' (Evr.Arab.II 1528, 2v. 22).

#### *Late fifteenth-century letters*

The Maḡribi letter MS Heb.c.72/18 exclusively displays the use of *heh* for 'alif *ṭawīla*. It is used to the exclusion of 'alef to represent 'alif *ṭawīla* in the 1.c.pl. suffix pronoun/ending, -*nā* (MCA: -*na*), e.g., אפתרקנה 'we were separated...' (MS Heb.c.72/18, 1r. 2, 4); קאציינה 'we went far away' (MS Heb.c.72/18, 1r. 2); וקעדנה 'and we stayed' (MS Heb.c.72/18, 1r. 4); ומורנה 'we went to and fro...' (MS Heb.c.72/18, 1r. 5); ונקצנה 'but we lacked' (MS Heb.c.72/18, 1r. 5); קטענה 'it disrupted us' (MS Heb.c.72/18, 1r. 8); מתענה 'belonging to us' (MS Heb.c.72/18, 1r. 7, 14, 14); ווצלנה 'and we arrived' (MS Heb.c.72/18, 1r. 3).

While the other letters in the corpus continue the classical JA representation of 'alif *ṭawīla* with Hebrew 'alef, in one text the final 'alif *ṭawīla* of the m.sg. demonstrative pronoun is written with *heh*, e.g., האדה אלכתאב 'this letter' (MS Heb.c.72/39, 1v. 5); האדה אלשגל 'this work' (MS Heb.c.72/39, 1v. 5); האדה אלאמר 'this order' (MS Heb.c.72/39, 1v. 20).

#### *Eighteenth/nineteenth-century folk tales*

As with the denotation of 'alif *maqṣūra*, *heh* is used more commonly in T-S Ar. 37.39 and Cairo JC 104, than in T-S Ar. 46.10. It is omitted completely from BnF Hébreu 583, e.g., דונייה '(the) world' (T-S Ar. 46.10, 1r. 34; Cairo JC 104, 9r. 2, 4, 6, 8, 11r. 10, 15r. 7, 14); כדה 'thus' (CA: *ka-dā*; MCA: *kida* كدا) (T-S Ar. 37.39, 3r. 13); מה 'what' (CA: *mā*; MCA: *mā, ma*) (T-S Ar. 37.39, 3r. 5; Cairo JC 104, 11v. 8); ואדה 'and when' (CA: *'idā*; MCA: *'iza*) (Cairo JC 104, 3r. 12); ואמה 'and as for...' (CA: *'ammā*; MCA: *'amma*); (Cairo JC 104, 5r. 6); ואמה 'and what' (CA: *māḏā*; MCA: *mā, ma; 'th*) (Cairo JC 104, 7r. 2); האדה 'this (m.sg.)' (CA: *hādā*; MCA: *da* دا) (Cairo JC 104, 8v. 11, 10r. 2, 13v. 13, 14r. 3, 15r. 5); לאבונה 'for our fathers' (T-S Ar. 37.39, 2r. 13).

### *Eighteenth/nineteenth-century letters*

'*Alif ṭawīla* is most commonly denoted in the late letter corpus with the Hebrew grapheme *heh*, e.g., כדה 'thus' (T-S 10J16.35, 1r. 13, 20, margin 7, 8, 12; T-S 13J25.24, 1v. col.1: 15, 19, 32, 38, col.2: 5, 23, 27, 33, 40, col. 3: 5); דה 'this' (T-S 10J16.35, 1r. margin 2); בקה 'still' (T-S 10J16.35, 1r. margin 6); אלה 'when' (T-S 10J16.35, 1r. margin 6); הונה 'here' (CA: *hunā*) (T-S 13J25.24, 1r. col. 1, 13).

The '*alif ṭawīla* of the 1.c.pl. suffix is represented very frequently with *heh* as opposed to its orthographic equivalent '*alef*, e.g., וצלנה 'we arrived' (T-S 10J16.35, 1r. 4, 6); מחבנה 'our friend' (T-S 10J16.35, 1r. 4, 7, 23, margin 1); רבונה 'our master' (T-S 10J16.35, 1r. 22); לנה 'for/to us' (T-S 10J16.35, 1r. 31, margin 9, 11, 12, 15, 15, 17; T-S 13J25.24, 1v. col. 1: 7, 8, 10, 14, 17, 29, 34, 36, col. 2: 5, 6, 9, 16, 17, 19, 20, 28, col. 3: 2, 3, 8, 10, 11, 13); בטרפנה 'in our place' (T-S 10J16.35, 1r. margin 1); בענה 'we sold' (T-S 10J16.35, 1r. margin 2); כונה 'we were' (T-S 10J16.35, 1r. margin 3; T-S 13J25.24, 1v.col. 1, 40); מעאנה 'with us' (T-S 10J16.35, 1r. margin 6; T-S 13J25.24, 1v.col. 1, 27); ענדנה 'our place' (lit. 'with us') (T-S 10J16.35, 1r. margin 13; T-S 13J25.24, 1v. col. 1, 6, 6, 19, 20, 37).

This representation of '*alif ṭawīla* is not the dominant trend in all of the letters in this corpus. In Rylands L192, '*alif ṭawīla* is represented (with only one exception) with '*alef*, e.g., אתצרפנא פיהום 'we dispatched them' (Rylands L192, 1r. 8); טרפנא 'our place' (Rylands L192, 1r. 10, 21, 30, 34, margin 3); מכאחיבנא 'our letters' (Rylands L192, 1r. 12).

There are also a number of instances in contemporaneous letters in which '*alef* does represent '*alif ṭawīla*, e.g., וגא 'and he came' (T-S 13J25.24, 1v.col. 1, 41); לקינא 'we met' (T-S 10J16.35, 1r. 8); בטרפנא 'in our place' (T-S 10J16.35, 1r. 27, margin 7); בתועונא 'belonging to us' (T-S 10J16.35, 1r. margin 5); כונה 'we were' (T-S 10J16.35, 1r. margin 6); ארסלנא 'send us (word)!' (T-S 13J25.24, 1v.col. 2, 4, 41); לנא 'for/to us' (T-S 13J25.24, 1v.col. 2, 32, 34).

### *Summary*

A brief examination of these corpora reveals that the representation of '*alif ṭawīla* with *heh* had begun in the fourteenth/fifteenth-century (Evr.Arab.II 852) and was used in both folk tales and letters (MS Heb.c.72/18 and to a lesser extent MS Heb.c.72/39) alike, albeit sporadically. *heh* for '*alif ṭawīla* becomes a common feature in the eighteenth/nineteenth-century letters and folk tales, although, yet again, its use is not consistent throughout each corpus. It is used frequently to denote '*alif ṭawīla* in the folk tales T-S Ar. 37.39 and Cairo JC 104, but is uncommon in T-S Ar. 46.10 and completely absent from BnF Hébreu 583. It is prevalent in the letters T-S 10J16.35 and T-S 13J25.24, but omitted

(on the whole) in Rylands L192. On this basis, it may perhaps be best interpreted as an indicator of personal style.

### 2.1.5.3. *'alif mamdūda*

#### *Fifteenth/sixteenth-century folk tales*

In CA, *'alif mamdūda* constitutes *'alif* followed by *hamza* (ء). In JA, *hamza* is seemingly unrepresented.<sup>103</sup> As such, *'alif ṭawīla* and *'alif mamdūda* are both often denoted with Hebrew *'alef*, thus becoming indistinguishable from one another (Blau 1981: 74, 125), e.g., וּלְדַעַ 'and the plea' (CA: *'al-du'ā'*; MCA: *du'a*) (Evr.Arab.II 852, 2r. 10; Evr.Arab.I 2996, 12v. 24); אֶלְקָבָא 'the outer garment' (CA: *'al-qabā'*) (Evr.Arab.II 852, 7v. 17); אֶלְמָא 'the water' (CA: *'al-mā'*; ECA: *mā'*; MCA: *mā'i*) (Evr.Arab.II 852, 3r. 10; Evr.Arab.II 1528, 1v. 10, 2r. 17, 2r. 29; Evr.Arab.I 2996, 11r. 9); שָׂא 'He wills' (CA: *šā'*; MCA: *šā'*) (Evr.Arab.II 852, 3v. 21; Evr.Arab.II 1528, 1v. 23); בְּאַמְרָא 'with (the) princes' (CA: *'umarā'*; MCA: *'umara*) (Evr.Arab.II 1528, 1v. 15, 3v. 21); בְּאַלְאַמְרָא 'with the princes' (Evr.Arab.II 1528, 4r. 24).

In one instance, the *'alef*, which occurs where one would expect *'alif mamdūda* in CA, is followed by two supra-linear dashes, e.g., אֶלְסַמָּא'' 'the heaven(s)' (CA: *'al-samā'*; MCA: *sama*) (Evr.Arab.II 852, 5r. 7). This sign may be intended to indicate the *hamza* of *'alif mamdūda*, but it may also be intended to mark rhyme.

In another deviation from the general representation found here, and in what may be regarded as a precursor of a later orthographic feature, *'alif mamdūda* is once denoted in the fifteenth-century text Evr.Arab.II 852 with Hebrew *heh*, e.g., יֵא אַמְרָה 'O, princes!' (Evr.Arab.II 852, 3v. 15).

#### *Late fifteenth-century letters*

As with the contemporaneous folk tales, *'alif mamdūda* is generally represented with *'alef* in the fifteenth-century letters, e.g., {אֶלְפִּצָּא} 'free (time)' (CA: *'al-faḍā'*) (MS Heb.c.72/13, 1r. 2); אֶלְגָּזָא 'the repayment' (CA: *'al-ḡazā'*) (MS Heb.c.72/39, 1v. 13, 16).

#### *Eighteenth/nineteenth-century folk tales*

*'Alif mamdūda* is most commonly denoted with *'alef* in the later folk tale corpus, e.g., בְּאַל בּוּכָא

<sup>103</sup> This is not unprecedented in CA. Some nominal forms with *'alif mamdūda* may be written both with and

‘weeping’ (CA: *bukā*) (BnF Hébreu 583, 140r. 5); ובכא בוכא ‘and he wept (many) tears’ (T-S Ar. 37.39, 2v. 7); ואל פוקרא ‘and the poor’ (CA: *fuqarā*) (T-S Ar. 37.39, 1r. 2, 3v. 21); פי אל סמא ‘in the heaven(s)’ (CA: *samā*) (T-S Ar. 37.39, 1v. 8, 3r. 7); לל נצרא ‘for the helpers/followers’ (CA: *nuṣarā*) (T-S Ar. 37.39, 2v. 10); דמא ‘bloods’ (CA: *dimā*) (T-S Ar. 37.39, 2v. 17); ואל גורבא ‘and the strange’ (CA: *ḡurabā*) (T-S Ar. 37.39, 3r. 20); גזא ‘punishment’ (CA: *ḡazā*) (T-S Ar. 37.39, 2v. 4).

Occasionally, *’alef* for *’alif mamdūda* is replaced with *heh*, e.g., אלהוכמה ואלאטיבה ‘the sages and the physicians’ (CA: *ḥukamā*; *aṭibbā*; MCA: *ḥukama*; *’aṭibba*) (Cairo JC 104, 5v. 9; T-S Ar. 37.39, 1v. 17-18).

#### *Eighteenth/nineteenth-century letters*

Words which in CA contain *’alif mamdūda* seldom occur in the late letter corpus. Those that do use both *’alef* and *heh*, e.g., ולא שרה ‘nor buying’ (CA: *širā*) (Rylands L192, 1r. 11); ואל שרה ‘and buying’ (Rylands L192, 1r. margin 3); אין שא אללה ‘God willing!’ (CA: *’in šā’a ’allāh*) (Rylands L192, 1r. 11, 31, margin 4; T-S 10J16.35, 1r. 24).

#### *Summary*

With the exception of eighteenth/nineteenth-century letters, *’alif mamdūda* is most commonly represented in texts of all periods by Hebrew *’alef*. However, there is one instance in the folk tale Evr.Arab.II 852 in which *heh* denotes *’alif mamdūda*. This is the first occurrence found in these of a phenomenon which later becomes common in some eighteenth/nineteenth-century folk tales (T-S Ar. 37.39 and Cairo JC 104) and letters.

#### 2.1.5.4. *’alif qaṣīra*/dagger *’alif*

##### *Fifteenth/sixteenth-century folk tales*

The representation of dagger *’alif* varies from text to text. In the fourteenth/fifteenth-century folk tale Evr.Arab.II 852 and fifteenth/sixteenth-century folk tale Evr.Arab.I 2996, we find that defective spelling (in keeping with CA convention) is favoured, e.g., הדה ‘this’ (Evr.Arab.II 852, 3r. 12, 3v. 16, 16, 17, 4r. 1, 9, 6r. 4, 10, 7v. 18, 19, 8r. 6); הדא ‘this’ (m.sg.) (Evr.Arab.I 2996, 1v. 2, 8, 12, 3r. 4, 5, 8, 9, 4r. 3, 5r. 10, 8r. 9, 9r. 7, 10r. 5, 12, 14, 14, 10v. 4, 5, 12r. 8); הדה ‘this’ (f.sg.) (Evr.Arab.I 2996, 3r. 12, 3v. 20, 24, 24, 25, 26, 4r. 5, 4v. 20, 24, 5v. 19, 23, 6r. 1, 9v. 26, 11v. 15, 12r. 2).

However, in the (roughly) contemporaneous fifteenth-century letter Evr.Arab.II 1528, *plene* writing

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without *hamza*, e.g., عطاء (‘*aṭā*’/‘*aṭan*’) ‘gift, present’; شقاء (‘*ṣaqā*’/‘*ṣaqan*’) ‘misery’.

of dagger 'alif occurs alongside the traditional defective spelling, e.g., הַזֶּה 'this' (Evr.Arab.II 1528, 1v. 13, 14, 14, 17); לָאֵכֵן 'but' (Evr.Arab.II 1528, 1v. 37); הַזֶּה 'this' (Evr.Arab.II 1528, 1v. 30, 38, 2v. 22).

#### *Late fifteenth-century letters*

Words in which the dagger 'alif occurs in CA are infrequent in the letter corpus. However, where it does occur, the dagger 'alif is more commonly written *plene* than not, e.g., הַזֶּה 'this' (MS Heb.c.72/39, 1r. 16, 1v. 5, 5, 20); דָּאֵלֶךְ 'that' (MS Heb.c.72/13, 1r. 11, 14, 17, 20); לָאֵכֵן 'but' (T-S 13J26.7, 1r. 14); דָּאֵלֶךְ 'that' (MS Heb.c.72/18, 1r. 8, 11, 15, 15, 17); וְכִדְאֵלֶךְ 'and likewise' (MS Heb.c.72/18, 1r. 9). Only in MS Heb.c.72/39 is the CA (and classical JA) practice of omitting the *plene* 'alif observed, e.g., הַזֶּה 'this' (MS Heb.c.72/39, 1r. 15); דִּלֶךְ 'that' (MS Heb.c.72/39, 1r. 7, margin 2, 1v. 9, 12, 17); בְּדִלֶךְ 'in/with that' (MS Heb.c.72/39, 1r. 8, 12, 14, margin 1).

#### *Eighteenth/nineteenth-century folk tales*

The emerging trend evident in the fifteenth-sixteenth-century folk tales and letters alike of writing the dagger 'alif *plene* dominates in later folk tales, e.g., לָאֵלֶךְ 'that' (T-S Ar. 46.10, 1r. 32, 33. 1v. 32; T-S Ar. 37.39, 1r. 6, 1v. 7, 14, 2r. 22, 2v. 5, 3r. 11, 12, 14, 14, 22, 3v. 1, 3, 13, 13, 15; BnF Hébreu 583, 140r. 2, 3; Cairo JC 104, 3r. 4, 3v. 5, 4r. 12, 4v. 3, 7, 5r. 2, 6r. 11, 6v. 4, 14, 8r. 14, 8v. 9, 9r. 2, 11, 13, 9v. 2, 10r. 10, 11v. 6, 12r. 3, 13r. 13, 13v. 8, 13, 14v. 8, 8, 11, 15r. 10, 15v. 3, 4, 6); לָאֵלֶיךָ 'that' (T-S Ar. 37.39, 1v. 5, 2v. 3, 5, 3r. 6); וְלָאֵכֵן 'but' (T-S Ar. 46.10, 1v. 26; T-S Ar. 37.39, 2r. 18); הַזֶּה 'this' (T-S Ar. 37.39, 2v. 4; BnF Hébreu 583, 140r. 8); בְּהַזֶּה 'in/with this' (T-S Ar. 37.39, 3r. 16); הַזֶּה 'this' (BnF Hébreu 583, 140r. 9, 10, 17); הַזֶּה 'this' (m.sg.) (Cairo JC 104, 2v. 14, 7r. 2, 8v. 11, 10r. 2, 11v. 13, 13. 13, 15r. 5); הַזֶּה 'this' (f.sg.) (Cairo JC 104, 9r. 8, 8v. 14). It is rare in this later corpus to find instances in which the CA convention is observed, yet they do occasionally occur, e.g., הַזֶּה 'this' (T-S Ar. 37.39, 3v. 7); תֵּלֶה 'three' (CA: *talāt*) (BnF Hébreu 583, 140r. 11, 11, 14).

#### *Eighteenth/nineteenth-century letters*

Words which in CA contain a dagger 'alif are less common in the later letters than folk tales. However, in those that do occur, dagger 'alif tends to be written *plene*, e.g., לָאֵלֶךְ 'this' (Rylands L192, 1r. 6; T-S 10J16.35, 1r. margin 3, 7); וְכִדְאֵלֶךְ 'and likewise' (Rylands L192, 1r. 9); לָאֵכֵן 'but' (Rylands L192, 1r. 17) (Khan 2013a: 244); וְלָאֵכֵן 'but' (T-S 10J16.35, 1r. 29, margin 10; T-S 13J25.24, 1v.col. 1, 7, 23).

#### *Summary*

*Plene* spelling of dagger 'alif with 'alef appears infrequently in fifteenth/sixteenth-century folk tales, but is common practice in contemporaneous letters. Dagger 'alif is also generally represented *plene* with 'alef in eighteenth/nineteenth-century folk tales, although with some exceptions. In contemporaneous letters, the trend exhibited in late fifteenth-century letters for *plene* writing of dagger 'alif continues.

#### 2.1.5.5. Otiose 'alif

The otiose separative 'alif, present in all CA 3.m.pl. suffix conjugations, 2.m.pl. and 3.m.pl. subjunctive and jussive forms of the prefix conjugation – e.g., كَتَبُوا *katabū* 'they wrote'; and يَكْتُبُوا *yaktubū* 'they (should) write' (examples from Fischer 2002:7 §7.2) – is omitted in all texts in the corpora under examination here with one exception. It occurs once in the late nineteenth-century folk tale Cairo JC 104; לָרָגוּ 'they left' (CA: *haraḡū*) (Cairo JC 104, 9v. 2). The omission of the otiose separative 'alif is also common in Middle Arabic texts of the Ottoman period (cf. Lentin 1997).

#### 2.1.5.6. Representations of 'alif: A summary

As has already been mentioned, Hary attributes the spelling of 'alif *maqṣura* and 'alif *ṭawīla* with 'alef and *heh* to Hebrew influence. While this is a sound elucidation of the situation, and one which I do not intend to dismiss, I think it is worth further exploring the possible phonetic implications of this shift that have already been touched upon by Khan (1992: 229; 2006: 50–1) and Wagner (2010: 45, §4.3.5).

In MCA, final long /a:/ is generally shortened to /a/. In so doing, the distinctions maintained in CA between vowel lengths through the use of *tā' marbūṭa* to denote final /a/ on the one hand, and 'alif *maqṣura* and 'alif *ṭawīla* to indicate /a:/ on the other hand, collapse in MCA. This is borne out in a number of instances found in these JA texts which demonstrate the interchangeability of *heh* and 'alef in the denotation of *tā' marbūṭa*, 'alif *ṭawīla*, and occasionally 'alif *maqṣura*. It is also made evident through examples such as the one that follows, in which the CA and MCA vowel patterns differ, and the MCA vowel pattern (which ends in short /a/) appears to be favoured, e.g., יַעֲזָא 'he renounced (God)' (CA: 'aṣā, ya 'ṣī; MCA: 'iṣi, yi 'ṣa) (T-S Ar. 37.39, 2v. 4; Cairo JC 104, 11r. 9, 11v. 14, 15r. 5), yet is still depicted with 'alef.

The interpretation of *heh* and 'alef as indicative of the shortened /a:/ vowel is also corroborated by the replacement of 'alif *mamdūda* with *tav* when it occurs as the first term of a construct state (cf. §2.1.4.2). This suggests that not only has the *hamza* been elided, but that the long /a:/ has been



shortened to /a/ and is, therefore, phonetically indistinguishable from *tā' marbūṭa* /a/.

#### 2.1.6. Double spelling of *vav*, *yod* and '*alef*

The double spelling of *yod* and *vav* to denote consonantal /y/ or /w/ or geminated /yy/ and /ww/ is considered a key feature of late JA (Hary 1996b: 732; 1997b: 38; Wagner 2010: 37). It is also noted in early and classical JA texts and is ascribed to the influence of Rabbinic Hebrew spelling practices (Blau 1981: 135; 2002: 32).

##### 2.1.6.1. Double '*alef*

###### *Fifteenth/sixteenth-century folk tales*

The double spelling of '*alef* occurs only in fourteenth/fifteenth-century folk tale Evr.Arab.II 852. It is used to indicate a variety of phenomena, all relating to variant forms of '*alif*; '*alif ṭawīla* carrying *hamza*, e.g., וקראאת 'and I read' (CA: *qara'atu*) (Evr.Arab.II 852, 7v. 20); dagger '*alif*, e.g., לאאכן 'but' (CA: *lākin*; *lākinna*) (Evr.Arab.II 852, 4r. 7); '*alif ṭawīla* carrying *hamza* and a following short vowel, e.g., {אאתי} 'he came' (CA: '*atā*) (Evr.Arab.II 852, 4r. 12); אאכד 'he took' (CA: '*aḥaḍa*) (Evr.Arab.II 852, 6r. 7); אאלף 'a thousand' (CA: '*alfun*) (Evr.Arab.II 852, 8r. 11, 10r. 8); and , e.g., אלאאתאר 'the traces' (CA: '*ālārūn*) (Evr.Arab.II 852, 4v. 17); and '*alif ṭawīla* with *madda*, e.g., {אאתאר} 'traces' (Evr.Arab.II 852, 5v. 15); אלאאלאם 'the agonies' (CA: '*ālāmūn*) (Evr.Arab.II 852, 6v. 18). As we will see below, the double spelling of *yod*, and to a lesser extent *vav*, is common in this particular folk tale. It is probable, therefore, that this idiosyncratic practice was the result of analogy with the double spelling of *vav* and *yod* to denote consonantal /w/ and /y/, respectively (§2.1.6.2 and §2.1.6.3).

##### 2.1.6.2. Double *vav*

###### *Fifteenth/sixteenth-century folk tales*

Double *vav* occurs in two of the three folk tales in this corpus. Yet, it is rare even in these two texts. Where it does appear, it tends to indicate consonantal /w/ in the sequence /wū/ and geminated consonantal /ww/, e.g., לעדוור 'for your enemy' (CA: '*adūwu-ka*; MCA: '*adiww-ak*) (Evr.Arab.II 852, 5v. 23); אוול 'first' (CA: '*awwalun*; MCA: '*awwil*) (Evr.Arab.II 852, 9v. 19); וטאוור 'and a peacock' (CA: '*ṭawūsun*) (Evr.Arab.II 852, 11r. 6); ינו 'they intend' (CA: *nawā*, *yanwī*, *yanwū*) (Evr.Arab.II 1528, 2v. 6). In the following two examples, the double *vav* may either be interpreted as marking *waw* acting as a seat for medial *hamza* (as in CA), or the long vowel /ū/ (in keeping with colloquial pronunciation), e.g., רווס 'head' (CA: *ru'ūsun*; MCA: *rūs*) (Evr.Arab.II 1528, 2v.9); אלשו 'the misfortune' (CA: *sū*'; MCA: *sū*', *saww*) (Evr.Arab.II, 1528 4r. 15).

*Late fifteenth-century letters*

The only occurrence of double *vav* in the fifteenth-century letter corpus occurs in T-S 13J26.7, and is representative of geminated consonantal /ww/, e.g., עומת 'I set off by ship/boat' (CA: 'awwama; MCA: 'awwim) (T-S 13J26.7, 1r. 10).

*Eighteenth/nineteenth-century folk tales*

There is a marked increase in the frequency of double *vav* in the eighteenth/nineteenth-century folk tale and letter corpora in comparison to the preceding period. Double *vav* appears in every text in the folk tale corpus with decided regularity. Unlike in the earlier texts and contemporaneous letters, double *vav* appears in initial, medial and – in two instances – final position. With only a small number of exceptions (discussed below), double *vav* is used to mark consonantal /w/ or geminated /ww/, e.g., בולד 'boy' (CA: *waladun*) (T-S Ar. 46.10, 1r. 33, 35, 36); ווגה 'face' (CA: *waḡhun*) (T-S Ar. 37.39, 1v. 11, 12, 12, 13, 13, 13, 16, 17, 18, 19, 3r. 10); וואגה 'my face' (T-S Ar. 37.39, 2r. 17); אולאד 'children' (CA: 'awlādun) (T-S Ar. 46.10, 1r. 29; BnF Hébreu 583, 139v. 21); גואב/לואב 'an answer' (CA: *ḡawābun*) (T-S Ar. 46.10, 1v. 2; BnF Hébreu 583, 140r. 8, 13, 16); נתווגהו 'we will go' (BnF Hébreu 583, 140r. 19); עואץ 'instead of' (CA: 'iwaḡa) (T-S Ar. 46.10, 1v. 15; T-S Ar. 37.39, 1v. 1; BnF Hébreu 583, 140v. 1; Cairo JC 104, 6r. 2, 12v. 11); חואיג/חואיגי 'my clothes' (CA: *ḥawā'igun*) (T-S Ar. 37.39, 1r. 14; Cairo JC 104, 5v. 4); טויל 'tall' (Cairo JC 104, 4r. 12); אלטויל 'the long' (Cairo JC 104, 7r. 7); רשווא 'bribe' (CA: *raṣwatun*, *riṣwatun*) (Cairo JC 104, 8v. 6); אחוואל 'conditions' (CA: 'aḥwālun) (Cairo JC 104, 12r. 8); אל מתוואל 'the ones responsible (for)' (CA: *mutawakkalun*) (Cairo JC 104, 11v. 3, 13r. 8); מוואל עליי 'in charge of me' (CA: *muwakkalun bi-*) (Cairo JC 104, 15r. 4); עלו 'exaltedness' (CA: 'ulūw; MCA: 'iliww, 'uluww) (Cairo JC 104, 9v. 4); וואני 'they took me' (CA: *waddā*, *wadū-nī*) (Cairo JC 104, 11r. 7); ואקווא 'but stronger' (CA: 'aqwā) (Cairo JC 104, 8r. 11); חואליי 'around me' (MCA: *ḥawālayya*) (T-S Ar. 37.39, 1r. 17).

In a couple of occurrences of double *vav* in the late nineteenth-century folk tale Cairo JC 104, it is unclear whether double *vav* is intended to indicate the seat on which *hamza* resides, or the consonantal /w/ or long vowel /ū/ of colloquial pronunciation; אלסו 'evil' (CA: *sū'un*; MCA: *sū'*, *saww*) (Cairo JC 104, 4v. 12); אודאנהו 'their ears' (CA: 'uḡmun/'udunun, pl. 'āḡānun; MCA: *widn*, pl. *widān*) (Cairo JC 104, 13r. 4). In a couple of instances, double *vav* appears to indicate the diphthong /aw/, which is retained in both classical and colloquial pronunciation in the following examples, e.g., ומוואי 'and my master' (CA: *mawlāya*; MCA: *mawlāya*) (Cairo JC 104, 10v. 8); נאווין '(those) intending' (MCA: *nāwi*, *nawyīn*) (BnF Hébreu 583, 140v. 18).

### *Eighteenth/nineteenth-century letters*

Double *vav* does occur in the later letter corpus, yet its use is far more limited and sporadic than in the contemporaneous letters, and it is found predominantly in one text: T-S 13J25.24. It appears only in medial form, and is generally used to denote either consonantal /w/ or geminated /ww/, e.g., אל בואלץ, 'the (insurance) policy' CA: *bawālisun/bawālīṣun*) (Rylands L192, 1r. 12); הוה 'he' (CA: *huwwa*) (T-S 10J16.35, 1r. margin 1, 2, 9; T-S 13J25.24, 1v. col. 2, 26); שויית 'a little (of)' (MCA: *šuwayya*, *šīwayya*) (T-S 13J25.24, 1v.col. 1, 20, 40); קאוי 'strong; very' (CA: *qawīy*; MCA: *'awī*; *qawī*) (T-S 13J25.24, 1v.col. 1, 26); ומתווקף 'dependent (on)' (CA: *mutawaqqif*; MCA: *mitwa'if/mitwaqqif*) (T-S 13J25.24, 1v.col. 1, 26); גואב 'a letter; reply' (CA: *ḡawābun*) (T-S 13J25.24, 1v.col. 1, 37, col. 2, 6, 6); אטווגה 'he went' (T-S 13J25.24, 1v.col. 2, 3).

In the following example, double *vav* is used to denote the diphthong /aw/, e.g., ונורין 'and (they) intend' (MCA: *nawyīn*) (T-S 13J25.24, 1v. col. 1, 31, col. 2, 44).

### *Summary*

A diachronic examination of double *vav*'s use in fifteenth- to late nineteenth-century JA texts reveals a notable increase in its frequency during this period. However, it also exposes significant differences in the relative frequency of its use between the different genres. Double *vav* occurs sporadically in fifteenth/sixteenth-century texts, and its appearance is mainly limited to one text, Evr.Arab.II 852. However, there is only one instance of double *vav* in the entire contemporaneous letter corpus. Double *vav* becomes a regular feature of eighteenth/nineteenth-century folk tales. While it does appear with more regularity in contemporaneous letters than in late fifteenth-century letters, it appears to be the standard usage in only one of these letters (T-S 13J25.24).

The nature of its usage remains consistent throughout this period; it denotes consonantal /w/, geminated /ww/, and the diphthong /aw/.

#### 2.1.6.3. Double *yod*

##### *Fifteenth/sixteenth-century folk tales*

In comparison to the use of double *vav*, double *yod* is notably more commonplace in the texts of all periods and genres studied here. There are a variety of potential inducements for the employment of double *yod*. These are explored below. Yet, it must be noted that while certain patterns can be identified with regards to double *yod*'s use, these patterns do not necessarily enlighten us with

conclusive phonological information. So, for instance, the retention or loss of *hamza* (glottal stop) in JA texts remains equivocal (as far as I can tell) (see below).

In the fifteenth/sixteenth-century folk tale corpus, double *yod* primarily occurs in the earlier text Evr.Arab.II 852 (in keeping with its use of double *vav*), although there are a few instances in other contemporaneous folk tales of this phenomenon.

In the following examples, double *yod* represents consonantal /y/, e.g., וצבייה ‘and (the) youths (of)...’ (CA: *ṣibya, ṣabya*) (Evr.Arab.II 852, 9r. 10); ויידה ‘and his support (lit. ‘hand’)’ (CA: *yadun*; MCA: *yadd*) (Evr.Arab.II 1528, 3r. 14); ונהייה ‘and intelligence’ (CA: *nuhyatun*) (Evr.Arab.II 1528, 3v. 14).

It is possible that double *yod* serves two functions in the following instances; the first *yod* may have been intended to indicate either *plene* spelling of /i/, or the long vowel /ī/, while the second *yod* denotes consonantal /y/ (cf. Wagner 2010: 37), e.g., ותרביית אלמלך ‘and the instruction of kings’ (CA: *tarbiyatun*) (Evr.Arab.II 852, 7v. 15-16); אלערבייה ‘Arabic; Arab (f.)’ (CA: *‘arabīyatun*) (Evr.Arab.II 852, 8v. 18); אלמולוייה ‘the *mawlawīya*’ (CA: *mawlawīyatun*) (Evr.Arab.II 852, 8v. 19);<sup>104</sup> תהייה ‘you prepare’ (CA: *yuhiyyā*) (Evr.Arab.II 852, 6v. 22); אלדיאר ‘the houses’ (CA: *diyārūn*) (Evr.Arab.II 852, 4v. 18, 5v. 16, 10r. 15).

In a number of cases, double *yod* is used where the diphthong /ay/ has been retained in both CA and MCA pronunciation, e.g., גייש ‘and an army’ (CA: *ḡayšun*) (Evr.Arab.II 852, 2v. 16, 18); לדייאן ‘the Judge (epithet of God)’ (CA: *‘al-dayyānu*) (Evr.Arab.II 852, 1r. 2); ואיזאמה ‘and his days’ (CA: *‘ayyāmūn*) (Evr.Arab.II 852, 5v. 26); פלא תגלייר ‘for you do not change’ (CA: *tagayyara*) (Evr.Arab.I 2996, 11r. 13)

In one instance (common to all texts of both genres and periods), double *yod* is found where in CA there is the diphthong /ay/, but where in MCA /ī/ has supplanted the diphthong, e.g., סיידנא ‘our lord’ (CA: *sayyidun*; MCA: *sīd/sayyid*) (Evr.Arab.I 2996, 5v. 19). It is uncertain as to whether the diphthong /ay/ is intended, or the long vowel /ī/, here.

In the final selection of examples from this folk tale corpus, double *yod* occurs where *hamza* is found in CA, while /ī/ or /y/ has supplanted *hamza* in colloquial speech, e.g., אלדייאב ‘the wolves’ (CA: *ḏi‘āb*; MCA: *diyāb*) (Evr.Arab.II 852, 11r. 7); אלחדייאן ‘the kites’ (CA: *ḥid’a*, pl. *ḥid’ān*; MCA:

*ḥiddāya*, pl. *ḥiddāyāt*) (Evr.Arab.II 852, 11r. 13).

#### *Late fifteenth-century letters*

Double *yod* is present in all the manuscripts examined in this corpus, albeit by no means consistently in each. It is used for a variety of functions. In a couple of cases, it may indicate either retention of the diphthong /ay/, or the long vowels /ī/ or /ē/, which have superseded the diphthong in colloquial pronunciation, e.g., שׂי ‘a thing, something’ (CA: *šay*’; CA: *šī*’) (MS Heb.c.72/39, 1r. margin 2, 1v. 14); וגײרה ‘and so on’ (CA: *ḡayra-hu*; MCA: *ḡēr-u*) (MS Heb.c.72/18, 1r. 5, 12). It also appears to denote geminated /yy/ and the long vowel /ī/, e.g., ביטיבה ‘it pleases him’ (CA: *yūṭayyibu-hu*) (MS Heb.c.72/39, 1v. 15); לסידי ‘for my lord’ (CA: *sayyidun*; MCA: *sīd*, *sayyid*) (MS Heb.c.72/13, 1r. 20); קצײה ‘matter’ (CA: *qaḏīyatun*; MCA: *qaḏīyya*) (MS Heb.c.72/39, 1v. 11). Double *yod* also occurs where in CA one would expect the dual ending /ayni/; שהריין ‘two months’ (CA: *šahrayni*) (MS Heb.c.72/18, 1r. 4). In the final instance found in this corpus, the use of double *yod* remains ambiguous; בפײדה ‘in favour of, for the benefit of’ (CA: *fā'idatun*; MCA: *fayda*) (MS Heb.c.72/18, 1r. 11). Does this signal the retention of *hamza* in accordance with CA pronunciation? Or is it indicative of the loss of the glottal stop and elision evident in the colloquial pronunciation?

#### *Eighteenth/nineteenth-century folk tales*

The potential motivations for the use of double *yod* in the eighteenth/nineteenth-century folk tales are many and varied. The widely accepted explanation of its frequent use is that it was intended to differentiate consonantal /y/ or geminated /yy/ from *plene* spelling of the short /i/ vowel, or indeed, the long vowel /ī/ (Blau 1981: 135; 2002: 32). In the following examples, we find a significant number of instances in which consonantal /y/ appears to be marked with double *yod*, e.g., אל דונייה ‘(the) world’ (CA: *'al-dunyā*) (T-S Ar. 46.10, 1r. 34; T-S Ar. 37.39, 1r. 19; 2r. 20, 3v. 8, 12; Cairo JC 104, 8v. 15, 9r. 2, 4, 6, 8, 11r. 10, 15r. 7, 14); אל עלייה ‘the highest’ (CA: *'ulyā*; MCA: *'alyā*) (T-S Ar. 37.39, 1v. 18); אלעאלייה ‘the highest’ (Cairo JC 104, 7r. 11); אל מלאיכה אלעאליין ‘the loftiest angels’ (Cairo JC 104, 7v. 8); אבייך ‘white’ (CA: *'abyadun*) (Cairo JC 104, 6v. 10); גאייט ‘to the extent (of); up to’ (CA: *ḡāyatun*) (Cairo JC 104, 13v. 11). Included in these sections are a number of cases, which in both MCA and CA contain a consonantal /y/ preceded by a short /i/ vowel (Wagner 2010: 37). Thus, the first of the double *yod* may be intended to indicate /i/, while the second *yod* denotes /y/, e.g., נחייט/נאחייט ‘(the) area (of)’ (CA: *nāhiyatun*) (T-S Ar. 46.10, 1v. 16; BnF Hébreu 583, 140v. 2); צײנה ‘treachery’ (CA: *ḥiyānatun*) (T-S Ar. 37.39, 3r. 18); ואל צײאה ‘and screaming’ (CA: *ṣiyāhun*) (BnF Hébreu 583, 140r. 5).

In the following examples, we find the diphthong /ay/, followed by geminated consonantal /yy/. This CA realisation is retained in MCA. Double *yod*, therefore, may be indicative of the diphthong /ay/, the geminated consonant /yy/, or both, e.g., מיתה 'dead (f.)' (CA: *mayyitun*) (T-S Ar. 37.39, 1r. 11); ושאייעוני 'and they escorted me' (CA: *šayya'a*, *šāya'a*; MCA: *šayya'*) (T-S Ar. 37.39, 1r. 15); יתגיירו 'they are changed' (CA: *tagayyara*; MCA: *'itgayyar*) (T-S Ar. 37.39, 2r. 15; Cairo JC 104, 11r. 4); אל טיבה/אלטיבה 'the good' (CA: *ṭayyibun*; MCA: *ṭayyib*) (Cairo JC 104, 6r. 7, 15v. 14); חוואלייא 'around me' (MCA: *ḥawālayya*) (T-S Ar. 37.39, 1r. 17); ומולאייא 'and my master' (MCA: *mawlayya*) (T-S Ar. 37.39, 2r. 8); אלגידה 'the good (f.)' (CA: *ḡayyidun*; MCA: *gayyid*) (Cairo JC 104, 16r. 3); חייאת 'serpents' (CA: *ḥayyātun*) (T-S Ar. 37.39, 2v. 1, 2, 3v. 11); יא אייהא 'O!' (CA: *'ayyuhā*) (Cairo JC 104, 12r. 9, 12v. 8, 15r. 3); יא אייהו 'O!' (Cairo JC 104, 14v. 2, 15r. 8).

There are further cases found in these folk tales in which the double *yod* may represent the diphthong /ay/. However, unlike the preceding examples, the diphthong is not retained in MCA, but has shifted to /ī/ or /ē/. It is unclear from these examples which pronunciation was intended, e.g., אל אתניין תלמידים 'the two students' (CA: *'itnāni*; MCA: *'itnēn*) (T-S Ar. 46.10, 1v. 27); לאת[נ]יין 'to (the) two' (T-S Ar. 46.10, 1r. 37); שיי 'something' (CA: *šayyun*; MCA: *šē*) (T-S Ar. 37.39, 1r. 18, 1v. 3); אל שייטין 'the devil' (CA: *šaytānun*; MCA: *šītān*) (T-S Ar. 37.39, 3r. 7).

There is one single occurrence in this corpus, in which the dual is also marked by double *yod*, e.g., ואחד כעכיתין 'one of the two *ka'ka*' (T-S Ar. 46.10, 1v. 14).

It is not uncommon to find double *yod* where in CA one would expect a *hamza*. In the vast majority of instances, the glottal stop (*hamza*) has been lost in colloquial pronunciation. Therefore, whether *hamza* or the colloquial pronunciation /y/ is intended by the use of double *yod* remains ambiguous, e.g., ארבע מאיית וסבעין 'four hundred and seventy' (CA: *mi'atun*, *mā'atun*; MCA: *miyya*) (T-S Ar. 37.39, 1r. 11-12); גאיי אלייא 'he came towards me' (CA: *ḡā'a*; MCA: *gā*, *gih*) (T-S Ar. 37.39, 1v. 5); גא' אלייא 'he came towards me' (Cairo JC 104, 6v. 2);<sup>105</sup> מגיי 'coming' (CA: *maḡī'un*; MCA: *migiyy*) (BnF Hébreu 583, 140r. 11); מלייאן 'full, filled' (CA: *mal'ānun*; MCA: *malyān*) (Cairo JC 104, 6v. 8, 15r. 12; T-S Ar. 37.39, 3v. 10); מלייאנין 'full' (Cairo JC 104, 11v. 7; T-S Ar. 37.39, 2r. 23, 2v. 1); מליין 'full, filled' (T-S Ar. 37.39, 1v. 9); קראייה 'recitation' (CA: *qirā'atun*) (T-S Ar. 46.10, 1v. 12; BnF Hébreu 583, 140r. 4, 23); לכאייפין 'for (those who are) afraid' (CA: *li-ḥā'ifina*; MCA: *ḥāyif*) (T-S Ar. 37.39, 2r. 16; Cairo JC 104, 11r. 5).

<sup>105</sup> The small supra-linear dash written above JA *g'* here, may be intended to denote *hamza*. However, this is an isolated instance, so it is hard to identify its intended function with any degree of certainty.

In a small number of examples, double *yod* appears to represent /ī/, e.g., יִפְּיִקוּנִי ‘they revived me’ (CA: *ʾafāqa, yufīqu*) (T-S Ar. 37.39, 1r. 15); אֵל פְּעִיִּל ‘the deed’ (CA: *fī ʾlun*, pl. *ʾafā ʾlun*; MCA: *fī ʾl*) (T-S Ar. 37.39, 3v. 19).

#### *Eighteenth/nineteenth-century letters*

In the eighteenth/nineteenth-century letters examined here, double *yod* appears most frequently to indicate consonantal /y/, e.g., לִידְכּוֹם ‘to your hand(s)’ (CA: *yadun*; MCA: *yad*) (T-S 13J25.24, 1v.col. 2, 2); בִּיעֲגָבוּ ‘they do (not) like’ (CA: *ʾa ʾḡaba, yu ʾḡibu*; MCA: *ʾagab, ya ʾgib*) (T-S 13J25.24, 1v.col. 2, 22); בִּיעֲמִיל ‘they use/work’ (CA: *ʾamila, ya ʾmalu*; MCA: *ʾamal, ya ʾmil*) (T-S 13J25.24, 1v.col. 2, 26); רִיאַל ‘a *riyāl*’ (T-S 13J25.24, 1v.col. 2, 2, 39, 44); לְגַאֲיִת ‘to the extent (of); up to’ (CA: *ḡāyatun*) (Rylands L192, 1r. 4).

As with the contemporaneous folk tales, there are a few instances of double *yod* in these letters in which the CA equivalent comprises the consonantal /y/ preceded by a short /i/ vowel. Thus, it is possible that the first of the *yods* is intended to represent /i/ in *plene*, while the second *yod* is used to indicate /y/, e.g., אֵל לִדְקִיָּה ‘Latakia’ (CA: *ʾal-lāḡiqīya*) (T-S 10J16.35, 1r. 25); מְזִיָּה ‘merit’ (CA: *mazīyatun*; MCA: *maziyya*) (T-S 13J25.24, 1v.col. 2, 28); בִּאֲקִיָּה ‘remaining’ (CA: *baqīyatun, bāqin*; MCA: *bāqi, ba ʾiyya/baqiyya*) (Rylands L192, 1r. margin 3). In the colloquial pronunciation of the following example, /i/ is dropped and only /y/ is pronounced; וְאֵל תַּאֲנִיָּה ‘and the second; another; the next’ (CA: *ʾal-tānīyatun*; MCA: *tānya*) (T-S 10J16.35, 1r. 18).

There are also a number of examples found in the letters whose pronunciation does not differ in CA and MCA. Here, it appears that double *yod* may denote /ay/ followed by a consonantal /y/, e.g., טַיִיבָה ‘good (f.)’ (CA: *ṭayyibun*; MCA: *ṭayyib*) (T-S 13J25.24, 1v.col. 2, 37); טַיִיב ‘good’ (T-S 13J25.24, 1v.col. 2, 43); וְתַקְיִדוּהוֹם ‘and you should record them’ (CA: *qayyada, yuqayyidu*; MCA: *ʾayyid (qayyid), y ʾayyid (yqayyid)*) (T-S 13J25.24, 1v.col. 1, 36).

In keeping with the findings of contemporaneous folk tales, there are a few cases in which double *yod* may be interpreted either (a) as preserving the *hamza*, or (b) as consonantal /y/ of the colloquial pronunciation. In both explanations, it is also possible that one of the *yods* is representative of short /i/ vowel, e.g., פֶּאֲיִתִּין ‘we are passing’ (CA: *fā ʾitun*; MCA: *fāyit*) (Rylands L192, 1r. margin 2); וְכַאֲיִן ‘and a traitor’ (CA: *ḡā ʾinun*; MCA: *ḡāyīn*) (T-S 10J16.35, 1r. margin 2); אֵל מֵיָּה ‘the hundred’ (T-S 13J25.24, 1v.col. 1, 6).

#### *Summary*

Although double *yod*'s usage is more consistent across both periods and genres than double *vav*, it does follow a similar trajectory in terms of growth of frequency and genre-dependent use. Double *yod* is most commonly and routinely found in eighteenth/nineteenth-century folk tales.<sup>106</sup> Its use in contemporaneous letters is, once again, more sporadic and seems to depend on the particular style of a given writer. As with double *vav*, double *yod* is most consistently found in the letter T-S 13J25.45. Both of these late corpora display a great increase in the frequency of double *yod* compared to the fifteenth/sixteenth-century corpora, where, yet again, the use of double *yod* is more sporadic in letters than in folk tales.

The motivations behind the use of double *yod* are somewhat enigmatic. Aside from consonantal /y/ and geminated /yy/, it may be used intermittently to denote the long vowel /ī/ and the diphthong /ay/.

## 2.2. Vowels

### 2.2.1. *Plene* spelling of short vowels

#### 2.2.1.1. /a/

##### *Fifteenth/sixteenth-century folk tales*

The writing of the short vowel *fatha* in *plene* orthography seldom occurs in this corpus. Instances of this phenomenon that do appear are limited to the fourteenth/fifteenth-century folk tale Evr.Arab.II 852. In this text, we find a couple of unambiguous examples, e.g., לכא 'for you' (CA: *la-ka*) (Evr.Arab.II 852, 9v. 20); and אלכאלב 'the dog' ('*al-kalbu*) (Evr.Arab.II 852, 11r. 13); אלבטאל 'the warrior' (CA: *baṭalun*) (Evr.Arab.II 852, 3r. 2); אלפאכר 'the glory' (CA: *fahrun*) (Evr.Arab.II 852, 3r. 8).

The third and final instance of this phenomenon from Evr.Arab.II 852 involves the writing of the final short vowel *fatha* in the 3.m.sg. independent pronoun *huwwa*, e.g., הוא 'he' (Evr.Arab.II 852, 1r. 4). Those familiar with the Hebrew 3.m.sg. independent pronoun will note the graphical similarity between the JA(?) form presented in this text and the Hebrew independent pronoun. Although rare in the fifteenth/sixteenth-century corpora, this JA rendition of the 3.m.sg. independent pronoun is found regularly in eighteenth/nineteenth-century texts. In general, it is unclear whether this form is to be interpreted as (i) a Hebrew loanword or (ii) the *plene* spelling of the short vowel /a/ (see below). In this particular context, I think (i) provides the most probable explanation; the form occurs in the opening four lines of the manuscript, in which Hebrew and JA are intermingled, freely. Furthermore,

<sup>106</sup> With the exception of the nineteenth-century manuscripts BnF Hébreu 583 and Cairo JC 104, double *yod* occurs more commonly (or at least equally as often cf. Evr.Arab.II 1528 and T-S 13J26.7) than double *vav* in



all other 3.m.sg. independent pronouns in this text are written without the final *'alef*, in keeping with the Arabic graphical form of the pronoun (هو).

#### *Late fifteenth-century letters*

There are no occurrences in the late fifteenth-century letters of /a/ written *plene*. However, in her examination of business letters, Wagner notes two examples in which the 3.m.sg. independent pronoun is written with final *'alef* and final *heh*, respectively, in two fifteenth/sixteenth-century letters (T-S 16.216 and GW XXVIII) (cf. Wagner 2010: 57). Suffice it to say, *plene* spelling of /a/ is not a common phenomenon in late fifteenth-century letters.

#### *Eighteenth/nineteenth-century folk tales*

In the eighteenth/nineteenth-century folk tales *mater lectionis* *'alef* for short /a/ occurs sporadically, e.g., ונאד 'he found' (CA: *wağada*) (T-S Ar. 46.10, 1v. 23); ונאד 'he found' (CA: *wağada*) (T-S Ar. 46.10, 1v. 27); צאלו 'they prayed' (CA: *şallā*) (T-S Ar. 46.10, 1v. 30); צדאקתי 'you gave alms...' (CA: *şadaqa; taşaddaqa* *'alā*) (T-S Ar. 37.39, 1r. 2); ושחטאטוני 'and they dragged me' (MCA: *šahṭat*) (T-S Ar. 37.39, 2r. 15); יאדין 'he condemns' (CA: *dīna, yadīna*) (T-S Ar. 37.39, 2v. 2); עוואץ 'in place of' (CA: *'iwada*) (T-S Ar. 46.10, 1v. 15; Cairo JC 104, 6r. 2); וכאמס 'and five' (T-S Ar. 37.39, 2v. 12); כאמס 'five' (Cairo JC 104, 5v. 13, 13); ואקת 'time' (CA: *waqtun*) (T-S Ar. 37.39, 1v. 1, 2v. 5).

In one instance, the use of *'alef* to denote the short vowel /a/ indicates a shift in the vocalisation of the verb *'rf* in the prefix conjugation from the CA *ya'rifu* to conform to the MCA norm, *yi'raf*, e.g., יעראפו 'they will know' (T-S Ar. 46.10, 1r. 29).

The *plene* writing of independent pronouns' final short vowel /a/ takes two forms in these eighteenth/nineteenth-century folk tales. In the earlier eighteenth-century folk tales, the final /a/ is denoted with both *'alef* and *heh*, e.g., הוא 'he' (AIU VII.C.16, 1v. 1, 14); היא 'she' (AIU VII.C.16, 1r. 3, 1v. 6); הוה 'he' (T-S Ar. 46.10, 1v. 4, 26); ואנתה 'and you (m.sg.)' (CA: *'anta*; ECA: *'inta*) (T-S Ar. 37.39, 2r. 7, 8). In the nineteenth-century folk tales, the final short vowel /a/ is represented exclusively with *'alef*, e.g., הוא 'he' (BnF Hébreu 583, 140r. 16, 140v. 11, 14, 141r. 1; Cairo JC 104, 2v. 6, 7r. 5, 15r. 6); היא 'she' (BnF Hébreu 583, 140v. 6; Cairo JC 104, 7v. 2, 12v. 6, 11, 16r. 3). The earlier interchangeability of *'alef* and *heh* to denote /a/ suggests that, at least in these earlier texts, the phonetic similarity of *heh* and *'alef*, rather than the graphical imitation of the Hebrew pronouns' forms, was the driving factor behind the *plene* writing of this short vowel. However, this does not

preclude the interpretation that the Hebrew pronouns' forms affected the consistent inclusion of *'alef/heh* in this context; it is possible that two influencing factors may have been at play simultaneously.

In MCA, the preposition *ma'a* is written with an *'alif ṭawīla* when followed by a pronominal suffix (Hinds and Badawi 1986: 828) to denote its phonetic lengthening; *ma'a* > *ma'ā*, e.g., *ma'ā-ka* 'with you (m.sg.)' (CA: *ma'a-ka*). There is evidence in many of the eighteenth/nineteenth-century texts (most notably the letters) for the use of this colloquial feature in JA, e.g., מעאכום 'with you (m.pl.)' (BnF Hébreu 583, 140r. 17); מעאך 'with you' (BnF Hébreu 583, 140v. 19).

### *Eighteenth/nineteenth-century letters*

Although not as common as *plene* short /i/ or /u/ (see below), *plene* short /a/ does occur in the eighteenth/nineteenth-century letters examined here, e.g., קאוי 'very' (CA: *qawīy*) (Rylands L192, 1r. margin 1); קאוי (T-S 13J25.24, 1v.col. 1, 26); כאבר 'news' (CA: *ḥabarun*) (Rylands L192, 1r. 29); ואל באלד 'and the country' (CA: *wa-'al-baladu*) (Rylands L192, 1r. 11); טאי זאלך 'enclosed herein' (CA: *ṭayya*) (Rylands L192, 1r. 6); בדאל 'instead of' (CA: *badala*) (Rylands L192, 1r. 24); שאי 'thing, something' (CA: *šay'un*) (T-S 10J16.35, 1r. margin 2, 7); עאן 'away from' (CA: *'an*) (T-S 10J16.35, 1r. margin 15); ולם ראצה 'and he was not pleased' (CA: *lam yarḏa, mā rādiya*; MCA: *mā riḏi, riḏa*) (T-S 13J25.24, 1v.col. 1, 14); מעא 'with' (T-S 13J25.24, 1v.col. 1, 25); אל האק 'the truth' (CA: *ḥaqqun*; MCA: ) (T-S 10J16.35, 1r. margin 10); האד 'no(one)' (CA: *'aḥadun*; MCA: ) (T-S 10J16.35, 1r. margin 10); עאן 'from' (CA: *'an*; MCA: *'an*) (T-S 10J16.35, 1r. margin 14).

The 3.m.sg. independent pronoun is depicted in two of these letters with final *heh* used to denote *plene* /a/, e.g., הווה 'he' (CA: *huwwa*) (T-S 10J16.35, 1r. margin 1, 2, 9; T-S 13J25.24, 1v. col. 2, 26).

It is possible that the *'alef* in the following example is indicative of vowel lengthening /a/ > /a:/, which has occurred in some instances in MCA, e.g., כאם 'amount, quantity' (CA: *kammun*; MCA: *kām, kam*) (T-S 10J16.35, 1r. margin 8, 15).

*'Alef* is also used to represent long /ā/ in keeping with the MCA writing and pronunciation of the preposition *ma'a* when followed by a pronoun suffix, e.g., מעאכום 'with you (m.pl.)' (T-S 13J25.24, 1v.col. 1, 16); מעאכם 'with you (m.pl.)' (T-S 10J16.35, 1r. margin 3, 11); מעאנה 'with us' (T-S 10J16.35, 1r. margin 6; T-S 13J25.24, 1v. col. 1, 27).

### *Summary*

From a diachronic perspective, instances of *plene* short /a/ notably increase between the fifteenth and nineteenth centuries. What appears to have been an idiosyncratic and uncommon practice in fifteenth/sixteenth-century folk tales and letters alike, becomes a universal – albeit sporadic – phenomenon in eighteenth/nineteenth-century folk tales and letters.

*Plene* spelling of /a/ also reveals a small number of deviations from the CA standards by which we measure JA. These deviations appear to conform to the norms of MCA. Take, for example, the lengthening of /a/ > /a:/ in the preposition *ma'a* when a pronoun suffix is attached to it, which occurs in both eighteenth–nineteenth-century folk tales and letters. *Plene* spelling of /a/ also reveals adherence to MCA vocalisation of verbs from CA *ya 'rifu* > MCA *yir'af*. There is also some evidence in the eighteenth-century folk tales and letters to suggest that the *heh* or *'alef* used frequently in letters and folk tales with the 3.m.sg. independent pronoun is equally likely to be indicative of *plene* spelling of the Arabic short vowel /a/, as it is of the Hebrew loanword *hū'*.

#### 2.2.1.2. /i/

##### *Fifteenth/sixteenth-century folk tales*

The final short /i/ vowel of the 2.f.sg. pronoun suffix is consistently written with *yod* in the fifteenth/sixteenth-century manuscript Evr.Arab.I 2996, e.g., לִי 'for you (f.sg.)' (CA: *la-ki*; MCA: *lī-ki*, *li-ki*) (7v. 25, 11r. 5); אַנִּי 'that you' (CA: *'anna-ki*; MCA: *'inn-ik*) (10v. 25, 12r. 1); עֲלֶיךָ 'on you' (CA: *'alay-ki*; MCA: *'alē-ki*) (11r. 2); אִישׁ קְעָאדְכִי 'how idle you are!' (6v. 23); טוֹל נְהָאֲרֵכִי 'throughout your day' (CA: *ṭūl nahāri-ki*; MCA: *ṭūl nahār-ik*) (10v. 26). In MCA, the 3.f.sg. pronoun suffix is realised as *-ki* when preceded by a vowel, but *-ik* when preceded by a consonant (Abdel-Massih, Abdel-Malek and Badawi 2009: 216-217, 220). Therefore, it would appear that, on the whole, the above-mentioned examples from this fifteenth/sixteenth-century folk tale imitate the CA norms with regard to the 3.f.sg. pronoun suffix, rather than the colloquial practices (at least in relation to forms ending in consonants).

With the exception of the *plene* writing of *kasra* in the 2.f.sg. pronoun suffix, the *plene* writing of /i/ in the fifteenth/sixteenth-century folk tale corpus is limited to the following instance; סִיר 'go!' (CA: *sir*) (Evr.Arab.II 852, 4v. 14, 6r. 4; Evr.Arab.II 1528, 2r. 6, 2v. 21), but this could reflect the colloquial form of the imperative with a long vowel: *sīr*.

##### *Late fifteenth-century letters*

There are no instances of *plene* /i/ in the late fifteenth-century letter corpus.

#### *Eighteenth/nineteenth-century folk tales*

Occurrences of *plene* /i/ outnumber those of *plene* /a/ in the eighteenth/nineteenth-century material, e.g., מין 'in, from, in terms of' (CA: *min*; MCA: *min*) (T-S Ar. 46.10, 1r. 27, 30, 31, 34, 37, 1v. 2, 10; T-S Ar. 37.39, 3v. 14); מיןך 'from you' (CA: *min-ka*; MCA: *min-ak*) (T-S Ar. 37.39, 2r. 9); ליל 'to the...' (CA: *li-l...*) (T-S Ar. 46.10, 1v. 7, 13, 17, 31); גיהת 'on account of...' (CA: *ġihatu...*; MCA: *giha*) (BnF Hébreu 583, 140r. 9); ואהיד 'one' (CA: *wāhidun*; MCA: *wāhid*) (T-S Ar. 46.10, 1r. 27, 1v. 3, 20); ואקיף 'standing' (CA: *wāqifun*; MCA: *wā'if* (*wāqif*)) (T-S Ar. 46.10, 1v. 23, 29); דליך 'that' (CA: *ḏalika*; MCA: *dā, da*) (T-S Ar. 37.39, 1r. 3); דאליך 'that' (T-S Ar. 37.39, 1v. 5, 2v. 3, 5, 3r. 6); ואלאטיבה 'and the physicians' (CA: *'aṭibbā*'; MCA: *'aṭibba*) (Cairo JC 104, 5v. 9). In the following example the *yod* indicates the genitive marker /i/; בהאלינא '(heard) of our situation' (CA: *ḥāli-nā*; MCA: *ḥal-na*) (T-S Ar. 46.10, 1v. 25).

A more frequent phenomenon exposed through the *plene* writing of /i/ is the consistent adherence to the norms of MCA vocalisation, as opposed to CA vocalisation. An example of this phenomenon is evident in the *plene* writing of the short vowel *kasra* in the 2.f.sg. pronoun suffix, where the shift from CA *-ki* > MCA *-ik* (after a consonant) is made explicit through the use of *yod*, e.g., מיןך 'from you' (CA: *min-ki*; MCA: *min-ik*) (T-S Ar. 37.39, 1r. 7).

The observance of MCA vocalisation is also evident in many verbal forms. The most commonly occurring feature (found predominantly in T-S Ar. 46.10 and T-S Ar. 37.39), is the verbal vowel shift *fa'ala* > *fi'il*, a notable feature of MCA, e.g., פי סאלים עליהום 'Then, he greeted them' (CA: *sallama*; MCA: *sallim*) (T-S Ar. 46.10, 1v. 28); קאדים 'he introduced (himself)' (CA: *qaddama*; MCA: *qaddim*) (T-S Ar. 46.10, 1v. 29); נזיל 'he descended' (CA: *nazala*; MCA: *nizil*) (T-S Ar. 37.39, 1r. 4); טלע 'he proceeded' (CA: *ṭala'a*; MCA: *ṭili'*; *ṭala'*) (T-S Ar. 46.10, 1r. 32, 1v. 19); טאליע (T-S Ar. 37.39, 2r. 19); תעגיבו 'they were astonished' (CA: *ta'ağğaba*; MCA: *'it'aggib*) (T-S Ar. 46.10, 1v. 20); אתע[גיב] 'he was amazed' (T-S Ar. 46.10, 1v. 32); עריפית 'I know...' (CA: *'arafa*; MCA: *'irif*) (T-S Ar. 46.10, 1v. 26); לנתגסיל 'in order to wash myself' (MCA: *'itgassil*) (T-S Ar. 37.39, 1r. 12).

Another development found in these folk tales, which corresponds to contemporary MCA practice, is found in the writing of the 1.c.sg. and 3.f.sg. verbal suffixes. Rather than the CA endings *-tu* and *-at* for the 1.c.sg. and 3.f.sg., respectively, we find *-it/ēt* and *-it/ēṭ*, e.g., אנפאכית מין עדאב 'I was untied from (the) punishment' (CA: *'infakkatu*; MCA: *'infakkēt*) (T-S Ar. 37.39, 3v. 14); כאנית 'it (f.sg.) was' (CA: *kānat*; MCA: *kānit*) (T-S Ar. 37.39, 2v. 9); פרגית 'it (3.f.sg.) was finished' (CA: *faragat*; MCA:

*firġit*) (BnF Hébreu 583, 140r. 22).

It is worth noting that the *plene* writing of /i/ occurs predominantly in the eighteenth/nineteenth-century manuscripts (T-S Ar. 37.39 and T-S Ar. 46.10), rather than the nineteenth-century texts (BnF Hébreu 583 and Cairo JC 104) examined here.

#### *Eighteenth/nineteenth-century letters*

As with the eighteenth-nineteenth-century folk tales, occurrences of the *plene* writing of /i/ are more common than the *plene* spelling of /a/. Many of these instances simply indicate the presence of the short vowel /i/ which occurs in CA, or MCA, e.g., קלית ‘a lack of’ (CA: *qillit*) (Rylands L192, 1r. 10, margin 3); ואל מצאליה ‘and that which is beneficial’ (CA: *wa-’al-maṣāliḥ*; ) (Rylands L192, 1r. margin 3); אל טאליב ‘the one who demands’ (CA: *aṭ-ṭālib*) (Rylands L192, 1r. 10); במוגיב ‘on account of’ (CA: *bi-mūgib*) (Rylands L192, 1r. 22); וכאמיל ‘and complete’ (CA: *wa-kāmil*) (T-S 10J16.35, 1r. margin 5); מנאסיב ‘appropriate’ (CA: *munāsibun*) (T-S 13J25.24, 1v.col. 1, 7); גיהת ‘on account of...’ (CA: *ġihatu*) (T-S 13J25.24, 1v.col. 1, 9); חיסאב ‘account/invoice’ (CA: *ḥisābun*) (T-S 13J25.24, 1v. col.1: 18).

The *yod* in the following conjunction may be indicative of the long vowel /ī/, and therefore, the colloquial pronunciation, but it may also simply constitute *plene* spelling of the short vowel /i/ in accordance with both CA and some dialectal realisations; ולאכין ‘but’ (CA: *wa-lākin*; MCA: *lākin*, *lakin*, *lakīn*) (T-S 10J16.35, 1r. 29, margin 10; T-S 13J25.24, 1v.col. 1, 7, 23).

In the next examples, *yod* is present – presumably to denote a short /i/ vowel – where in CA there would be a *sukūn*, e.g., ואכדינהום ‘and we took them’ (CA: *’aḥadnā-hum*; MCA: *’aḥadn(i)-hum*) (T-S 10J16.35, 1r. margin 12); כאתבינהום ‘we wrote to them’ (CA: *katabnā-hum*; MCA: *katabn(i)-hum*) (T-S 10J16.35, 1r. margin 11). This is the result of a phenomenon that occurs in MCA, where no more than two consonants can occur side-by-side. When a third consonant is added, either within or beyond a word boundary, a short /i/ vowel is inserted after the penultimate consonant (Abdel-Massih, Abdel-Malek and Badawi 2009: 321-322).

#### *Summary*

The *plene* spelling of /i/ is a rare phenomenon in the fifteenth/sixteenth-century corpora. Where it does occur, it seems to indicate adherence to the strictures of CA and MCA. As with the *plene* spelling of /a/, *plene* /i/ becomes increasingly common in the eighteenth-century texts. From the depiction of the 2.f.sg. pronoun suffix as *-ik/-īk* to the shift from *fa’ala* > *fi’il* evident in the eighteenth-century folk tales, compliance with MCA practices abounds. This representation of MCA

vocalisation features is also found in the contemporaneous letters, although to a lesser extent.

### 2.2.1.3. /u/

#### *Fifteenth/sixteenth-century folk tales*

There are no instances of *plene* /u/ in the fifteenth/sixteenth-century folk tales.

#### *Late fifteenth-century letters*

Occurrences of *plene* spelling of the short vowel /u/ are limited to the Magribi text MS Heb.c.72/18 in this corpus. This letter displays a tendency which is to become prevalent in eighteenth/nineteenth-century letters and folk tales; the frequent *plene* spelling of *ḍamma*, particularly in the 2.m.pl. pronoun suffix *-kum*, e.g., מנכום ‘from you’ (MS Heb.c.72/18, 1r. 2); כובז ‘bread’ (CA: *ḥubzun*) (MS Heb.c.72/18, 1r. 5, 6); ואנא קולת לה ‘And I said to him’ (CA: *qultu*; MCA: *’ult (qult)*) (MS Heb.c.72/18, 1r. 12).

#### *Eighteenth/nineteenth-century folk tales*

Instances of the *plene* spelling of the short vowel /u/ with *vav* far exceed occurrences of *plene* /a/ and /i/ combined. This is in keeping with Wagner’s findings in her examination of eleventh–eighteenth-century business letters (2010: 53). However, while these *plene* spellings reveal a few interesting features – such as the invariable nature of the 3.m.sg. and 3.m.pl. pronoun suffixes, and some changes in the vowel patterns of common verbs (cf. §2.2.3) – for the most part they reveal a consistent adherence to the norms of either CA, or MCA, e.g., חוכם ‘wisdom, judgement’ (CA: *ḥukm*) (T-S Ar. 37.39, 2r. 22; T-S Ar. 46.10, 1v. 16; BnF Hébreu 583, 140v. 1); כול ‘each, every; all’ (CA: *kullun*; MCA: *kull*) (T-S Ar. 46.10, 1r. 27, 31; T-S Ar. 37.39, 1r. 2, 1v. 9, 3v. 8); כולו ‘all of it (m.sg.)’ (CA: *kullu-hu*; MCA: *kull-u*) (T-S Ar. 37.39, 1v. 11, 3r. 23, 3v. 7); כולהא ‘all of it (f.sg.)’ (T-S Ar. 37.39, 3v. 2); קורבאן ‘sacrifice’ (CA: *qurbānun*) (T-S Ar. 46.10, 1r. 28, 29); יטלונו ‘they demand’ (CA: *yaṭlubūna*; MCA: *yuṭlubū*) (T-S Ar. 46.10, 1r. 31; Cairo JC 104, 3r. 8); וכונת ‘and I was’ (CA: *kuntu*; MCA: *kunt*) (T-S Ar. 37.39, 1r. 12, 3r. 3; Cairo JC 104, 3v. 11, 12, 4r. 12, 5r. 12)

The 3.m.sg. possessive pronoun suffix *-hu* is rendered *-hi* after the short vowel /i/, the long vowel /ī/ or the diphthong /ay/ in CA (Fischer 2002: 143, §269b). Regardless of the immediate vocalic or syllabic environment, the 3.m.sg. pronoun suffix is rendered most commonly as *-hw* in eighteenth/nineteenth-century JA folk tales, e.g., ואסמחו ‘and his name...’ (Cairo JC 104, 3r. 12); מנכרהו ‘his nose’ (T-S Ar. 37.39, 2r. 19); ורסהו ‘and his head’ (T-S Ar. 37.39, 1v. 8); ראסהו ‘and his head’ (T-S Ar. 37.39, 1v. 12); בדנהו ‘his body’ (CA: *badanu-hu*) (T-S Ar. 37.39, 1v. 9); שטרהו ‘his portion’ (CA: *ṣaṭru-hu*) (T-S Ar. 37.39, 1v. 11); סדרהו ‘his chest’ (CA: *ṣadru-hu*) (T-S Ar. 37.39, 1v.

13, 19); דקנהו 'his beard/chin' (CA: *daqanu-hu*) (T-S Ar. 37.39, 1v. 13, 18); ימינהו 'his right' (CA: *yamīnu-hu*) (T-S Ar. 37.39, 1v. 12, 16); יסארהו 'his left' (CA: *ysāru-hu*) (T-S Ar. 37.39, 1v. 12); קודמהו 'in front of him' (T-S Ar. 37.39, 1v. 13); לאהו 'for/to him' (CA: *la-hu*) (T-S Ar. 46.10, 1v. 25, 29); להו 'for/to him' (CA: *la-hu*) (T-S Ar. 46.10, 1v. 31; T-S Ar. 37.39, 1v. 8, 9, 10, 11, 13; BnF Hébreu 583, 140r. 4, 8, 13, 16, 18, 140v. 10, 10, 14, 16, 20, 141r. 19; Cairo JC 104, 3v. 10 4r. 6); בָּהו 'with him' (CA: *bi-hi*; MCA: *bīh*) (T-S Ar. 37.39, 1v. 16, 17, 18, 19). In only one instance is the CA orthographic convention of writing the 3.m.sg. pronoun suffix as *-h(u)* with *heh* is adhered to; כֹּדִיָּה 'take (f.sg.) him!' (CA: *ḥudī-hu*; MCA: *ḥudi* 'and-ik') (T-S Ar. 37.39, 2r. 2).

In a limited number of cases, the CA influenced JA 3.m.sg. pronoun suffix *-hw* is supplanted by *vav* (*-u/-ū*), indicating the colloquial pronunciation of the 3.m.sg. pronoun suffix, *-u*, e.g., עֹמְרוֹ 'his age' (BnF Hébreu 583, 140r. 3); מְנוּלוֹ 'his house' (BnF Hébreu 583, 140r. 18); כֹּדֵדוֹ 'Seize him!' (T-S Ar. 37.39, 1v. 3, 2r. 11, 20); עֲנֵדוֹ 'with him' (BnF Hébreu 583, 140r. 18); כֹּלּוֹ 'all of it (m.sg.)' (T-S Ar. 37.39, 1v. 11, 3r. 23, 3v. 7).

The short vowel /u/ of the 2.m.pl. CA pronoun suffix *-kum* and is rendered in *plene* orthography (i.e. *-kwm*) consistently in these eighteenth-nineteenth-century folk tales, e.g., מַעֲכֹכֶם 'with you (m.pl.)' (T-S Ar. 46.10, 1v. 5); מַעֲכֹכֶם 'with you (m.pl.)' (BnF Hébreu 583, 140r. 17); לָכֶם 'for/to them' (T-S Ar. 37.39, 3r. 3; BnF Hébreu 583, 141r. 17; Cairo JC 104, 13r. 11); יִכְפִּיכֶם 'he will save you!' (T-S Ar. 37.39, 2v. 16); אֶגַּעֲלֶכֶם 'I believe you!' (Cairo JC 104, 10r. 5); וַיִּכְפִּיכֶם 'and may He save you!' (Cairo JC 104, 15r. 2).

The CA 3.m.pl. pronoun suffix *-hum* is rendered *-hwm* invariably throughout eighteenth/nineteenth-century folk tales. There is no evidence of the form *-him* which occurs after /ī/, /i/, or /ay/ in CA. This is further evidence of preference for MCA norms (Abdel-Massih, Abdel-Malek and Badawi 2009: 215-217, 219-220), rather than CA standards, e.g., וְהֵם 'and they' (CA: *hum*) (T-S Ar. 37.39, 2v. 4); אֶרְסַלְהֵם 'he sent them' (CA: *'arsala-hum*) (T-S Ar. 46.10, 1v. 27); עֲלֵיהֶם 'upon them' (CA: *'alay-him*; MCA: *'alī-hum*) (T-S Ar. 46.10, 1v. 28; BnF Hébreu 583, 140r. 9, 140v. 4, 13, 141r. 11); בִּיהֶם 'with them' (CA: *bi-him*; MCA: *bī-hum*) (T-S Ar. 37.39, 3v. 2); לָהֶם 'for/to them' (CA: *la-hum*) (T-S Ar. 46.10, 1v. 2, 4, 8; T-S Ar. 37.39, 2r. 20; BnF Hébreu 583, 140r. 7, 13, 15, 16, 19, 140v. 3, 13, 19, 20, 22, 141r. 2, 2, 8, 18, 19); פִּי קֹלַת לָהֶם 'So, I said to them' (T-S Ar. 37.39, 3r. 9); יִסְרֵהֶם 'their left' (T-S Ar. 37.39, 2v. 19); וְתַחְתָּהֶם 'and underneath them' (T-S Ar. 37.39, 2v. 20); אֶצְעָבֵהֶם 'their fingers' (T-S Ar. 37.39, 2v. 1); מִנֵּהֶם 'from them' (T-S Ar. 37.39, 2v. 2; Cairo JC 104, 4r. 5, 7); וְפֹקֵהֶם 'and above them' (T-S Ar. 37.39, 2v. 20).

*Eighteenth/nineteenth-century letters*

By far the most common *plene* spelling of short vowels involves /u/ in this letter corpus. Many of the instances merely corroborate the established CA, or MCA vowel patterns, e.g., אל עומלה ‘the standard (currency)’ (CA: *’al-’umlatu*) (Rylands L192, 1r. 9); וביל שוכך ‘and as for the doubts’ (CA: *’al-’šukūku*) (Rylands L192, 1r. 10); אל צורה ‘the purse’ (CA: *’al-’surratu*) (Rylands L192, 1r. 24); דורה ‘maize’ (CA: *’duratu*; MCA: *dura*) (Rylands L192, 1r. 29; T-S 10J16.35, 1r. 26; T-S 13J25.24, 1v.col. 1, 37); צוה (abb. *’šuhba*) ‘in the company of’ (CA: *’šuhba*) (Rylands L192, 1r. 5, 25); אוכרה ‘other’ (CA: *’uḥrā*; MCA: *’uḥra*) (T-S 10J16.35, 1r. 14); ונאלוד/נאלוד ‘and we will take’ (CA: *na’ḥuḏu*; MCA: *nāḥud*) (T-S 10J16.35, 1r. 23, 25, margin 13); עומר ‘his age’ (CA: *’umrun*; MCA: *’umr*) (T-S 10J16.35, 1r. margin 2); אל דוכאן ‘the shop’ (CA: *’dukkānun*) (T-S 10J16.35, 1r. 22);<sup>107</sup> דוכאן ‘shop’ (T-S 13J25.24, 1v. col. 1, 13); כול ‘each, every, all’ (T-S 13J25.24, 1v. col.1: 33, 36, 39); כולו ‘all of it’ (T-S 13J25.24, 1v. col.3: 39); כונה ‘we were’ (CA: *kun-nā*; MCA: *kuna*) (T-S 10J16.35, 1r. margin 3; T-S 13J25.24, 1v.col. 1, 40).

The writing of the /u/ of 2.m.pl. pronoun suffix in *plene*, is well-established in these late letters, e.g., עליכם ‘upon you’ (T-S 13J25.24, 1v. col. 1, 3, 42); נערפכם ‘we inform you’ (T-S 13J25.24, 1v. col. 1, 4; T-S 13J25.24, 1v. col. 1, 35, 40); לכם ‘for/to you’ (T-S 13J25.24, 1v. col. 1: 4, 7, 12, 33, 34, col. 2: 15, 19, 28, 41, 45, col. 3: 6, 10); מנכם ‘from you’ (T-S 13J25.24, 1v. col. 1, 13); וערפכם ‘and we told you’ (T-S 13J25.24, 1v. col. 1, 4, 5, 8); לכטרכם ‘for your respect’ (T-S 13J25.24, 1v. col. 1, 16); יברכם ‘he tells you’ (T-S 13J25.24, 1v. col. 1, 24).

As with the 2.m.pl. pronoun suffix, the /u/ of the 3.m.pl. pronoun suffix is also written in *plene*. Furthermore, the short /i/ vowel (*-him*), which appears when the 3.m.pl. pronoun suffix is preceded by /i/, /ī/ or /ay/ does not occur at all in these letters. This is in accordance with MCA norms, e.g., דכלהום ‘their income’ (T-S 10J16.35, 1r. 6); בתאעהום ‘belonging to them’ (T-S 10J16.35, 1r. 10); פרגתהום ‘you disposed of them’ (T-S 10J16.35, 1r. 13); ותרסלהום ‘and you should send them’ (T-S 10J16.35, 1r. margin 9, 15); כאתבינהום ‘we wrote to them’ (T-S 10J16.35, 1r. margin 11); ואכדינהום ‘and we took them’ (T-S 10J16.35, 1r. margin 12); פוקהום ‘above them’ (T-S 10J16.35, 1r. margin 14); עטאהום ‘he gave them’ (T-S 13J25.24, 1v. col. 1, 10); אכדהום ‘he took them’ (T-S 13J25.24, 1v. col. 1, 21); מנהום ‘from them’ (T-S 13J25.24, 1v. col. 1, 22, 37); פיהום ‘in them’ (CA: *fi-him*) (T-S 13J25.24, 1v. col. 1, 29).

There are only a few examples in which the 3.m.sg. pronoun suffix is written with *heh + vav* (*-hw*), e.g., להו ‘for/to him’ (T-S 13J25.24, 1v. col. 1: 15, col. 2: 35). In keeping with the findings in contemporaneous folk tales, there are a small number of cases in which the JA 3.m.sg. pronoun suffix *-hw* is written in imitation of its phonetic realisation in MCA, i.e. /u/ or /ū/, e.g., עומר (CA: *’umru-hu*;

<sup>107</sup> The addition of a supralinear dot above this *kaf* for *kāf* appears to have been a mistake on the part of the writer.



MCA: *'umr-u*) (T-S 10J16.35, 1r. margin 2); כולו 'all of it' (CA: *kullu-hu*; MCA: *kull-u*) (T-S 13J25.24, 1v. col.3: 39). There is great discrepancy between the frequency of this phenomenon in letters as compared to contemporaneous folk tales. Although it occurs only rarely in both genres, the instances of *-hw* in folk tales far outnumber those of *-hw* in letters of the same period. Thus, it would appear that this was regarded as a classicising feature, used to bring the text as a whole into line with perceived CA standards.

### *Summary*

By far the most common form of *plene* spelling of short vowels concerns /u/. This phenomenon is absent from the fifteenth/sixteenth-century folk tales and Egyptian letters (with the exception of the Magribi letter MS Heb.c.72/18), but becomes extremely widespread in the eighteenth/nineteenth-century material. On the whole, *plene* /u/ reveals a large degree of conformity to CA and MCA norms. The abundance of *plene* /u/ spelling in, for instance, the 3.m.pl. pronominal suffix, allows us to state for certain that the invariable MCA pronunciation of *-hum* was preferred in eighteenth/nineteenth-century JA folk tales and letters, alike.

#### 2.2.2. Defective spelling of long vowels

Instances of the defective spelling of long vowels or diphthongs seldom occur in the fifteenth/sixteenth-century corpora. They are found primarily in eighteenth/nineteenth-century texts, and concern only /ī/, /ēy/, /a:/ and (in the eighteenth/nineteenth-century letters) /ū/, e.g., ואש 'and what?' (CA: *'ayy*; (archaic); ECA: *'ēš*; MCA: *'ēh*) (T-S Ar. 37.39, 2r. 7); טאבקות 'layers' (CA: *ṭabaqātun*) (T-S Ar. 37.39, 2v. 9); אלתורב 'the earth' (CA: *'al-turābu*; MCA: *turāb*) (Cairo JC 104, 2v. 6).

A number of the defective spellings of long vowels occur in nouns or prepositions to which are attached pronoun suffixes. The majority of these instances are found in the eighteenth-century folk tale T-S Ar. 37.39. It is possible that the addition of the pronoun suffix to the noun or preposition caused the shortening of the noun or preposition's long vowel in the speech of the writer (e.g., /ī/ > /i/), and this phonetic phenomenon is reflected in the orthography of the text, e.g., עדהום 'their festival' (CA: *'īdu-hum*; MCA: *'īd-hum*) (T-S Ar. 46.10, 1r. 27); גרו 'other than it' (CA: *gayra-hu*; MCA: *gēr-u*) (T-S Ar. 37.39, 2r. 22); גרך 'other than you' (T-S Ar. 37.39, 3r. 18); ורסהו 'and his head' (CA: *ra'su-hu*; MCA: *rās-u*) (T-S Ar. 37.39, 1v. 8); יסרהו 'his left' (CA: *yasār-hu*; MCA: *šimāl-u*) (T-S Ar. 37.39, 1v. 17); יסרהום 'their left' (CA: *yasāru-hum*) (T-S Ar. 37.39, 2v. 19).

There is only one case of defective spelling in the late fifteenth-century letters; בפיידה 'for the benefit of' (CA: *fā'idatun*; MCA: *fayda*) (MS Heb.c.72/18, 1r. 11). However, this is in keeping with the

MCA phonetic realisation of the word and, therefore, reflects colloquial speech.

Defective spelling of /a:/ is a common feature of eighteenth/nineteenth-century letters, e.g., אסערהא 'its price' (CA: 'as'āru-hā; MCA: 'as'ār-ha) (Rylands L192, 1r. 18); פיל בוואה 'at the main gates' (CA: *bawābātun*; MCA: *bawābāt*) (Rylands L192, 1r. 24); מכתובכם 'your letters' (CA: *makātībun*) (T-S 10J16.35, 1r. 5); מכתוב 'letters' (T-S 10J16.35, 1r. margin 6); בענאדום 'we sold them' (CA: *bā'anā-hum*; MCA: *bā'na-hum*) (T-S 10J16.35, 1r. 10, 17); בענה 'we sold' (CA: *bā'nā*; MCA: *bā'na*) (T-S 10J16.35, 1r. margin 2). Most of these can be interpreted as reflecting the shortening of originally long /a:/ in colloquial speech.

Omission of the /a:/ of the 1.c.pl. suffix ending occurs in late letters, e.g., כאטבינהום (CA: *katabnā-hum*; MCA: *katabna-hum*) (T-S 10J16.35, 1r. margin 11); ואכ'דינהום (CA: 'aḥadnā-hum; MCA: 'aḥadna-hum) (T-S 10J16.35, 1r. margin 12); וצ'ענהא 'we have put it' (CA: *waḍa'nā-hā*; MCA: *waḍa'na-ha*) (Rylands L192, 1r. 6); וערפנכום 'and we told you' (CA: 'arafnā-kum; MCA: 'irifna-kum) (T-S 13J25.24, col. 1, 4, 5, 8). This happens only when the 1.c.pl. pronoun suffix is immediately followed by a direct object pronoun; it represents the shortening of the long vowel in MCA pronunciation from /a:/ > /a/ in this context.

### Summary

Defective spelling of long vowels appears to emerge as a notable feature of written JA only in the seventeenth/eighteenth-century. It is most commonly found in letters, and appears in some cases to reflect the MCA shortening of long vowels in certain contexts.

## 2.2.3. Vowel shifts

### 2.2.3.1. /a/ > /i/

#### *Fifteenth-sixteenth-century folk tales*

The sole instance of plene spelling revealing a vowel shift in fifteenth/sixteenth-century folk tales occurs in Evr.Arab.II 852, and reveals a shift that is attested neither in CA nor MCA; אלינגאח 'success' (CA: *nağāḥun*; MCA: *nagāḥ*) (Evr.Arab.II 852, 3r. 4).

#### *Late fifteenth-century letters*

There are no obvious signs of the vowel shift /a/ > /i/ in the late fifteenth-century letters.

### *Eighteenth/nineteenth-century folk tales*

In the eighteenth/nineteenth-century folk tales, the most frequently occurring vowel shift made evident through the use of *plene* spelling is that of /a/ > /i/. In the first example we find in this corpus, the third vowel of the fifth form is written as an /i/ rather than the /a/ found in both CA and MCA, e.g., ואתווגיהו 'and they set off towards...' (CA: *tawaḡḡaha*; MCA: *'itwaggah*) (T-S Ar. 46.10, 1v. 2, 14). In the second example, the second /a/ vowel is written with *yod*, suggesting the pronunciation is *malik*, *malek* (which in CA and MCA alike means 'king') rather than the expected *malak*, e.g., מליך אל מות 'the angel of death' (CA: *malakun*; MCA: *malāk*) (T-S Ar. 37.39, 1v. 5).

In CA, the short /i/ vowel of the preposition *li-* is replaced with an /a/ vowel when followed by a pronoun suffix, e.g., *li-* > *la-hu*. In the folk tale T-S Ar. 46.10, *yod*, written immediately after the *lamed* of the preposition, reveals that the original pronunciation of *li-* is retained in this context as is often the case in MCA, e.g., ליהם 'for/to them' (CA: *la-hum*; MCA: *lī-hum*, *lu-hum*) (T-S Ar. 46.10, 1v. 18, 28, 34).

Another deviation from CA pronunciation, made apparent through the use of *yod* to indicate the vowel, is the shift in the pronunciation of the complementisers 'an and 'anna to 'in/'īn, e.g., אין 'that' (CA: 'an; 'anna; MCA: 'inn) (T-S Ar. 46.10, 1r. 30); באיני 'that I...' (CA: 'anna-nī; 'annī) (T-S Ar. 37.39, 1v. 1). This is a further example of the tendency for JA of this period to imitate colloquial/MCA pronunciation, rather than the classical precedent.

There is consistent evidence of the vowel shift /a/ > /i/ in the final vowel preceding the f.sg. ending *tā'* *marbūṭa* in the first term of the construct state in two of the four eighteenth/nineteenth-century folk tales, e.g., ארבעית 'four...' (CA: 'arba'atu) (T-S Ar. 46.10, 1v. 11); סכרית '(the) agony of...' (CA: *sakratu*) (T-S Ar. 37.39, 1v. 2); טבקית 'level of...' (CA: *ṭabaqatu*) (T-S Ar. 37.39, 2r. 4). The same phenomenon is found before the dual ending, e.g., כעכיתין 'two cakes' (CA: *ka'katun*) (T-S Ar. 46.10, 1v. 14).

### *Eighteenth/nineteenth-century letters*

An instance of the vowel shift /a/ > /i/ is found in the following example; מובאריך 'fortunate' (CA: *mubārakun*; MCA: *mubārak*) (T-S 10J16.35, 1r. margin 10). This shift may have resulted from confusion with the vocalisation of the third form active particle *mufā'il(a)*.

As has already been remarked on in the preceding section, the vowels of the complementisers 'an and

'anna are occasionally revealed through *plene* spelling to read not as they do in CA, but as 'in/ 'inn as they are pronounced in MCA (cf. Hinds & Badawi 1986: 42), e.g., באַן 'that' (CA: *bi-'anna*) (Rylands L192, 1r. 3); אַן (CA: 'an, 'anna) (Rylands L192, 1r. 24, 30, 1r. m. 1); לאַן 'because' (CA: *li-'an*; MCA: *li-'inn*) (Rylands L192, 1r. 19, 20, 29, 1r. m. 1).

#### 2.2.3.2. /i/ > /a/

##### *Fifteenth-sixteenth-century folk tales*

There are no obvious signs of the vowel shift /i/ > /a/ in this corpus.

##### *Late fifteenth-century letters*

There are no obvious signs of the vowel shift /i/ > /a/ late fifteenth-century letters.

##### *Eighteenth/nineteenth-century folk tales*

There is one instance in the eighteenth/nineteenth-century folk tale T-S Ar. 46.10 in which 'alef, denoting the /a/ vowel appears where one would expect /i/; מוכאב 'procession' (CA: *mawkibun*; MCA: *mawkib*) (1v. 33).

##### *Eighteenth/nineteenth-century letters*

There are no obvious signs of the vowel shift /i/ > /a/ in this corpus.

#### 2.2.3.3. /a/ > /u/

##### *Fifteenth/sixteenth-century folk tales*

There are no obvious signs of the vowel shift /a/ > /u/ in this corpus.

##### *Late fifteenth-century letters*

There are no obvious signs of the vowel shift /a/ > /u/ in this corpus.

##### *Eighteenth/nineteenth-century folk tales*

In his study of the Cairene Purim Scrolls, dated to between sixteenth–nineteenth centuries, Hary demonstrates that the shift in the vocalisation of verbs from *fa'ala* > *fu'ul* is commonplace (Hary

1992: 280; 1997a: 212). As Hary goes on to explain, *fu'ul* is not a frequently encountered verbal pattern in MCA. However, as both Hary (ibid.) and Rosenbaum (2006: 37) state, it does appear to have been common among the Jewish inhabitants of Cairo in the late nineteenth- and early twentieth-centuries, and in the written language of the Cairene Purim scrolls.

However, instances of *fu'ul* verbal patterns are less common in eighteenth/nineteenth-century folk tales (and letters) than in Hary's scrolls. In the late folk tale corpus, I can find only one example of this phenomenon in the suffix conjugation; הוצ'רו 'they attended' (CA: *ḥaḍara*; MCA: *ḥaḍar*) (BnF Hébreu 583, 140r. 14).

In a couple of substantives, *plene* spelling of short vowels reveals a different pronunciation from that found in CA or MCA; ואל צוהרה 'and the sorcerers' (CA: *saḥaratun*; *suhḥārun*) (T-S Ar. 37.39, 2v. 11); אורבע 'four' (CA: *'arba 'a*; MCA: *'arba 'a*) (Cairo JC 104, 4r. 2).

#### *Eighteenth/nineteenth-century letters*

The shift in verbal vocalisation from *fa'ala* > *fu'ul* is most in evidence in the late eighteenth-century letters. Yet, even here it is not widespread, and is limited to two verb roots, *ḥ-ḍ-r* and *z-h-r* (CA: *z-h-r*) vocalised (as in the contemporaneous folk tale BnF Hébreu 583) as *ḥuḍur* and *zuhur*, respectively, e.g., הוצ'ור 'he visited' (Rylands L192, 1r. 21, 30, 34); הוצ'ור/הוצ'ור 'he was present' (CA: *ḥaḍara*; MCA: *ḥaḍar*) (Rylands L192, 1r. 30, 34; T-S 10J16.35, 1r. 24, margin 12); הוצ'רת 'I was present' (T-S 10J16.35, 1r. margin 6); מא הוצ'רתו 'you were not present' (T-S 10J16.35, 1r. margin 11); זוהור 'it emerged' (CA: *zahara*; MCA: *zahar*) (Rylands L192, 1r. 29).

#### 2.2.3.4. /i/ > /u/

##### *Fifteenth/sixteenth-century folk tales*

There are no obvious signs of the vowel shift /i/ > /u/ in this corpus. However, Hasson-Kenat notes a small number of examples in her analysis of contemporaneous folk narratives in which – through the use of Hebrew vocalisation – the passive form *fu'ila* is revealed to be read as *fu'ul* (2016: 99, §b.2.1.2.).

##### *Late fifteenth-century letters*

There are no obvious signs of the vowel shift /i/ > /u/ in this corpus.

### *Eighteenth/nineteenth-century folk tales*

A common vowel shift found in these eighteenth/nineteenth-century folk tales is /i/ > /u/, e.g., עוצאמי 'my bones' (CA: 'izām-ī; MCA: 'iḏām) (T-S Ar. 37.39, 2r. 4); רוצאה 'his approval' (CA: riḏā; MCA: riḏa) (T-S Ar. 37.39, 2v. 15); רוצא 'acceptance' (T-S Ar. 37.39, 3v. 7); קוצת 'story (of)' (CA: qiṣṣatun; MCA: qiṣṣa) (Cairo JC 104, 3r. 1, 3v. 1, 4r. 1, 4v. 1, 5v. 1, 6r. 1, 6v. 1, 7r. 1, 7v. 1, 8r. 1, 8v. 1, 9r. 1, 9v. 1, 10v. 1, 11r. 1, 11v. 1, 12r. 1, 12v. 1, 13r. 1, 13v. 1, 14r. 1, 14v. 1, 15r. 1, 15v. 1, 16r. 1); נהן we will support them (CA: yaṣrifu; MCA: yiṣrif) (BnF Hébreu 583, 140r. 9).

### *Eighteenth/nineteenth-century letters*

Unlike the contemporaneous folk tales, there is only limited evidence of the vowel shift /i/ > /u/ in the eighteenth/nineteenth-century letters; בוצאעה 'merchandise' (CA: biḏā'atun; MCA: biḏā'a) (T-S 13J25.24, 1v. col. 1, 23).

#### 2.2.3.5. /u/ > /i/

### *Fifteenth/sixteenth-century folk tales*

There are no obvious signs of the vowel shift /u/ > /i/ in this corpus.

### *Late fifteenth-century letters*

There are no obvious signs of the vowel shift /u/ > /i/ in this corpus.

### *Eighteenth/nineteenth-century folk tales*

In another example from the late folk tale corpus, the final vowel of the prefix conjugation is written in *plene* orthography, but rather than the /u/ indicative mood vowel found in CA, there appears *yod*, indicating the /i/ vowel, e.g., נתווגהי 'I will go...' (CA: 'atwaggahu; MCA: 'atwaggah) (T-S Ar. 46.10, 1v. 5).

### *Eighteenth/nineteenth-century letters*

There are no obvious signs of the vowel shift /u/ > /i/ in this corpus.

### *Summary*

Evidence of vowel shifts is rare in the fifteenth/sixteenth-century folk tales and contemporaneous letters. This is in keeping with the limited number of *matres lectionis* in the earlier corpora examined here. As *plene* spellings of short vowels increase, so too do revelations regarding vowel shifts. The most common vowel shifts in the later corpora are that of /a/ > /i/, /a/ > /u/, and /i/ > /u/. However, instances of *fa'ala* > *fu'ul* (cf. §2.2.3.3) in both letters and folk tales are less common than in other genres of late JA (cf. Hary 1992, 2009), and widespread *matres lectionis* reveal a decided preference in the folk tales – and letters to a lesser extent – for the *fi'il* verbal pattern (cf. §2.2.1.2) found in MCA.

### 2.3. Metathesis

#### *Fifteenth/sixteenth-century folk tales*

Instances of metathesis are infrequent in these corpora. In the fifteenth/sixteenth-century folk tales, manifestations of this phenomenon are limited to Evr.Arab.II 1528 in which we find the root *ḡ-h-z* rendered as *z-h-ḡ* in the fifth form active participle; מְזַהֵג 'he was preparing' (CA: *mutaḡahhizun*) (Evr.Arab.II 1528, 3r. 1). In the equivalent passage in the contemporaneous folk tale Evr.Arab.II 852, we find the original CA order *ḡ-h-z*; <sup>108</sup>מְזַהֵג 'he was preparing' (Evr.Arab.II 852, 6v. 20) (cf. 1.3.1.5) for a discussion regarding the representation of *tā'* with *dalet*). This metathesised form may be described in similar terms to the more common (and often-attested) interchange of /z/ and /ḡ/ in *z-w-g* > *g-w-z*. However, unlike *z-w-g* > *g-w-z*, the metathesised form *z-h-ḡ* is not recorded in contemporary vernacular Arabic. The CA order of *ḡ-h-z* is retained in MCA (e.g., *mitḡahhiz*). Whether or not this phenomenon has anything to do with the realisation of *ḡīm* as a plosive, is unclear. The metathesis of *ḡ-h-z* > *z-h-ḡ* evident in Evr.Arab.II 1528, may have been triggered by the preceding plosive /t/; stop + stop replaced in favour of stop + fricative.

In the former text (Evr.Arab.II 1528), we find *ḡīm* represented with *kaf*, while in the latter, *šin* and *zayin* are sporadically used to denote *ḡīm* (cf. §2.1.2; Connolly, forthcoming).

#### *Late fifteenth-century letters*

In the following examples found in the late fifteenth-century letters T-S 13J26.7 and MS Heb.c.72/18, we see further evidence of both the CA form *z-w-ḡ* and its well-established metathesised form *ḡ-w-z*, e.g., זוג 'a pair' (MS Heb.c.72/18, 1r. 7); גִּזְזֶתְךָ 'your wife' (T-S 13J26.7, 1r. 21); and גִּזְזֶתָּהּ 'and his wife' (T-S 13J26.7, 1r. 24). The first of these examples comes from a letter composed by a Maḡribi

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<sup>108</sup> Inserted above and between the *gimel* and *heh* found here is what appears to be a *zayin*. This may be indicative of the proximity in articulation of /ḡ/ and /z/, which is attested elsewhere in this particular text.

trader, while the second and third examples are taken from an Egyptian writer. These latter two examples are indicative of the prevalence of the metathesised form of the verb in Egyptian spoken dialects. As has already been discussed, the co-occurrence of these forms in various contemporary dialects – including Cairene, Syrian and Palestinian – is well-attested.

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*

N/A

## 2.4. Assimilation

Evidence of assimilation in the orthography of these JA texts is scarce. From the fifteenth-century corpora, only the folk tale Evr.Arab.II 852 contains cases of overt assimilation. These – albeit limited – occurrences are highly informative about the phonetic realisation of *ḡīm* and *dāl* in this text.

### 2.4.1. /ḡ/ > [ʒ/z]

An example frequently mentioned in analyses of *ḡīm* is the VIIIth form of the verb *ḡm* ‘in which the *ḡīm* is represented by the Hebrew grapheme *šin*, *’štm* ‘to gather, meet’ (CA: *’iḡtama* ‘a). This verb form is found in the fourteenth/fifteenth-century folk narrative Evr.Arab.II 852, e.g., *וַאֲשַׁתְּמַע w’štm* ‘and he gathered’ (Evr.Arab.II 852, 8r.9); *כַּשְׁתַּמַּעַת fštm* ‘then I gathered’ (Evr.Arab.II 852, 12r.11) (examples from Palva 2008b: 387). The use of *šin* in this context suggests that the intended reflex of *ḡīm* is a voiceless palato-alveolar fricative [ʃ], resulting from a process of devoicing caused by the following voiceless alveolar stop [t] (Zaborski 2007, II: 494). The assimilation exhibited here further supports the reconstruction of a voiced palato-alveolar fricative [ʒ] reflex, rather than the affricate variant proposed by Blanc, Hary and Palva.

The interpretation of a fricative reflex for *ḡīm* is further corroborated by the following example found in the same text, in which the *ḡīm* in *ḡazīra* ‘island’ is denoted with a *zayin*: *בּוּזִירָה* ‘island’ (Evr.Arab.II 852, 1v. 20), thus suggesting a proximity both in manner and place of articulation to both phonemes /z/ and /ḡ/ in this particular text.



#### 2.4.2. /ð/ > [d]; /t/ > [d]

The orthography of the following examples found in the fourteenth/fifteenth-century folk tale Evr.Arab.II 852 suggests two stages in the process of metathesis have occurred: (i) the first of these developments is the shift in manner (and place) of articulation from a voiced dental fricative [ð] to a voiced denti-alveolar stop [d]; (ii) then the lag assimilation of the adjacent/preceding voiceless alveolar stop /t/ > voiced denti-alveolar [d] reflex: מַדְלָל 'ashamed/humbled' (CA: *mutaḏallalun*) (Evr.Arab.II 852, 8r. 3); אֶלְדָּאכֶר 'the message' (CA: *'al-taḏākīru*) (Evr.Arab.II 852, 8r. 9).

#### 2.4.3. /d/ > [t]

The only other examples of assimilation evident in these corpora are found in two letters, one from the late fifteenth-century (MS Heb.c.72/18), and the other from the eighteenth-century (T-S 13J25.24). In the first of these examples, the final radical of the root *w-d* is rendered *tav*, e.g., וַעֲתֵךְ 'I promised you' (MS Heb.c.72/18, 1r. 16, 17). From context, it appears that the 1.c.sg. suffix conjugation suffix is intended. This suggests that in addition to the devoicing of /d/ > [t], the final radical of the root has merged with the 1.c.sg. suffix *-t(u)*. In the latter two examples, the first radical of the root *d-f-* 'is denoted with a *tav*, suggesting that it has been devoiced by partial assimilation to the following /f/, e.g., תַּתְּפַעוּ 'you payed' (CA: *tadfa'ūna/tadfa'ū*) (T-S 13J25.24, 1v. 35); תַּתְּפַעְוֶהָ 'you should pay it' (T-S 13J25.24, 1v. col 2, 5).

### 2.5. The Definite Article

In the CA reading tradition, and in vernacular Arabic,<sup>109</sup> the *lām* of the definite article – '*al-*' 'the' – assimilates<sup>110</sup> to following coronal consonants (Zemánek 2006, I: 204), e.g., الرَّجُل *al-raḡulu*

<sup>109</sup> In MCA, it is not only the coronal consonants that assimilate the /l/ of the definite article, but also the two velar stops /k/ (*kāf*) and /g/ (*ḡīm*).

<sup>110</sup> Heselwood and Watson contend that 'the Arabic definite article does not assimilate' (2013: 34). Their argument is predicated upon refined definitions of the terms 'geminate', 'assimilation' and 'coarticulation'. The former is divided into three subcategories, comprising on the one hand (i) 'true' geminates, and on the other (ii) 'false' or 'concatenatory' and (iii) 'fake' or 'assimilatory' geminates. A 'true' geminate as termed by Heselwood and Watson is 'obligatory, contrasts (at least potentially) with singletons, and displays 'geminate inseparability'' (Gafos 2002: 274 in Heselwood and Watson 2013: 38). 'False' geminates arise from the linking of 'two identical consonants, e.g., bad dog', while 'fake' geminates occur when one consonant fully assimilates to another consonant, e.g., bad boy [bab bōi] (examples from Heselwood and Watson 2013: 38). Through the examination of these various types of coarticulation using four words, two speakers and electropalatographic (EPG) data, Heselwood and Watson demonstrate that the /l/ of the definite article should not be regarded as assimilated by the following coronal consonant, but as 'true' geminates which occur as phonologically-determined allomorphs of the definite article' (2013: 34, 46). The one major impediment to this theory is that in MCA, when preceding the velar stops /g/ and /k/, the definite article may be realised as either [ʔil] or [ʔig]/[ʔik]. While Heselwood and Watson acknowledge this phonetic feature of MCA (2013: 47), they do not offer a satisfactory resolution to the issue. Despite this compelling theory, the term 'assimilation' will continue to be used in this context to describe the phonetic change that occurs to the /l/ definite article when placed before

[ʔar:adʒulu] ‘the man’. These consonants were referred to by the Arab grammarians as ‘*al-ḥurūf ‘al-šamsiyya*’<sup>111</sup> ‘the sun letters’ (as opposed to ‘*al-ḥurūf ‘al-qamariyya*’ ‘the moon letters’, in which the *lām* of the definite article is retained in pronunciation) (Fischer 2002: 26, §44.1).

In written Arabic, however, the definite article is attached to the noun it modifies and is invariably written in full (i.e. *ال* ‘*al-* ‘the’), regardless of its immediate phonetic environment (Fischer 2002: 11, §18). Where the *lām* of the definite article is assimilated, this is indicated by the writing of a *šadda* (ّ) above the following grapheme (ibid.).

In JA, the writing of the definite article *أل* ‘*l-/l*’ ‘the’ varies across the centuries. In their detailed study of early JA papyri, Blau and Hopkins record that the *lamed* of the definite article never appears preceding coronal consonants, e.g., *ארהים* ‘the Merciful One’ (CA: ‘*al-rahīm*’) (I, 1; II, 1; XIII, 1); *אדוניה* ‘the world’ (CA: *al-dunyā*) (II, 1; III E, 2) (examples from Blau and Hopkins 1987: 148). In classical JA, however, the writing of the definite article follows written CA convention and appears in full (often ligatured) form, irrespective of the phonetic realisation of the following consonant, e.g., *אלסחר* ‘the magic’ (CA: *al-siḥr*) (T-S NS. 298.55, 1r. 6, c. eleventh century CE); *אלסמאואת* the heavens (T-S Ar. 8.3, 14r.) (CA: *al-samawāt*) (example from Khan 2010: 202) (cf. Hary 1996b: 730; Khan 2017: 396–7). For the most part in late JA, the definite article occurs as it does during the classical JA period, with one major difference; the definite article is regularly written as a separate entity from the noun or adjective it modifies (Khan 1992: 231, 2006: 51, 2010: 211; Hary 2009: 110, §1.15; Wagner 2010: 6, §4.7.1).<sup>112</sup>

## 2.5.1. Assimilation of /l/

### 2.5.1.1. Definite article + coronal consonants

Hary refers to two examples from the seventeenth-century text *Darḥe No‘am* in which the *lamed* of the definite article is omitted when preceding a coronal consonant, e.g., *אצגריה* ‘the small’ (CA: ‘*al-ṣuḡarā*’); *אנאס* ‘the people’ (CA: *al-nāss*) (1992: 92). However, instances of this phenomenon seldom occur in other late JA texts, and not at all in the corpora under examination, here. The *lamed* of the definite article is always present in these manuscripts;

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certain consonants.

<sup>111</sup> The transliteration used here and elsewhere represents the written CA spelling, rather than the phonetic realisation. Phonetic transcriptions are marked by [ ].

<sup>112</sup> Wagner also records two instances in eleventh-century letters (from Egypt and the Maḡrib, respectively) in which the definite article is written as an independent entity (2010: 66, §4.7.1)

*Fifteenth-century folk tales*

ואלצקור 'and the falcons' (Evr.Arab. II 1528, 2r. 39); אלזראף 'the giraffe' (Evr.Arab. II 852, 1v. 20); and אלסלטאן 'the sultan' (Evr.Arab. I 2996, 1v. 9).

*Late fifteenth-century letters*

אלשוק 'the longing/desire' (MS Heb.c.72/13, 1r. 2); אלשהוד 'the witnesses' (MS Heb.c.72/39, 1v. 4); אלסלאם אלתאם 'the perfect greeting' (T-S 13J26.7); and אל כובז ואל נביד 'the bread and wine' (MS Heb.c.72/18, 1r. 6).

*Eighteenth- and nineteenth-century folk tales*

אל דגאג 'the chicken' (AIU VII.C.16, 1v. 22); אל סנה 'the year' (T-S Ar. 46.10, 1r. 29, 30); אל שיטאן 'the devil' (T-S Ar. 37.39, 1r. 3); אל סכינה 'the knife' (BnF Hébreu 583, 141r. 10, 11); אלשכץ 'the person' (Cairo JC 104, 14v. 8, 3v. 5).

*Eighteenth/nineteenth-century letters*

אל טאליב 'the order' (Rylands L192, 1r. 10); אל סבב 'the reason' (T-S 13J25.24, 1v. col. 1, 13); and מן אל תפריג 'from the unloading' (T-S 10J16.35, 1r. 15).

2.5.1.2. *w-/b- + definite article*

While the *lamed* of the definite article is rarely omitted, the *'alef* is more commonly dropped in texts from these corpora when preceded by the bound conjunction *w-* 'and' (CA: *wa-*), or the bound preposition *b-* 'in, with' (CA: *bi-*). This is also a common feature in early JA documents (cf. Blau and Hopkins 1987: 147, §13.2.2; 149; 127-128, §1.4), e.g., ולקריה 'and the village' (XII, 9) (CA: *wa-'al-qarya*); בילקמה 'with the wheat' (XIII, 11) (*bi-'al-qamḥ*).<sup>113</sup> As Wagner points out in her analysis of letters from across the centuries, this phenomenon may have resulted from analogy with the spelling

<sup>113</sup> Blau and Hopkins compare this feature to the writing of the preposition *fī*, which retains its independent form in these early JA papyri. They attribute this distinction in the writing of the bound morphemes *b-* and *w-* and the independent preposition *fī* to the influence of Hebrew spelling. While there are similar constructions in Hebrew using *vav* and *bet*, there is not an analogous form for *fī* in Hebrew, hence their differences in representation (1987: 149). However, this analogy strikes me as deficient; in Biblical Hebrew the definite article *ha-* is dropped when preceded by the preposition *ba-*, the preposition takes a *pataḥ* and the following letter is marked with a *dageš*, e.g., בַּבֵּית [*bab:ait*] 'in the house' (Genesis 27:15). However, when the conjunction *wa-* is followed by the definite article in Hebrew, the definite article is retained in pronunciation, e.g., וַהֲדַבֵּר [*vahad:avaḥ*] 'and the speaker' (Samuel I 20:23). Therefore, I think this phenomenon of omitting the *'alef* of the definite article when preceded by a bound morpheme may more simply be attributed to phonetic renderings of a common vowel

of the bound particle *l-* + definite article (2010: 65), which in all forms of written Arabic appears as - *lil-* ‘to/for the...’, thus omitting the *’alef* of the definite article. It may also be indicative of the pronunciation of *wa-* or *bi-* + definite article, in which the /a/ vowel is elided, e.g., [walqarja ]; [[bɪlqamħ].

#### *Fifteenth/sixteenth-century folk tales*

The omission of *’alef* is uncommon in the fifteenth-century corpora, occurring only in the folk tale Evr.Arab. II 852 after the bound conjunction *w-* ‘and’ and the bound preposition *b-* ‘in, with’, e.g., בלק אלטיר ולוחש ולחיואן ‘He created the birds and the beasts and the animals.’ (Evr.Arab. II 852, 1r. 3-4); ולנמר ‘and the tiger’ (Evr.Arab. II 852, 1r. 10); בלגואב ‘with the response’ (Evr.Arab. II 852, 6r. 5). However, there are also many instances in the same text in which *’alef* is retained after a bound morpheme, e.g., ואלשביטר ‘and the *subayṭar*’<sup>114</sup> (Evr.Arab. II 852, 9r. 2); ואלסואד ‘and the black’ (Evr.Arab. II 852, 3r. 11).

#### *Late fifteenth-century letters*

In fifteenth-century letters, the *’alef* and *lamed* of the definite article both remain after the preposition *b-*, e.g., באלמסעדה ‘with the help’ (MS Heb.c.72/13, 1r. 6); באלואקעה ‘in reality’ (MS Heb.c.72/39, 1r. 14).

#### *Eighteenth/nineteenth-century folk tales*

Within this corpus, occurrences of this phenomenon are limited to the eighteenth-century folk tale T-S Ar. 37.39, in which the *’alef* of the definite article is absent after the bound preposition *b-* ‘in, with’; בל גבאל ‘in the mountain’ (T-S Ar. 37.39, 3v. 9-10). As with the fifteenth-century folk tale Evr.Arab.II 852, however, there are also occurrences in the same manuscript in which the *’alef* is retained, e.g., באל סיף ‘with the sword’ (T-S Ar. 37.39, 1v. 7).

#### *Eighteenth/nineteenth-century letters*

The elision of the *’alef* of the definite article when preceded by a bound morpheme is all too apparent in two (T-S 13J25.24 and Rylands L192) of the three late JA letters in this corpus. In many instances, not only is *’alef* absent, but it is replaced by *yod*, perhaps intended to indicate the short vowel *kasra* /i/, reflecting the phonetic pronunciation of the bound morpheme *b-* + definite article (which in many dialects, including MCA, is realised as *’il-* [ʔil] ‘the’), e.g., ערך יו ביל אצעאר אל קדימה ‘(at) the value

elision in spoken Arabic.

<sup>114</sup> *Subayṭar*: ‘a name of a bird’ (Kazimirski 1860: I, 1044).

of 150 with/in the old prices' (Rylands L192, 1r. 8); ביל סער אל קדים 'with the old price' (Rylands L192, 1r. 9); ביל סלאמיה 'safely' (T-S 13J25.24, 1v. col. 2, 40); וביל שוכוך 'and with the doubts' (Rylands L192, 1r. 10). However, this phenomenon does not occur in the contemporaneous letter T-S 10J16.35, and so may be regarded as a matter of personal style, or indicative of a greater phonetic influence in Rylands L192 and T-S 13J25.24.

#### 2.5.1.3. *fy* + definite article

Another feature often mentioned in analyses of late JA texts is the writing of the the independent preposition *fy* 'in' (CA: *fī*) as a bound morpheme. This phenomenon has various manifestations; most commonly, the definite article and the independent preposition fuse, forming a separate entity, which retains either the 'alef of the definite article, or the *yod* of the independent preposition, or neither. The latter is less common than the former two manifestations.

#### *Fifteenth/sixteenth-century folk tales*

There are no instances of this phenomenon in the fifteenth-century folk tales. In these folk tales, the preposition *fy* 'in, during' (CA: *fī*) retains its independent form, e.g., פי אלסחאב 'in the clouds' (Evr.Arab. II 1528, 3v. 20); פי אלמצגע 'on the couch' (Evr.Arab. II 852, 7v. 22); and פי אלבר 'outside' (Evr.Arab. I 2996, 4r. 1).

#### *Late fifteenth-century letters*

In one instance in this corpus, the independent preposition is bound to the following definite article, losing its *yod*, e.g., פאלקצד 'in/with the intention' (MS Heb.c.72/13, 1r. 18). However, other than this one occurrence, the writing of the definite article and independent preposition adheres to classical JA – and early JA (cf. Blau and Hopkins 1987: 149) – practices, e.g., וכל מן פי אלהארה 'and every(one) who is in the district...' (T-S 13J26.7, 1r. 26); פי אלגואב 'in the answer' (MS Heb.c.72/39, 1v. 10); and פי אל טריק 'on the road' (MS Heb.c.72/18, 1r. 2).

#### *Eighteenth/nineteenth-century folk tales*

In some of the later folk tales, the merger of *fy* + definite article does occur. However, it is always *yod* rather than 'alef that is omitted, e.g., פל ריפ 'in the countryside' (AIU VII.C.16, 1v. 12, 21); פאל בניס 'in the synagogue' (BnF Hébreu 583, 140v. 15); פאל בלד 'in the town' (BnF Hébreu 583, 140v. 5, 22); פאל דונייה 'in the world' (Cairo JC 104, 9r. 6); פאל סמא 'in the heaven(s)' (Cairo JC 104, 13r. 14). While this phenomenon is common in the seventeenth/eighteenth-century folk tale AIU VII.C.16 and

the nineteenth-century folk tales BnF Hébreu 583 and Cairo JC 104, it is notably absent in the two eighteenth-century folk tales T-S Ar. 37.39 and T-S Ar. 46.10, e.g., *פִּי אֵל סְמָא* ‘in the heaven(s)’ (T-S Ar. 37.39, 1v. 8); *פִּי אֵל דּוֹנִיָּה* ‘in the world’ (T-S Ar. 46.10, 1r. 34). It is also worth noting that in texts where the definite article and independent preposition do merge, there are also some cases in which they do not, e.g., *פִּי אֵל חָאָל* ‘in the circumstance’ (AIU VII.C.16, 1v. 14-15).

#### *Eighteenth/nineteenth-century letters*

In Rylands L192 and T-S 13J25.24, the independent preposition and the definite article frequently appear as a single entity. Unlike in the nineteenth-century folk tales, however, the *yod* of the preposition, as opposed to the *’alef* of the article, remains, e.g., *פִּיל קִבְלָךְ* ‘in the revenue’ (Rylands L192, 1r. 14); *פִּיל בּוֹבָאָת* ‘at the doors’ (Rylands L192, 1r. 24); *פִּיל חִסָּאָב* ‘in the account’ (T-S 13J25.24, 1v. col. 3, 13); *וּקְעַד פִּיל דּוֹכָאָן* ‘and he stayed in the shop’ (T-S 13J25.24, 1v. col. 1, 13). The *yod* may be indicative of the vowel elision that occurs in the phonetic realisation of the two components, e.g., *fī-’al baladi* ‘in the town’ in written CA, is pronounced [fi:lbaladi].

As with the contemporaneous folk tales, it is also not uncommon to find the independent pronoun written as a separate entity in these late JA letters, e.g., *פִּי אֵל בּוֹאָלִיךְ* ‘in the (insurance) policy’ (Rylands L192, 1r. 12); *פִּי אֵל דִּיּוּאָן* ‘in the customs’ (T-S 10J16.35, 1r. margin 12).

### 2.5.2. The definite article as an independent morpheme

The separation of the definite article from the noun or adjective it modifies is an oft-noted feature of late JA texts (cf. Khan 1992: 231, 2006: 51; Wagner 2010: 66–7). However, to my knowledge, the cause of the separation has not been explored in the existing literature. In this section, I will first examine each corpus for instances of this orthographic development (§2.5.2.1), before examining a possible cause (§2.5.2.2).

#### 2.5.2.1. The definite article in these corpora

##### *Fifteenth-century folk tales*

The ligature of the definite article is consistently written attached to the noun or adjective it modifies in these fifteenth-century folk tales, e.g., *וְאֵלְסָאָבֵק* ‘and the former’ (Evr.-Arab. II 1528, 1v. 5); *אֵלְתַּעֲלֵב* ‘the fox’ (Evr.-Arab. II 852, 1v. 15); *אֵלְשָׂאָב* ‘the youth’ (Evr.-Arab. I 2996, 14r. 9).

##### *Late fifteenth-century letters*

In all three letters written by Egyptian hands (MS Heb.c.72/13, MS Heb.c.72/39 and T-S 13J26.7), the definite article is attached to the noun or adjective it refers to, e.g., אלכתאב 'the letter' (MS Heb.c.72/13, 1r. 13); אלגואב 'the reply' (MS Heb.c.72/39, 1v. 10); אלסלאם אלתאם 'the perfect greetings' (T-S 13J26.7, 1r. 20). However, in the contemporaneous letter MS Heb.c.72/18, which appears to be written by a Magribian from Syracuse, Sicily, the definite article is consistently detached from the following noun or adjective, e.g., ואל נאס 'and the people' (MS Heb.c.72/18, 1r. 6); אל נצראני 'the Christian' (MS Heb.c.72/18, 1r. 11).

#### *Eighteenth- and nineteenth-century folk tales*

In the seventeenth/eighteenth-century folk tale AIU VII.C.16, the definite article is written as a separate entity, e.g., ואל קמה ואל בייץ ואל זבדא 'and the wheat and the eggs and the butter' (AIU VII.C.16, 1r. 18-19). The same is true of the eighteenth- and early nineteenth-century folk tales, e.g., אל וולד 'the boy' (T-S Ar. 46.10, 1r. 35); אל טאלמין 'the darkness' (T-S Ar. 37.39, 2r. 19); אל דעווה 'the summons' (BnF Hébreu 583, 140r. 9, 17, 19, 140v. 5). However, in the late nineteenth-century folk tale Cairo JC 104, the definite article is generally written attached to the following noun or adjective, e.g., אלאנסאן 'the man' (Cairo JC 104, 14v. 2, 3). This is only the case, however, when the definite article is not preceded by the bound morpheme *b-*. In such cases, the definite article forms a separate entity with the bound morpheme, e.g., באל לולי 'during the night' (Cairo JC 104, 4r. 9); באל אסם 'in the name' (Cairo JC 104, 4r. 6); באל טוראב 'with the earth' (Cairo JC 104, 8v. 13). The writing of the definite article attached to the following noun in Cairo JC 104 may indicate a greater awareness of Arabic orthographic practices with regard to the definite article, and (perhaps) a desire to replicate the Arabic norm.

#### *Eighteenth/nineteenth-century letters*

The definite article is consistently written as an independent morpheme in late JA letters, e.g., אל ביע 'the buying and selling' (Rylands L192, 1r. margin 3); אל נאס 'the people' (T-S 13J25.24, 1v. col. 1, 25); אל דורה 'the maize' (T-S 10J16.35, 1r. 26).

#### *2.5.2.2. Separation of the definite article: exploring a possible cause*

As has already been mentioned, the earliest letter in these corpora in which the definite article appears as a separate component is the Magribian letter MS Heb.c.72/18, most probably sent from Syracuse, Sicily. This letter is found in a corpus of letters addressed to Mošeh b. Yehūdah<sup>115</sup> in Alexandria. Amongst these letters, which predominantly appear to be written from Cairo and the Magrib, there is

<sup>115</sup> cf. Arad and Wagner (forthcoming).

at least one other letter that was composed in Sicily or Spain (MS Heb.c.72/23).<sup>116</sup> In these letters, the definite article is consistently and clearly written as an independent entity, e.g., אל ספר תורה ‘the book (of the) Torah’ (MS Heb.c.72/23, 1r. 15); דאלך אל זונג ‘that husband’ (MS Heb.c.72/23, 1r. 22). As this is a feature that becomes (almost) ubiquitous in JA compositions after the seventeenth/eighteenth century, it seems worth examining possible motivations for its development.

Thus far, the only plausible explanation I can think of is based on the geographical origin of these letters, and the political events of the era and region. Prior to 1492, there were substantial Jewish communities living in Spain, Italy and Sicily. However, after the ‘Edict of Expulsion’ was signed on 31st March 1492 and issued later that same year, Jews were given a little over four months to leave the Spanish Empire (Beinart 2005: 33). Many Jews fled to North African countries, particularly Egypt, and Palestine to join existing Jewish communities there. With the influx of Sephardi Jews<sup>117</sup> post-1492 to Arabic-speaking lands, it is probable that there would have been an extended period – perhaps even into the seventeenth century – in which both Spanish and Arabic were spoken among these immigrant communities (Gutwirth 1990: 113). In light of this prolonged period of contact, it is not unreasonable to presume that the customs of written Spanish, or at least Judaeo-Spanish, may have influenced the writing practices of JA. In Spanish the m.sg. definite article *el* is always separate from the noun it modifies, e.g., *el dio* ‘the day’. In Judaeo-Spanish texts written in the fourteenth/fifteenth and sixteenth centuries (and later), *el* is transcribed איל ‘yl; its independent form in Spanish is retained in Judaeo-Spanish, e.g., איל קיטאדו ‘the aforementioned’ (Spanish: *el citado*) (Penn CAJS Halper 408, 1r. 3. c. 1400–1499); איל דיאה ‘the day’ (Spanish: *el día*) (Penn CAJS Halper 409, 1r. 6, c. 1400–1700)<sup>118</sup>; איל גוי ‘the gentile’ (Yoreh Deah 53, 25, Salonica 1595); and איל פאנדירי ‘the tambourine’ (Spanish: *el pandero*) (Bet Yosef 8, 5) (the latter two examples are taken from Benaim 2012: 192–3; 407–8, sixteenth-century responsa); איל קוידאדו ‘the caution’ (Spanish: *el cuidado*) (Or. 1080J194, 1r. 15) (cf. Gutwirth 1986: 212–3; Kraemer 1991: 257).

It is possible that the writing of the definite article as an independent entity, which becomes a significant feature of late JA, arose from analogy with the writing of the m.sg. definite article in Spanish, or more probably Judaeo-Spanish. This influence may have preceded the expulsion of the Jews from Spain (cf. MS Heb.c.72/18 and MS Heb.c.72/23), but was probably consolidated by the great influx of Spanish-speaking, and Judaeo-Spanish-writing, Sephardi Jews in the late fifteenth

<sup>116</sup> The contemporaneous texts MS Heb.c.72/2 and MS Heb.c.72/24, composed by the same hand and possibly fragments of the same text, display intermittent separation of the definite article from the noun, e.g., אל חכמים ‘the sages’ (MS Heb.c.72/2, 1v. 12); אל כאמל אל אליר ‘the final perfection’ (MS Heb.c.72/2, 1v. 8); and ופי אל תורה ‘and in the Torah’ (MS Heb.c.72/24, 1v. 9).

<sup>117</sup> Prior to the 1492 Edict of Expulsion, Jews had already begun to travel from Spain to Arabic-speaking lands, due to persecution at the hands of the catholic authorities (Beinart 2005: 2).

<sup>118</sup> These manuscripts may be found on the Friedberg Genizah Project website under the classmarks listed here.



century.

## 2.6. Summary

This chapter was devoted to the detailed description and analysis of orthographic and phonological data in written late JA as found in the fifteenth/sixteenth-century and eighteenth/nineteenth-century folk tales and letters. In §2.1.1, diachronic developments in the use of diacritical dot were examined. It was apparent that the marking of *peh* for *fā'*, *dalet* for *dāl*, *kaf* for *hā'* and *kāf* and *gimel* for *gayn* is a late phenomenon that becomes increasingly common from the seventeenth/eighteenth century onwards. The more frequent appearance of the dot above these graphemes in folk tales relative to letters was also noted. As such, it was suggested that the diacritical dot was considered a literary or archaising feature. This exploration revealed that the marking of *peh* for *fā'* with a diacritical dot is crucial to understanding the use of the dot in relation to other graphemes (*dalet* for *dāl*, *kaf* for *hā'* and *kāf* and *gimel* for *gayn*). As a result of these findings, the inherent phonetic value of the diacritical dot was queried. The use of the diacritical dot in relation to these graphemes was considered to be the result of direct Arabic orthographic influence.

In §2.1.2 the current understanding of the use of the diacritic in the orthographic representation of *ḡīm* was questioned. Through a brief examination of some former analyses of historical phonetic reflexes of *ḡīm* in which the origins of the fronted *ḡīm* were explored in relation to the voicing and velarisation of *qāf*, this paper laid the foundations for a more detailed exploration of orthographic denotations of *ḡīm* as they appear in Egyptian JA literary and documentary texts between the ninth and nineteenth centuries. The aim of this section was to ascertain the extent of the usefulness of the diacritic in reconstructing the phonetic value and chronological development of *ḡīm*; and to search for more unambiguous indications of the phonetic reflexes of *ḡīm* as displayed in Egyptian JA literary and documentary texts. In pursuit of this aim, the first stage of Blanc's methodology (1981) – the examination of texts for the use of the diacritic with *gimel* denoting *ḡīm* – was applied to two documentary texts and two literary texts (where available) from six periods, spanning the ninth–nineteenth centuries. The degree of inconsistency displayed in the application of the diacritic in all periods and both genres examined here establishes that the diacritic is a dubious source for recreating the phonetic realisations of *ḡīm* in pre-Modern Egyptian dialects. Oft-cited examples of assimilation, metathesis and graphemic substitutions used in support of an affricate pronunciation of *ḡīm* between the twelfth and seventeenth centuries in Egypt were re-examined in relation to new evidence. These phenomena offer a far more substantial basis on which to assess, if not quite establish, the phonetic realisations of *ḡīm*. It was, however, demonstrated that these occurrences require more careful analysis: the instances of assimilation and metathesis tend to suggest not affricate but fricative reflexes, which may indicate different reading traditions influenced by Magribian, Tunisian and

Libyan and urban Syro-Palestinian pronunciations of *ġīm*. Furthermore, new evidence discovered in the fifteenth/sixteenth-century folk narrative Evr.Arab.II 1528, in which *ġīm* is represented by *kāf*, implies that the voiced velar stop [g] reflex of *ġīm* may have been in circulation in Egypt for longer than has previously been supposed by scholars of JA.

In the following section (§2.1.3), I turned my attention to graphemic substitutions, in which the standard classical JA orthographical representations are supplanted by alternative graphemes, and thus afford us some limited phonological information. The most frequently occurring substitution common to all corpora is *ṣadeh* + dot for *zā'*. This is indicative of the colloquial plosive realisation of *zā'* and its phonetic merging with *ḍād*. It was also demonstrated that late fifteenth-century letters contained the smallest number of graphemic substitutions. The analysis of phonological information was continued in §2.1.3.2 and §2.1.3.3 with discussions of *tafḥīm* and *tarqīq*. There is a notable increase in the frequency of instances of *tafḥīm* between the fifteenth/sixteenth and eighteenth/nineteenth-century folk tales and letters. As with the graphemic substitutions, *tafḥīm* occurs rarely in the fifteenth-century letters. It was also noted that in the late corpora where *tafḥīm* is common, it still occurs more frequently in some texts than others, perhaps revealing the writer's level of education, or idiosyncratic style. As with *tafḥīm*, *tarqīq* occurs more frequently in the later corpora. It also occurs in selected texts only. However, it is worth noting that in texts where instances of *tarqīq* are common, cases of *tafḥīm* are absent.

The ensuing section (§2.1.4) dealt with the representations of *tā' marbūṭa* in non-construct and construct states in the late JA texts. In the letter corpora, the classical JA graphical representation of *tā' marbūṭa* with *heh* in non-construct state was found to be most consistent in the letter corpora. *Heh* was more commonly substituted with *'alef* in the fifteenth-century folk tale Evr.Arab.II 852 and the eighteenth- and nineteenth-century folk tales T-S Ar. 37.39 and Cairo JC 104. Thus, yet again, the folk tales reveal a greater degree of phonetic representation than the documentary texts. The representation of construct state *tā' marbūṭa* in the fifteenth/sixteenth century suggests, however, that phonetic representation (with *tav*) was the norm in the letter corpus, but not in the folk tales, where only occasional graphical representations were found. However, in the later corpora the situation was reversed. Whereas a few instances of *heh* for construct-state *tā' marbūṭa* are evident in the later letters, only phonetic representation (*tav*) is found in the eighteenth/nineteenth-century folk tales.

Representations of *'alif* were discussed in detail in §2.1.5. In this section, I explored the possibility that the interchangeability of *heh* and *'alef* in the representation of *'alif* may be due to phonetic influence as much as Hebrew orthographic influence.

From representations of *'alif*, I turned to an examination of the use of double *vav* and *yod* (§2.1.6). The frequency of these orthographic features was shown to increase notably between the fifteenth/sixteenth and eighteenth/nineteenth centuries. Both double *vav* and *yod* were found to be more consistently used in folk tales than in letters of both periods. Double *yod* is also found to be more commonly employed than double *vav*.

§2.2 was dedicated to the description and analysis of vowels, focusing on *plene* spelling of short vowels (§2.2.1), defective spelling of long vowels (§2.2.2) and vowel shifts (§2.2.3). In §2.2.1, *plene* spelling of the short vowels /a, i, u/ were all shown to have increased notably between the two periods in both folk tales and letters alike. In the vast majority of cases, *plene* orthography revealed a decided tendency towards MCA pronunciation. In §2.2.2, it is shown that defective spelling of long vowels is a phenomenon that came to the fore after the seventeenth/eighteenth century. In general, it appears to reflect the shortening of long vowels evident in MCA. The preference for MCA pronunciation is also revealed in the vowel shifts that become apparent after the seventeenth/eighteenth century. Instances of *fa'ala* > *fu'ul* in both letters and folk tales appear to be less common than in other genres of late JA (cf. Hary 1992, 2009), and are restricted to specific lexical items. Frequent *matres lectionis* reveal a decided preference in the folk tales – and letters to a lesser extent – for the *fi'il* verbal pattern found in MCA. Overall, the letters and folk tales alike reveal an increase in phonetic spelling after seventeenth/eighteenth century.

§2.3 and §2.4 were devoted to the limited phonological information that can be gained from instances of metathesis and assimilation as they occur in the written data. Instances of assimilation and metathesis were shown to be entirely absent from the eighteenth/nineteenth-century letters and folk tales. Of the rare occurrences in fifteenth/sixteenth-century texts, most pertained to the realisation of *ḡīm*. Evidence was found for both plosive and fronted allophones of *ḡīm*.

In the final section (§2.5), I examined the separation of the definite article, and possible causes behind this orthographic development.

In short, a diachronic examination of letters and folk tales suggests that the main orthographic features associated with late (fifteenth–nineteenth-century) written JA, such as writing of double *vav* and *yod*, increased *plene* spelling and the separation of the definite article, became established features after the seventeenth/eighteenth centuries. Furthermore, explorations of the use of the diacritical dot and separation of the definite article suggest that Muslim Arabic and Judaeo-Spanish may have played a not insignificant role in some of the key orthographic developments of this period.





### 3. Syntax

#### 3.1. Subordination

##### 3.1.1. Complement clauses<sup>119</sup>

A complement clause is ‘a notional sentence or predication’ that acts as an argument – either the subject or object – of a main predicate (Noonan 2006: 694; 2007: II, 52; cf. Cristofaro 2003: 98). In CA, complement clauses tend to be marked by one of three complementisers. The predicate (often referred to as a complement-taking predicate), is generally a verb, substantive or participle.<sup>120</sup> Complement-taking predicates (henceforth CTP) and their complement clauses may be connected with a complementiser (syndetic), or not (asyndetic). In CA, complementisers are compulsory after the vast majority of verbal forms.<sup>121</sup> There are three main complementisers used to introduce predication in CA; (i) *’an*, (ii) *’anna* and (iii) *’inna*. The first of these – *’an* ‘that, to’ – has two forms, both of which are used for non-factual<sup>122</sup> assertions; *’an ’al-maṣḍariyya* – so called because in instances in which the subject of the main and complement clauses are coreferential, *’an* may be replaced with a *maṣḍar* (verbal noun) (LeTourneau 2009, IV: 360–1) – precedes a prefix conjugation verb in the subjunctive in instances when the action remains unrealised (in relation to the CTP), or a suffix conjugation verb, in cases where the action or event has already occurred (Fischer 2002: 212, §414). The subject of the complement clause follows the verb and is in the nominative case. *’An ’al-maṣḍariyya* is used most commonly after desiderative, manipulative, modal and phasal CTPs (LeTourneau 2009, IV: 361). The alternative *’an* is termed *’an ’al-muḥaffafa* ‘the lightened *’an*’. It differs from *an ’al-maṣḍariyya* in terms of the word order of the following complement clause, which may be either v + s, or s + v. Furthermore, the verb of the complement clause is in the indicative, rather than the subjunctive (LeTourneau 2009, IV: 361). The second complementiser *’anna* is used, unlike its counterpart *’an*, to introduce factual (or realis) assertions. It also differs from *’an* in that it must be followed by a nominal form or pronoun suffix. The verb that follows *’anna* (indirectly) is in the indicative form, while the subject is in the accusative case (Fischer 2002: 212, §415). The complementiser *’anna* occurs after CTPs which are inherently assertive or epistemic, such as knowledge predicates (LeTourneau 2009, IV: 360–1). The final complementiser *’inna* is used exclusively in conjunction with the verbal form *qāla* ‘to say’ (LeTourneau 2009, IV: 360; cf. Ryding

<sup>119</sup> Complement clauses are also referred to as ‘content clauses’ and ‘nominal clauses’ (cf. Aarts 2006: 252; Holes 1995: 225–9, §7.2.2.1)

<sup>120</sup> Some scholars do not include modal particles (such as participles and substantives), which function as predicates in their analyses of complementation (cf. e.g., Cristofaro 2003: 101–2; Quirk et al: 1985), while others do (cf. e.g., Noonan 2007: 147).

<sup>121</sup> Complementisers may be omitted after verbs which denote the act of drawing near or immanency of an action, and a select number of other verbs (LeTourneau 2009, IV: 361; cf. Ryding 2005: 452).

<sup>122</sup> Whether a clause is designated ‘realis’ (or ‘factual’) (in the sense of an action or state that has happened or been realised), or ‘irrealis’ or ‘non-factual’ (an action or state that has yet to occur) is determined by the temporal relationship of the complement clause to the CTP (Noonan 2007: II, 103; Khan 2016b: 491).

2005: 425).

Both the type of complementiser and mood of the complement clause's main verb are intrinsically important to the differentiation of 'factual' from 'non-factual' complementation in CA. However, in colloquial Arabic, the distinctions between the three main CA complementisers have collapsed (Holes 1995: 226; as they have in written JA, cf. Blau 1981: 85–6). In MCA, *'an*, *'anna* and *'inna* are represented by the single complementiser *'inn*,<sup>123</sup> which is always followed by a substantive, e.g., *'alū-li (qalū-li) 'inn 'il-maktab ma'fūl (maqfūl)* 'They told me that the office was closed'; *wafī't (wafīqt) 'alā 'inni ḥ-arūḥ* 'I agreed to go' (examples adapted from Hinds and Badawi 1986: 42); *muḥtamal 'inn 'ašraf rigi* 'It is possible that Ashraf has returned.' (example adapted from Abdel-Massih, Abdel-Malek and Badawi 2009: 149).

Furthermore, in dialectal Arabic case-markings have disappeared, leaving mood distinctions to be expressed through other means. In MCA, the subjunctive mood is generally expressed with the unadorned prefix conjugation (Abdel-Massih, Abdel-Malek and Badawi 2009: 275), while the indicative mood is marked by the *bi-* prefix attached to the prefix conjugation (ibid: 120). Future tense is marked in MCA with the prefix *ḥa-* (ibid: 268).

Complementation in written JA has been examined by a number of scholars (cf. Blau 1980, 1981; Hary 1992, 2009; Wagner 2014). Blau focuses on the merging of *'inna* with *'anna* and *'an* 1980: 221, 2; 1981: 72, n. 3); the disintegration of the CA distinctions between the three complementisers (1980: 221, §3; 1981: 85–6; and in written Early MA 2002: 54, §130); and touches upon asyndetic subordination in general in both written JA (1980: 211–6, §330–5; 1981: 95, 137–8) and Early MA (2002: 52–3, §128). In his studies of late written JA historical narratives (1992) and *šurūḥ* (2009), Hary looks at asyndetic complementation (1992: 307; 2009: 130) and records a considerable number of instances of the colloquial use of the complementiser as it is found in a number of seventeenth–twentieth-century historical narratives (1992: 307–8). In her (2014) article on subordination in fifteenth/sixteenth-century JA letters (some of which are also included in this analysis), Wagner examines both syndetic and asyndetic forms of complementation, comparing the findings with classical JA letters (ibid.: 160–1). Wagner concludes that while asyndetic complementation does occur in fifteenth–sixteenth-century letters, it is considerably less frequent than in classical JA texts of the same genre (ibid.: 161).

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<sup>123</sup> The particle *kūn* is also used as a complementiser in MCA, but it is not evident in the corpora under examination here.

In this section, I expand on these existing studies of JA complementation in order to ascertain the extent of diachronic developments and genre-related differences in the use of complementisers, complement types, modalities and asyndetic complementation in two genres of written JA. The JA material found in the corpora that pertains to complementation is categorised, first and foremost, into complement clauses that occur syndetically (§3.1.1.1) and asyndetically (§3.1.1.2). These categories are then sub-divided into non-factual (§3.1.1.1.1) and factual (§3.1.1.1.2) syndetic clauses and non-factual (§3.1.1.2.1) and factual (§3.1.1.2.2) asyndetic clauses, respectively. Within each of these sections, complement types and the modalities of CTPs are identified and examined in further detail.

### 3.1.1.1. Syndetic

#### 3.1.1.1.1. Non-Factual

#### + prefix conjugation

##### *Fifteenth/sixteenth-century folk tales*

In the first four examples of complementation from the fifteenth-sixteenth-century folk tale corpus, manipulative predicates are followed by the JA particle 'n, which in turn is followed by a prefix conjugation verb:

(1) ואשאר אליה אן יכתב

‘...and he ordered him to write.’ (Evr.Arab.II 1528, 2v. 23-24)

(2) ואשאר אליה אן {יכתב}

‘...and he ordered him to write.’ (Evr.Arab.II 852, 6r. 5-6)

(3) פאמרת אלטבאך אן ישתרי להא שוא ויגהז להא עשא

‘She ordered the cook to buy her grilled meat and to prepare (lit. ‘and (that) he should prepare’) dinner for her.’ (Evr.Arab.I 2996, 5r. 8-9)

(4) ואמרת גאריתין אן ינשו אל[ן]אחדה ענד ראסי ואלאכרה ענד [ר]גלי

‘She ordered two serving girls to come into being; one at my head and the other at my feet.’ (Evr.Arab.I 2996, 5r. 12-13).

In the next examples (5-6) from this corpus, the CTP expresses desire on the part of the subject in the main clause that either they themselves (6), or another party (5) act according to their wishes. Unusually, in terms of CA standards, the CTP in example (5) also takes a direct object pronoun, and thus reads literally, ‘...I want you that you devote...’. In example (5), the desiderative CTP is preceded by the verb *q'l*, used here without a complementiser to introduce direct discourse. Rather than the



complementiser 'n found in example (5), in example (6) the complementiser is *b-'n*, formed by the conjoining of the preposition governed by a verb to the following complementiser 'n. However, in this particular instance the CTP verb *qaṣada* 'to intend' is usually followed either by *li-* or *'ilā* in CA or zero in MCA and, therefore, it appears that *b-'n* has, by this point in time, become a complementiser in its own right (cf. Blau 1981: 110):

(5) פקאל ארידך אן תכל לי סמעך ובצרך ועקלך

'Then he said, 'I want you to devote your attention to me; your hearing, your sight and your mind.' (Evr.Arab.I 2996, 4v. 17-18)

(6) וקצדו באן ימלכו אלבלאד

'And they intend to rule (lit. 'they intended that they will will rule') the country!' (Evr.Arab.II 1528, 1v. 12-13).

The following two examples ((7) and (8)) of syndetic complement clauses occur in the fifteenth/sixteenth-century folk tale Evr.Arab.I 2996. In (7) we find an impersonal verbal construction, while in (8) a nominal form appears. Both constructions function as propositional attitude CTPs, and appear to be semantically positive. In each case, the predicate is followed by 'n and a prefix conjugation verb:

(7) פחק לי אן אבכי ואחזן

'So, I have every reason to weep and grieve.' (Evr.Arab.I 2996, 7v. 22-23)

(8) היהאת היהאת אן ירגע מא פאת או תחיא אלמואת

'How preposterous! It is absolutely out of the question that what has passed will resume or (that) the dead will live...' (Evr.Arab.I 2996, 10r. 10-12).

#### *Late fifteenth-century letters*

As with the contemporaneous folk tales, desideratives are common in the late fifteenth-century letters. In example (9), the CTP verb *qṣd* (CA: *qaṣada*) 'to intend' introduces an unrealised intention, which is expressed in the prefix conjugation. In examples (9) and (11), the subjects of the main and complement clauses are not one and the same; they introduce a desire (tinged with an element of command) that the recipient of the letter do something on behalf of the writer. However, in example (10), the subject of the main and complement clauses is coreferential. The verbal form of the complement clause in example (10) is written in CA subjunctive (with the ending *-ū*), which is also the base form of MCA verbs (and generally indicates the subjunctive) (Abdel-Massih, Abdel-Malek and Badawi 2009: 275). The predicate in example (11) is a participle form:

(9) פִּאקֶצְדִּי {ד} פִּצֵּל אֶלְמַכְדוֹ וְאַחֲסָאנָה אֲנִי תַעֲרַף סִידִי צִלָּחַ אֶלְדִּין בְּדִלְךָ

‘I intend, (due to) the grace of the Master (i.e., you) and his (i.e., your) kindness, that you should inform my lord Šalāḥ ad-Dīn about that.’ (MS Heb.c.72/39, 1r. margin 1-2)

(10) {פִּקֶּצְדוֹ} אֲנִי יַעֲמוּ עָלַי אֶלְפֶּרֶט יֶאֱכֹדוּהָ

‘They intended to float (lit. ‘they intended that they will float’) on the interest (which) they (had) taken.’ (MS Heb.c.72/39, 1v. 9-10)

(11) וּמִקְצוֹד אֶלְמַע שְׁמוּאֵל אֲנִי תַסְאֲעַד בְּכָל גְּהֶדֶךְ מִעַם בְּדֵר אֶלְדִּין אֶלְמַצְרִי פִי בִיעַ אֶלְכִיָּאֵר

‘And the intention of the master (abb.) Samuel (is) that you will make every effort to help *s(ayyid)* Badr ad-Dīn al-Maṣrī in the selling of the best (pieces).’ (MS Heb.c.72/13, 1r. 9-10).

In the final example (12) in this section (underlined), the JA complementiser *'n* is supplanted by the particle *b 'š*,<sup>124</sup> which appears to be acting as a complementiser in this context. In so doing, it functions like the CA complementiser *'an* in that it takes a prefix conjugation verb (cf. example 35 for discussions of the use of *'n* and *b-'n* in this example).

(12) נַעֲלַמְךָ בָּאֵן אֶל סְפָרִים אֶלְדִּי וְעַתָּה בְּאִשׁ אֲבַעֲתָךְ אֵן מָא כָאֵן לִי זְמַן נִכְתּוּבָהֶם לָךְ

‘I (am also writing to) tell you that the books – which I promised that I would send to you – that I have not had time to transcribe them for you...’ (MS Heb.c.72/18, 1r. 16).

### *Eighteenth/nineteenth-century folk tales*

In the following example (13) from the mid-eighteenth-century folk tale BnF Hébreu 583, there are two complement clauses to be found. The first of these is an utterance predicate which introduces direct discourse (underlined) asyndetically. The second is introduced by a desiderative CTP, expressing an unfulfilled desire on the part of the speaker. In this latter complement clause, the complementiser *'n* is used in conjunction with the MCA subjunctive form in the 2.m.pl:

(13) פִּי קָאָל לְהוֹם אֶל רַב אֲבִי'ן עֶזְרָא אֶתְמַנָּה אֲנִי תִגְעֲלוּ אֶל קִסִּים אֶל כְּבִיר פִּי זְכִיבָה וְתִרְבְּטוּ פֹם אֶל זְכִיבָה פֶּאֶל תִּכְתְּרוּאָן  
לְחִין יִנְתֵּם אֶל מוֹכֵב

‘To which Rabbi Abraham ibn ‘Ezra replied, ‘I wish you to put the high priest into a large gunny sack and bind the opening of the sack to the sedan chair until the procession is over.’’ (BnF Hébreu 583, 141r. 2-4).

In the next example (14), the CTP is a m.sg. imperative form of the verb *q'l*. In keeping with CA, the

<sup>124</sup> The particle *b 'š* is used elsewhere in the letter MS Heb.c.72/18 as a purposive subordinator (cf. §3.1.3.2.1; Wagner 2014: 148–9).

following complement clause is introduced with 'n + prefix conjugation (here the 1.c.sg. *niktib* form is used). The 1.c.sg. independent pronoun occurs after the prefix conjugation, perhaps with the intention of clarifying the use of the *niktib* verbal form – which in this context is both homophonous and homographic with the 1.c.pl. CA verbal form *nakūnu* 'we will be' – or merely to add emphasis:

(14) קול להום אן נכון אנא מעאך

‘‘Say to them that I will be with you.’’ (BnF Hébreu 583, 140r. 19).

Example (15) contains a series of complement clauses. The first of these (see underlined section) is predicated with the verb *q'l*. The accompanying complement clause, which introduces direct discourse, is unmarked. The second complement clause follows the verb *s'l* (CA: *sa'ala*) 'to ask', is an expression of request and, therefore, falls into the category of manipulative CTP. The complement clause that follows is introduced with the JA complementiser 'n + prefix conjugation (cf. example (26) for a discussion of the third complement clause found here):

(15) וקאל יא אלאה וסיידי ורגאיה אסאל מן פצלך ואחסאנך אן תאדן להאדה {אל} גמגמה אנהא תנטק ותתכלם ותגאובני  
שכל מא יתכלם אלאנסאן מעה צאחבו

‘And he said, ‘O God, my lord and my hope, I beseech you out of your grace and kindness to permit this skull to articulate and speak and answer me (in the) manner in which man speaks with his companion.’’ (Cairo JC 104, 2v. 12-3r. 3).

#### *Eighteenth/nineteenth-century letters*

As with example (14), in (16) we also come across a CTP in the form of an imperative. The following verbal complement clause is introduced with the particle 'yn (CA: 'an; MCA: 'inn) + a *niktibū* prefix conjugation form:

(16) אעלמו איך נתוגהו טרפוכום סאעה עלא גאפלה [ ] אל לאין זעלנא קאוי

‘...know that we will come to (your) region at an unspecified time [...] because we are very tired (of this state of affairs).’ (Rylands L192, 1r. 35-margin 1).

The CTP in example (17) is a predicate of fearing and takes the form of an active participle. It is followed by the compound particle 'l' (CA: 'allā), which comprises the complementiser 'an and the negative particle *lā* to mean ‘lest’:

(17) וכאיפ אלא ירוח ולם ירגע

‘And he is afraid lest he will go and not return.’ (T-S 13J25.24, 1v. col.2, 14-15).

In the following example (18) found in the letter T-S 13J25.24, the JA complementiser 'n appears three times. In all three instances, 'n is followed by a prefix conjugation. However, there is no explicit CTP found in any of the instances. We can infer from the surrounding context that with regard to the underlined sections, the CTPs would express requests and statements, thus constituting manipulative or utterance predicates:

(18) וקצצנה וכתב<sup>125</sup> לכוּם מכתוב בכטו אן תבעת לנה מכתוב בורדין<sup>126</sup> עלא טי מנדולפו ה' אן יסלם לנה כאמיל אל חיסאב  
ויעטינה אורדנס לסחבכוּם ביתוע סלאניקי אן למ יערפו כלפנה וירסלו אל פילוס לנה ואחנה נרסלהוּם לכוּם

‘So, he came to us (i.e., for advice(?)) and he wrote a letter to you in his hand (requesting) that you send a letter to us with (the) new arrivals about *s(ayyid)* Mandolfo –may God comfort him – (demanding) that he should pay us the whole of the sum and (that) he should give us an injunction (?) for your associates belonging to Salonica (which says) that they will not tell our successors and (that) they should send the money to us and we will send it (lit. ‘them’) to you.’ (T-S 13J25.24, 1v. col.2, 14-19).

#### + suffix conjugation

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century letters*

N/A

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*

N/A

#### + nominal clause

*Fifteenth/sixteenth-century folk tales*

In example (19), we find a form III active participle following a pronominal suffix attached to the complementiser 'n. The CTP in (19) is used to express a command, which in CA would take the

<sup>125</sup> Khan reads this as וקצצנה וכתב ‘and he requested us to write...’, but the original appears to me to read וקצצנה וכתב ‘and he came to us and he wrote...’ (2006: 42, line 57).

<sup>126</sup> בורדין: This is perhaps an alternative plural form to *wurrādun* ‘new arrival’ (of which the singular form is *wāridun*).

complementiser 'an + subjunctive. It must be assumed that an act of informing is intended:

(19) תם אמר אלמלך אלמסחור לארבאב דולתה וכואץ ממלכתה **אנה** מסאפר אלי אלחגאז

‘The bewitched King gave a command (and said) to the lords of his state and the elite of his Kingdom that he (would be) traveling to *al-ḥiḡāz*.’ (Evr.Arab.I 2996, 13v. 15-17).

In the next example (20) from the earlier folk tale corpus, we find a propositional attitude predicate, which is used in a negative sense. The subject of both the main and complement clauses is one and the same, a fact that is made clear by the use of the pronominal suffix attached to the complementiser 'n:

(20) וטן **אנה** בגיוש טיורה

‘And he thought that he was among his troops of birds...’ (Evr.Arab.II 852, 2v. 17-19).

#### *Late fifteenth-century letters*

N/A

#### *Eighteenth/nineteenth-century folk tales*

In examples (21) and (22), a form X participle functions as a predicate, preceded by the auxiliary verb *k'n* (CA: *kāna*) in the 3.m.pl. suffix conjugation. This CTP is a desiderative with a counterfactual sense (expressed in English translation with the subjunctive form ‘would’). Unlike in CA desideratives, however, this CTP is followed with the JA complementiser 'n + suffix pronoun + verb, rather than 'n (CA: 'an) + subjunctive, as would be expected in CA. It is probable that we are confronted here with the MCA particle 'inn (an assertion that is corroborated by the *plene* spelling of the short /i/ vowel in (21)), which takes a pronominal suffix before a verb, regardless of the semantic function of the CTP. Although the exact CTP differs in example (23), its modality remains desiderative, and the same explanation applies:

(21) [וכ]א[נו] מס[תנ]טרין אהלי **באיני** אערק

‘...my people were expecting that I would perspire.’ (T-S Ar. 37.39, 1v. 1-3)

(22) וכאנו מסתנטרין אלגמאעה **אני** אערק

‘...and the group was expecting that I would perspire.’ (Cairo JC 104, 5v. 14-15)

(23) פי לים ארדת **אני** תדוס

‘But I did not want to you to tread.’ (T-S Ar. 37.39, 3r. 14-16).

In examples (24) and (25), the manipulative CTP *'amara* 'to command, order' is followed, as with the previous examples, with the JA complementiser *'n* + pronoun suffix + prefix conjugation. As has already been noted, in CA verbs of command acting as predicates take the complementiser *'an* + prefix or suffix conjugation. However, here it seems that the all-purpose MCA complementiser *'inn* has replaced the CA complementisers and their concomitant semantic and syntactic differentiations:

(24) ואֵלֶּה קִדְּ אֱמֶרְהָא אֶלְכָּאֵלֶּק סוֹת<sup>127</sup> עַז וְגַל אֱנֶהָ תִּגְאֹוּב פִּי גִמִּיעַ מֵא יִסְאֵלְהָ וַיִּטְלוּב מִנְהָ

‘And then, the Creator – may He be praised, may he be elevated and exalted – ordered that it should answer all that he asks it and requests of it.’ (Cairo JC 104, 3r. 5-8)

(25) לִקְדַּ אֱמֶרְנִי אֶלְחֶק סוֹת<sup>127</sup> עַז וְגַל אֱנֶנִי אֶגְאֹוּבֶךָ פִּי כִאֲמַל מֵא תִסְאֵל מִנִּי

‘Verily, the Truth – may He be praised, may he be elevated and exalted – commanded me that I should answer everything that you asked me.’ (Cairo JC 104, 3v. 2-4).

In this example (26), the complement clause (underlined) is preceded by the modal predicate *'ḡn* (CA: *'aḡina*) ‘to permit’, and is introduced with *'n*, which takes a 3.f.sg. suffix pronoun and then a prefix conjugation verb (cf. example (15) for a discussion of the other forms of complementation found here):

(26) וְקֵאֵל יֵא אֱלֹאֵה וְסִיִּדִי וְרִגְאִיָּה אִסְאֵל מִן פְּצֹלֶךְ וְאִחְסֶאנֶךְ אֵן תֵּאֲדֹן לְהֵאֲדֹה {אֵל} גִּמְגִּמָּה אֱנֶהָ תִנְטֶק וְתִתְכַּלֵּם וְתִגְאֹוּבִנִי  
שְׁכַל מֵא יִתְכַּלֵּם אֱלֶאנְסֶאן מֵעָה צִאֲחֶבֹו

‘And he said, ‘O God, my lord and my hope, I beseech you out of your grace and kindness to permit this skull to articulate and speak and answer me (in the) manner, in which man speaks with his companion.’ (Cairo JC 104, 2v. 12-3r. 3).

In the following two constructions (27 and 28), the modal CTP *qdr* (CA: *qadira*; MCA: *qidir*) ‘to be able to’ precedes *'n* + suffix pronoun, which in turn comes before prefix conjugation verbs. It seems that the MCA complementiser *'inn* has supplanted the CA complementiser *'an*, which would be apt in this context:

(27) פִּי לֹם קִדְּרַת אֱנֶנִי אֲדוּס

‘But I was not able to slip (into it).’ (Cairo JC 104, 13v. 14)

(28) וְלֹם קִדְּרוּ אֱנֶהוּם יִכְלִצוּנִי

‘...but they were not able to save me.’ (Cairo JC 104, 6r. 8-9).

<sup>127</sup> סוֹת<sup>127</sup> *subhānu wa-ta 'ālā* ‘may He be praised’. This formula is used immediately after the name of God.

### *Eighteenth/nineteenth-century letters*

As with many of the above-mentioned examples, (29) contains two different types of complementation. The first of these (see underlined section) is predicated by the verb of utterance *q'l*, which asyndetically introduces indirect discourse. The second construction has in the main clause a common predicate of knowledge, which is preceded by the auxiliary verb *kāna* and the conditional particle *lw* (CA: *law*) (cf. §3.1.3.4 for a discussion of conditional clauses) to form a hypothetical conditional. The complementiser *'yn* (which may again be seen as further evidence of the MCA complementiser *'inn* having penetrated written JA at this time) is followed by a prepositional noun phrase:

(29) וקאל לנא אל מזכור לו כאן ביערפ' אין פיל בובאת למ יפתשו כאן גאב בדאל אל צורה כמסין

‘And the aforementioned said to us (that) if he had known that they would not be checking at the doors he would have taken out, instead of (only) one purse, fifty (purses).’ (Rylands L192, 1r. 23-25).

### *Summary*

Instances of syndetic non-factual complementation are present in many, but not all, of the texts under consideration in this thesis. The most frequent use of the complementiser *'n* + prefix conjugation verb is found in the fifteenth/sixteenth-century folk tales. In the contemporaneous letters, a complementiser + prefix conjugation does also occur relatively regularly, but there is slightly more variation in the form of the complementisers used (e.g., *b's* found in the Magribi letter MS Heb.c.72/18). With regard to the eighteenth/nineteenth-century material, the use of *'n* + prefix conjugation occurs less frequently than in the earlier texts. Whereas the examples from the eighteenth/nineteenth-century folk tales are unremarkable, those found in the contemporaneous letters are more conspicuous; the consistent omission of the CTP before the complementiser *'n* in the letter T-S 13J25.24 is particularly worthy of note.

There is no evidence of the complementiser *'n* used directly before a suffix conjugation verb in either the folk tales or letters of either period.

The use of nominal forms, such as a pronominal suffix, prepositional noun-phrase or substantive after a complementiser is more sporadic than the use of the prefix conjugation and, with only one exception is limited to the two folk tale corpora. The complementiser *'n/'nn* + pronoun suffix occurs in the fifteenth/sixteenth-century and eighteenth/nineteenth-century folk tales, alike, although it is especially common in the latter. There are no instances of *'n/'nn* + pronoun suffix in either of the letter corpora, yet there is one example in the eighteenth/nineteenth-century letters in which the complementiser *'yn*

precedes a prepositional noun-phrase (cf. example 29).

With regard to the modalities of the CTPs used in the construction of syndetic non-factual complementation, there is notable consistency across all periods and genres in the use of CTPs before the prefix conjugation; desiderative and manipulative predicates occur in all periods and both genres (with the exception of the nineteenth-century letters). There are a greater number of modalities used in the eighteenth/nineteenth-century folk tales before *'n/ 'nn* + pronoun suffix than in the other genres or periods.

#### 3.1.1.1.2. Factual

##### + prefix conjugation

##### *Fifteenth/sixteenth-century folk tales*

N/A

##### *Late fifteenth-century letters*

In the following example (30) from the Magribi letter MS Heb.c.72/18, the utterance CTP is concerned with the communication of a factual assertion, which in CA would be followed by *'anna* and either a substantive or pronominal suffix. Yet in this example, the CTP precedes the complementiser *b- 'n*, which in turn comes before a 3.m.sg. prefix conjugation verb. This hints at the breakdown in the distinction in written JA – which is also evident in MCA – among the different semantic functions of the three main complementisers:

(30) נעלמך באן יגי ענדך ואחד אל נצראני קטלאני אסמו מיסר ברנארד

‘I (am writing to) tell you that a Christian, a Catalanian called *mīsr* (i.e. ‘mister’)<sup>128</sup> Bernard, is coming to your place.’ (MS Heb.c.72/18, 1r. 9-10).

##### *Eighteenth/nineteenth-century folk tales*

N/A

##### *Eighteenth/nineteenth-century letters*

N/A

##### + suffix conjugation

<sup>128</sup> Thank you to Dr. Michael Rand for pointing this out to me.



*Fifteenth/sixteenth-century folk tales*

In example (31) the utterance CTP *q'l* precedes the JA complementiser *'n*, which in turn is followed by a suffix conjugation verb. As the verb *q'l* marks indirect discourse, use of a complementiser is expected in this situation. While this is the case, the CA semantic and syntactic differentiations between the three main complementisers do not seem to be observed in the following example:

(31) וקלתה **אן** כאן הכדא

‘...and I said that it was so!’ (Evr.Arab.I 2996, 11r. 12-13).

*Late fifteenth-century letters*

In the following example (32), the complementiser appears to be repeated twice, once immediately after the utterance CTP, and again before the final complement clause. This latter (underlined) section is what concerns us here (cf. examples (15) and (26)) for discussions of the other forms of complementation found in this example); the complementiser *'n* appears to refer back to the utterance predicate at the beginning of the construction, and is followed by the negated verb *kāna*. Yet again, as an assertive CTP, one would expect the complementiser *'anna* in CA in this context. However, it would appear that this CA convention is not observed here. The same applies to (33) in which the complementiser *b-'n* is followed directly by a 3.m.sg. suffix conjugation verb:

(32) נעלמך **באן** אל ספרים אלדי ועתך באש אבעתך **אן** מא כאן לי זמן נכתובהם לך

‘I (am also writing to) tell you that the books – which I promised to send to you – that I have not had time to transcribe them for you...’ (MS Heb.c.72/18, 1r. 16)

(33) וינהי אלי עלמה אלכרים **באן** אכד

‘...and he draws to his generous attention that he took...’ (MS Heb.c.72/39, 1r. 2).

In the final example (34) in this section found in the late fifteenth-century letter corpus, the knowledge CTP *'rf* (CA: *'arafa*; MCA: *'irif*) ‘to know’, which in CA would be followed by the complementiser *'anna* due to its epistemic nature, comes before *'n* + a negated 3.m.pl. suffix conjugation verb:

(34) ואנא אערף **אן** מא עמלו דלך אלא מן גהה אלפרט אלדי תאכד להם פי אלמביע

‘But I know that they only did that on account of the interest which you took for them in the sale...’ (MS Heb.c.72/39, 1v. 8-9).

*Eighteenth/nineteenth-century folk tales*

In the following examples ((35) and (36)) from two nineteenth-century folk tales, we encounter further evidence of the abandonment of CA rules regarding the use of complementisers. In the first of these examples (35), the commonly used utterance CTP *q'l* introduces indirect discourse, syndetically. The complementiser, however, is not immediately followed by a nominal form, as one would expect in CA, but by a 3.f.sg. suffix conjugation verb. In (36), we also find an utterance CTP, which, yet again, precedes a complementiser + 3.m.sg. suffix conjugation verb:

(35) קאלו אלעולמה עליהום אלסלאם אן גרת מעשה פֿי שִׁכְץ ואחד כאן מסאָפֿר פֿי אלכלה בין אלתורב

‘The learned men – peace be upon them – said that an event befell someone who was travelling in the open air between graves...’ (Cairo JC 104, 2v. 3-6)

(36) איִצֶה אַכְּבֵּרוּ אָן כאן פֿי בלד מן בלאד אל ערלים<sup>129</sup>

‘They also recounted that in one of the towns of the uncircumcised...’ (BnF Hébreu 583, 139v. 19).

The knowledge CTP used in example (37) precedes a complementiser, which in turn is directly followed by the negative particle *lm* (CA: *lam*) and a prefix conjugation verb. This latter construction conveys negative past tense meaning in CA, as it appears to do so here. As has been noted in many of the preceding examples, the complementiser of a knowledge CTP in Arabic would be *'anna* + nominal form rather than *'n* + verbal form as it appears here:

(37) וראו אָן לם ינפֿעני שיא מן אל אדוויא ואלדהאן

‘And they realised that none of the medications or ointments were of any use to me.’ (Cairo JC 104, 5v. 10-12).

In (38) we come across a phenomenon more commonly found in contemporaneous letters, in which the CTP is omitted. Based on the immediate context, we can glean that an utterance CTP (i.e., ‘to say’) or asseverate CTP (i.e., ‘to state’) may have been intended here:

(38) ונחן נכתב לכוּם פֿרמאן אָן מן אל יום לם עודנא נטלבו ואחד כל סנה אבדן

‘‘We will write an edict for you (which says) that from today we will no longer claim one (of your people), each year.’’ (BnF Hébreu 583, 141r. 17-18).

*Eighteenth/nineteenth-century letters*

The most common CTP found in eighteenth/nineteenth-century letters, which is also in evidence to a

<sup>129</sup> The term ערלים ‘uncircumcised’ (sg. עָרֵל) is a Jewish term used to refer to non-Jews, generally Christians (Jastrow 1926: 1119).

lesser extent in some late fifteenth-century correspondence, is the transitive verb *'rrf* (CA: *'arrafa*; MCA: *'arraḡf*) 'to inform (s.o.) of (s.th.)'. This utterance CTP introduces assertive statements, which often describe events that have been realised, as is the case in examples (39–43). However, as an assertive CTP, we would anticipate the use of complementiser (in CA *'anna*) + nominal clause, whereas in all of the following examples, the JA complementiser immediately precedes a suffix conjugation verb:

(39) ונערפכום אן כונה ולדין אל שווית אל כרז מן ס'י אנטוניו פוסית/קי (?) צאחבכום וגא מיעאדו יקבץ מיננה וכאן טלב  
מעה פולסה עליכום

'And we (are also writing to) tell you that we were taking a few beads from *s(ayyid)* Antonio Posīṭi/Posīqī (?), your friend, and he came at his appointed time (and) he took (it) from us and he asked for a sum from you with it...' (T-S 13J25.24, 1v. col.1, 40-42)

(40) ואיצה נערפכום אן גרה לנה אלס'י פואה ה'י וקסצנה מן נחיתו ומן נחיתכום

'And also, we inform you that the *s(ayyid)* Puwah –may God comfort him – came to us and he made a beeline for us from his place and your place...' (T-S 13J25.24, 1v. col.2, 9-10)

(41) ונערפכום מן גיהת אל חריר אן צורנה אל בנצ'ר ולם לקאנה בוצאעה נציפה ולם אחדן רצ'י יפרט לנא

'And we (are also writing to) tell you that concerning the silk that we searched the commercial town, but we did not encounter (any) clean merchandise, and no one (who) was willing to part (with it) for us.' (T-S 13J25.24, 1v. col.2, 31-32)

(42) ונערפכום יא מחבנה אן אטלענה עלא תזכרת אל בון לקינא סאקטין עלא אל עיאר רטל 55

'And we (are writing to) tell you, O our friend, that we consulted the note (about) the coffee beans (but) we found that they had fallen to the rate of 55 *ratl*...' (T-S 10J16.35, 1r. 7-9)

(43) ונערפכום אן חוצ'רת מכתוב אלא גמעא תגאר בטרפ'נה מן קבל סער אל בון

'And we inform you that letters (addressed) to a group of traders arrived at our place concerning the price of coffee beans...' (T-S 10J16.35, 1r. margin 6-7).

In the next example (44) from the later letter corpus, the intransitive verb *zhr* (CA: *zahara*; MCA *zahar*) 'to emerge' appears as a CTP. It precedes the complementiser *'yn* + 3.m.sg. suffix conjugation verb:

(44) לאין זוהור כאבר פי טרפנא אין חוצ'ור ארבע מראכיב פרנסאוי פי נא א[מון] ופיהום מתגאר

'...because news has emerged in our place that four French ships have arrived in Alexandria which contain (new) merchandise.' (Rylands L192, 1r. 29-31).

In the final examples ((45) and (46)) in this section we find two complement clauses preceded by 'n. In the first example (48), the CTP is present, while in the latter (46), the predicate is omitted. The meaning of the omitted CTP is, therefore, context-dependent. In both examples, the main verb of the complement clause comprises a negated suffix conjugation form of the verb *kāna*:

(45) וחלף לנא אן למ כאן להו גרין במוביעהום ולתשו אנהו כאן עטאנה קול מן סאבק

‘He swore to us that he had no intention of selling them and they feared that he had given us an account (of it) previously (but still we did not believe it).’ (T-S 13J25.24, 1v. col.2, 34-36)

(46) וכדה וחיות אל עיש ואל מלח ואל מוחבה אן למ כונה רצין בידיל כלאם אלה לולה עלשאן לאטר {כום}

‘And so, (we swear) by the life of bread and salt and friendship that we would not have been pleased with these words unless it were not because of your feelings.’ (T-S 13J25.24, 1v. col.2, 23-24).

### + nominal clause

#### *Fifteenth/sixteenth-century folk tales*

There are a number of nominal complement clauses found in fifteenth/sixteenth-century folk tales, most notably in Evr.Arab.I 2996. In the first of these examples (47) an impersonal nominal construction expressing a positive propositional attitude precedes the complementiser 'n, which is used to introduce a nominal sentence:

(47) והדא אלסמך לא שך אן לה חדית וכבר

‘... and there can be no doubt that this fish has a tale and news (to tell)!’ (Evr.Arab.I 2996, 3r. 5-6).

The next two examples ((48) and (49)) each contain two forms of complementation. The first of these (underlined in both examples) is that of an utterance predicate introducing direct discourse asyndetically. Within the direct discourses are found two further forms of complementation; in (48) an imperative verbal form is followed by the JA particle 'n + nominal sentence, while in example (49) an impersonal nominal construction is followed by a complementiser + 2.f.sg. pronoun suffix:

(48) פקאל אלשאב אעלם יאסידי אן להדה אלסמך ולי חדית עגיב ואמר גריב

‘The youth said, ‘know, O my lord, that these fish and I have an astonishing tale and a strange matter (to tell you of).’ (Evr.Arab.I 2996, 4v. 20-21)

(49) קאל סבבה אנכי טול נהארכי תעאקבי זוגך והו יסתגית

‘He replied, ‘Its cause is that throughout your day, you punish your husband, while he calls for help.’ (Evr.Arab.I 2996, 10v. 25-11r. 2).

The knowledge CTPs found in examples (50 and 51) precede the complementiser 'n + definite

substantives:

(50) אעלם יא סידי **אן** ואלדי כאן מלך הדא אלמדינה

‘‘Know O, my lord, that my father was the king of this city...’’ (Evr.Arab.I 2996, 4v. 23-24)

(51) פאנא קד בלגני **אן** ואלדתי קד מאתת ואבי קתל פי אלגהאד ואלגזאה

‘‘It has reached me that my mother died, and my father was killed in the battle and the invasion.’’  
(Evr.Arab.I 2996, 7v. 20-22).

The following three examples (52–54) all contain the same verb functioning as a knowledge CTP. The complement clauses are introduced with *'n* + 3.m.sg. pronoun suffix in all four cases, which is followed in (52) and (53) by a form I active participle, and in (54) by a form V participle:

(52) ועלם **אנה** נאצח לדולת[ה] ואיאמה

‘And he knew that he was a sincere advisor to his state and his era.’ (Evr.Arab.II 1528, 2v. 16)

(53) ועלם **אנה** נאצח לדולתה ואיאמה

‘And he knew that he was a success for his state and his days...’ (Evr.Arab.II 852, 5v. 26)

(54) פלמא עלם אלדב **אנה** מדג{ז} הז אלי מדינה{ } אשתכדם מעה תאלת אנפאר אלקרד

‘When the bear realised that he (should) prepare (to go) to the city of the birds, he employed three individuals of the monkeys (to) accompany him.’ (Evr.Arab.II 852, 6v. 20-21).

In (55), we encounter another knowledge predicate. In this case the CTP precedes the complementiser *b- 'n*, which is followed by the 2.m.sg. pronoun suffix and a following suffix conjugation verb, also in 2.m.sg:

(55) אמא בעד פקד אתצל אלינא ואתצל בנא **באנך** עולת עלי אלקתאל וגרדת סאיר אלאבטאל

‘‘Now, then! It has reached us, and it has come to our attention that you have resolved upon combat and (that) you have dispatched the rest of your warriors.’’ (Evr.Arab.II 1528, 2v. 26-28).

The next three examples (56–58) all comprise utterance CTPs which are followed by *'n* + a nominal sentence. The utterance CTPs all introduce indirect discourse:

(56) פאכברה אלציאד **אן** לה ארבעה אולאד אבנין ובנתין

‘So, the fisherman told him that he had four children; two sons and two daughters.’ (Evr.Arab.I 2996, 14v. 24-25)

(57) תם אכברה במא פעל באבנה עמה ... ואן דלך סבב גיבתה אלסנה אלדי גאבהא

‘Then, he told him about what he he had done to his cousin... and that that (was) the cause of his absence (throughout) the year in which he had been absent.’ (Evr.Arab.I 2996, 14r. 10-14v. 1)

(58) אעלמ[ך] רחמכם אללה אן אלאסד אלגצבאן" גלס יום

‘‘I tell you may – God have mercy on you – that the wrathful lion sat (one) day...’’ (Evr.Arab.II 852, 1r. 7-8).

### *Late fifteenth-century letters*

In examples (59) and (60), indirect discourse is introduced with utterance CTP followed by the complementiser *'n*. In each example, the utterance predicates precede two (60) and three (59) consecutive nominal complement clauses, all of which are introduced with the JA complementiser *'n* + 1.c.sg. pronoun suffix:

(59) בל קלת לה אני נכתב לך ואנך תסאעד ותעמל פאלקצד אנך אן לם תקדר תעמל ת[תדכ]ל עלי אלמעלם מחמד פאעד

‘Instead, you told him that I will write to you and that you will help and you will act upon the intention that you – even if you will not be able (to) – will contrive to intervene against the teacher Muḥammed Fā‘id.’ (MS Heb.c.72/13, 1r. 17-19)

(60) ויחית בעלם אלשיך עבד אללטיף אני פי כיר ועאפיה ואני כתיר שוק לראיכם כתיר אללה יגמענא פי כיר ועאפיה

‘Let it be known to šayḥ ‘Abd al-Laṭīf (i.e., you) that I am (enjoying) prosperity and (good) health and that I long very much to see you (all) – may God bring us together in prosperity and (good) health.’ (T-S 13J26.7, 1r. 6-9).

In examples (61–63), we find more examples of utterance CTPs which introduce indirect discourse, referring to actions and events that have already occurred. In (61) and (63), the complementiser *'n* is used, while in (62) *b- 'n* is found. The complementisers in both (61) and (63) precede proper nouns, whereas in example (62) an adverbial subordinating construction directly follows the complementiser:

(61) וקד ארסל הו כתאב ידכר פיה אן קרקשונה טלבהם לאגל וגואב אלכתאב

‘And he has already sent him a letter which mentions in it that Qarqašūnah asked them for a deadline and a response (to) the letter.’ (MS Heb.c.72/13, 1r. 11-13)

(62) נעלמך באן בעד אלדי אפתרקנה מנכום קאצינה כתיר פי אל טריק

‘We inform you that after we were separated from you (all), we went very far away on the route...’ (MS Heb.c.72/18, 1r. 2)

(63) תם אערף אלמכדו' עלי אן אלממ למן האסבת אלדכירה {ואכדו} מני אלמבלג' אלמתעלק

‘Then, I inform the master (i.e., you) that the servant(s) (abb.), when you asked for an account of the

supplies, they took from me the attached sum.' (MS Heb.c.72/39, 1r. 8-9).

The next example (64) also contains an utterance CTP, which introduces indirect discourse. The CTP is followed by a complementiser which takes a pronoun suffix prior to the 1.c.sg. suffix conjugation verb that follows:

(64) ואמא תגדיד אלחקאיק פנערף אלמכדו אנני אכדת לך אלגזא אלאול פי ורק דיואני

'And as for the restoration of the facts, I tell the master (i.e., you) that I took the first payment for you in a customs paper...' (MS Heb.c.72/39, 1v. 12-13).

#### *Eighteenth/nineteenth-century folk tales*

In all the following examples (65–68), the verb *'lm* (CA: *'alima*; MCA: *'ilim*) 'to know' is followed by the complementiser *b-* 'n, followed by a particle (65), or substantive (66-68). The predicate is in the 2.m.sg. prefix conjugation in all four examples. This form of the verb is often used in JA and MA texts alike to express a polite form of the imperative. Thus, while the verb *'lm* is generally a knowledge CTP, it functions with an element of command in these cases. In example (68), the utterance CTP *q'l* (underlined) introduces the ensuing direct discourse without a marker:

(65) ותעלם יא אייזהא אלשכץ באן לי אליום ואנא מיתה ארבע מאיה וסבעין סנה

“And you should know, O human, that, today, I have been dead for four hundred and seventy years!” (Cairo JC 104, 5r. 10-12)

(66) תעלם יא אייזהא אל שכץ באן גהינם להא סבע טבקאת ואחדה פוק ואחדה

“You should know, O man, that hell has seven layers, one on top of (the) other.” (Cairo JC 104, 12r. 9-11)

(67) ותעלם יא אייזהא אלסאן באן גומק גהינם ינזל פיהא אלסאן אלף סנה למא יחצל אלקראר

“And you should know, O human, that man descends into the depths of hell for a thousand years when he obtains the Judgement.” (Cairo JC 104, 14v. 2-4)

(68) קאלת תעלם יא איהו אל שכץ באן גהנם פהא סבע טאבקת

‘It replied, ‘You should know, O man, that (in) hell there are seven layers...’ (T-S Ar. 37.39, 2v. 8-9).

In the next example (69), there are two forms of complementation. The first of these concerns the asyndetic introduction of direct discourse (underlined), while the second comprises a positive declaration of belief (a propositional attitude CTP), which is followed by *'n* + a definite substantive:

(69) פקאל אל ריפי אפיה עלא כאטרי אן אל מדינה מא תנפע

‘Then, the countryman replied, ‘I say that to my mind the city is useless (lit. ‘I say to my mind that the city is useless.’).’ (AIU VII.C.16, 1r. 8).

In both (70) and (71), we come across two more positive propositional CTPs. Unlike the preceding example (69), the complementisers used in (70) and (71) take pronoun suffixes before (70) an active form I participle, and (71) a 1.c.sg. suffix conjugation verb:

(70) פי למנו אנו סאל

‘They guessed that he was a beggar.’ (BnF Hébreu 583, 140v. 9)

(71) וואנא אפתכר אנני כונת צולטאן פי בלאד אלשאם

‘And I think that I was a sultan in the country of *’al-šām*.’ (Cairo JC 104, 3v. 12-13).

### *Eighteenth/nineteenth-century letters*

In example (72), the common colloquial verb *š’f* (MCA: *šāf*) ‘to see’, which is used in this context as a knowledge CTP, is followed by the complementiser *’n* + 1.c.pl. independent pronoun before a 1.c.pl. prefix conjugation verb. Thus, rather than taking a pronominal suffix, as would be its wont in CA, the complementiser *’n* is written separately from the pronoun, which precedes the prefix conjugation verb:

(72) ושאפ אן אחנה נחסיסו פיה

‘And he saw that we sympathise with it/him.’ (T-S 13J25.24, 1v. col.3, 4-5).

The following example (73) comprises an impersonal nominal construction as predicate, which conveys a positive propositional attitude. It is followed by the JA complementiser *’n* and an indefinite f. sg. predicative substantive:

(73) וצחיה אן בוצאעה עזימה

‘And (it is) true that it is great merchandise.’ (T-S 13J25.24, 1v. col.2, 36-38).

As we saw in examples (39–4346), the verb *’rjf* is extremely common in the later letters as an utterance CTP. In keeping with the aforementioned examples, the verb is followed by a complementiser (either *b-’n/b-’yn* as in (74–76), or *’n* as in (77–80)). Unlike in the previous examples, however, in (74–80), this verbal CTP precedes a nominal complement clause:

(74) ונערפכם באן סער אל בון בתאריכו סער 10



‘And we tell you that the price of coffee beans to date is the price of 105...’ (T-S 10J16.35, 1r. 19-22)

(75) סבב דיל כטין נערפכום באין סאבק תא<sup>130</sup> וצלנא<sup>131</sup> מורסלכום לגאית נו ץ

‘The reason for these (few) lines is to inform you that the previous day we received your dispatch up to (order) no. 2.’ (Rylands L192, 1r. 3-6)

(76) נערפכום יא מחבנה באן אמס תאריכו וצלנא מכתובכום ץ וכאמל מא שרחתו צאר מעלומנא

‘... we inform you, O our friend, that yesterday 3 letters arrived (from you) and everything that you explained became clear to us.’ (T-S 10J16.35, 1r. 4-5)

(77) ונערפכום אן ענדנה בתאריכו פרנסה 700 ואכדינהום סער 186

‘And we inform you that we have, to date, 700 francs and we took them (for) a price of 186.’ (T-S 10J16.35, 1r. margin 12-13)

(78) ו[נ]ערפכום<sup>132</sup> ואלס: עזרי מן קבל אל דורה אן ענדנה ץ 110 קרוש

‘And we inform you and the *s(ayyid)* ‘Ezrī in terms of the maize that we have (some) at a value of 110 piastres...’ (T-S 13J25.24, 1v. col. 1, 37)

(79) סבב דיל כטין נערפכום אן יום רח כתבנה לכום וערפכום בוסול אל אמאין נו 20 1 2 ץ

‘The reason for these (few) lines is (to) inform you that on the first day of the month, we wrote to you, telling you about the arrival of the orders/consignments no.s 20, 1, 2, (and) 3.’ (T-S 13J25.24, 1v. col. 1, 3-5)

(80) וערפכום אן אל פצה בארדה ענדנה ץ אל מייה ואל מח ענדנה ץ 207

We (are also writing to) tell you that the silver is not selling well (lit. ‘is cold’) in our place (at) a value of 5 out of a hundred and the gold coins in our place are at a value of 207.’ (T-S 13J25.24, 1v. col. 1, 5-6).

The CTP in this example (81) is the set exclamatory phrase often read and heard in all forms of Arabic: *‘al-ḥamdu li-llāhi* ‘Praise be to God!’ As we have seen in previous examples from documentary texts, the complementiser is followed not by a pronoun suffix, as one would anticipate in CA, but by an independent pronoun before a prepositional noun-phrase:

(81) ואל חמד לאלה אן אחנה פ’י וכאלת תוגאר

‘...then praise be to God that we are in a traders’ union!’ (T-S 10J16.35, 1r. margin 4).

<sup>130</sup> An abbreviation of תאריכו ‘its date’.

<sup>131</sup> Khan (2013a): וצלנא.

<sup>132</sup> The original manuscript reads וערפכום ‘and he informed you...’, which Khan interprets as a mistake for ו[נ]ערפכום ‘and we inform you...’ (2006: 41).

The final example (82) found in this section is a commentative CTP followed by 'n + pronoun suffix, preceding a pluperfect construction:

(82) וְכַתְּשָׁה אֵנֶהוּ כֵּן עֲטָאנָה קוֹל מִן סַאבֵּק

‘...and he was embarrassed that he had given us an account (of it) previously (but still we did not believe it).’ (T-S 13J25.24, 1v. col.2, 34-36).

### Summary

The number of syndetic factual complement clauses present in these corpora is approximately twice that of syndetic non-factual complementation. Syndetic non-factual clauses which contain a prefix conjugation verb occur most frequently in the fifteenth/sixteenth-century folk tales and thereafter decrease. Syndetic non-factual clauses which contain a nominal form are found to occur far more frequently in the folk tale corpora than in either of the letter corpora. Syndetic factual clauses which take a prefix conjugation are limited to a single instance in a late fifteenth-century Magribian letter. Use of the suffix conjugation in syndetic factual clauses, however, is found to be highest in the eighteenth/nineteenth-century letter corpus. The greatest number of syndetic factual clauses are found to occur with a nominal form, either a suffix pronoun or a substantive. This type of complementation is most frequent in the fifteenth/sixteenth-century folk tales and eighteenth/nineteenth-century letters. The differences in the construction of this type of complement clause between the two corpora is worth noting. In the earlier folk tales, the complementiser 'n is frequently followed by a pronominal suffix (four times), whereas in the later letters the pronominal suffix is attached to the complementiser only once. In two other instances it is written as a separate entity (an independent pronoun suffix).

While the compound complementiser *b- 'n/b- 'yn* makes only the rare appearance in fifteenth/sixteenth-century folk tales, it is used regularly in eighteenth/nineteenth-century texts of the same genre.

The modalities of the CTPs do seem to vary according to whether the complementiser precedes a suffix conjugation or a nominal form. In the letter corpora, utterance and (to a lesser extent) knowledge predicates precede the syndetically introduced suffix conjugation only, whereas (at least with regard to the later letters) knowledge and utterance predicates appear alongside commentative and positive propositional CTPs when followed syndetically by a nominal form. However, it must be noted that utterance CTPs are far more common in both periods of letters than any other CTP modalities. The folk tales display a greater variety of CTP modalities when preceding the suffix conjugation and nominal forms than the contemporaneous letters.

### 3.1.1.2. Asyndetic

#### 3.1.1.2.1. Non-factual

#### + prefix conjugation

##### *Fifteenth/sixteenth-century folk tales*

In the first example (83) of asyndetic non-factual complementation found in the fifteenth/sixteenth-century folk tale corpus, we find a prefix conjugation verb functioning as a predicate of fearing which introduces a hypothetical proposition:

(83) וּמֵא תִכְאֵף תְּדוּר עֲלֶיךָ אִלְדֵּאִירָה

‘‘Are you not afraid (that) the circle will turn back on you?’’ (Evr.Arab.II 852, 6v. 15-16).<sup>133</sup>

Both of the ensuing examples (84) and (85) contain two types of asyndetic complementation. The first of these is the common utterance CTP *q’l*, which introduces direct discourse. The second concerns the use of a prevalent desiderative predicate *r’d* (CA: *’arāda*; MCA: *rād*, *’arād*) ‘to want’, used in both examples in the prefix conjugation. As the CTP is desiderative, we would anticipate the use of the complementiser *’an* in CA, yet no complementiser is found in either example.<sup>134</sup> Hary records similar asyndetic complement clauses with the predicate *r’d* (CA: *’arāda*; MCA: *rād*, *’arād*) ‘to want’ found in JA historical narratives and *šurūḥ*, dating between the sixteenth/seventeenth and twentieth centuries (1992: 307; 2009: 130). As Hary states, asyndetic complementation is characteristic of dialectal Arabic (1992: 323, cf. Abdel-Massih, Abdel-Malek and Badawi 2009: 269–72). In both (84 and 85) the following complement clause is in the prefix conjugation and is unrealised:

(84) וְקָאֵל לֵה אֲרִיד אִלְסָאֵהָ תִאֲתִינָא בְּאַרְבַּע [ס] מִכָּתָה מֵתֵל אִלְאַרְבַּעָה אִלְאוּלָה וְתַעְגֵּל בְּמִגִּיהֶם

‘And he said to him, ‘I want you – (within) the hour – to bring us four fish like the four first (fish you caught) and you should hasten their arrival.’’ (Evr.Arab.I 2996, 2r. 1-4)

<sup>133</sup> The equivalent passage in the fifteenth/sixteenth-century folk tale Evr.Arab.II 1528 reads:

וּמֵא תִכְאֵף מִן תְּדוּר עֲלֶיךָ אִלְדֵּאִירָה

‘Are you not afraid that the circle will turn back on you?’ (Evr.Arab.II 1528, 2v. 35-36). The preposition *mn* (CA: *min*) ‘of’ is used invariably after the verb *ḥāf* in MCA, and as such, may function as a complementiser without the addition of *’inn*. The preposition + *’inn* + complement clause may be deleted in part or in whole after a verb that governs a preposition (cf. Abdel-Massih, Abdel-Malek and Badawi 2009: 150–1).

<sup>134</sup> As we will see below, it is common for modal or phasal verbs, such as *mā zāla* to function as auxiliary verbs in CA and dialectal forms of Arabic. In some cases in CA (and to a greater extent in vernacular Arabic), semantically similar verbs, such as desideratives, which in CA take the complementiser *’an*, may omit the complementiser *’an*, e.g., *’arādū yaqtulūna-hu* ‘they wanted to kill him’ for *’arādū ’an yaqtulū-hu* (example

‘The king was astonished, and he said, ‘I want to see this (with my own) eyes.’ (Evr.Arab.I 2996, 1v. 11-12).

The common CA negated verbal phrase *mā zāla* (also *lā yazālu*, *lam yazal*) ‘still, yet; to continue to be’ denotes continuous aspect when preceding a prefix conjugation verb (thus, functioning as an auxiliary verb). In the following examples (86) and (87), the verb is used to express continuous action in the past tense:

(86) ולא יזאל יצרב אלחמאם בסיף אלנקמה אלי אן נתף גמיע רישה וגעלה לחם

‘And he continued to hit the pigeon with the sword of vengeance until he had torn out all of his feathers and he had made meat of him.’ (Evr.Arab.II 1528, 3v. 14-16)

(87) ולא זאל יצרב בצות<sup>135</sup> אלנקמה {ח} תי נתף {רישה} וגעלה לחמה

‘And he continued to hit the pigeon with the sound (?) of vengeance until he had torn out his feathers and he had made meat of him.’ (Evr.Arab.II 852, 8r. 4-5).

#### *Late fifteenth-century folk tales*

There are a number of instances in some late fifteenth-century letters of asyndetic complement clauses. In example (88), we find a desiderative CTP, which in CA would generally precede the complementiser *ʿan*. The predicate and predication are separated in this example by a direct address to the recipient of the letter:

(88) ואקצד פצלך תנהי לי אמר אלכאפור

‘I intend, your grace, (that) you should finish the order of the camphor for me...’ (MS Heb.c.72/39, 1v. 18).

In examples (89) and (90), the CTP is also desiderative. The predicate is in the suffix conjugation, while the ensuing asyndetic complement clause is in the prefix conjugation. Both examples convey a sense of hypothetical conjecture:

(89) ואן אכתארו יכשפן מן חסאב אלדכירה מן קדאם אלשהוד כאן אחסן

‘But if they had chosen to investigate the account of the supplies in front of the witnesses, it would have been better.’ (MS Heb.c.72/39, 1v. 3-4)

from Fischer 2002: 221, §432.1).

<sup>135</sup> Evr.Arab.II 852 reads בצות אלנקמה ‘...with the sound of vengeance’, whereas the corresponding passage in Evr.Arab.II 1528 is בסיף אלנקמה ‘the sword of vengeance.’

(90) ואמא אלגזא אלתאני ענדי בכט רבי עמרם אן אכתרת ארסלתה לך

‘Regarding the second repayment, (which) I have in the handwriting of Rabbi ‘Amram, if I chose to send it to you (I could do so (?))’ (MS Heb.c.72/39, 1v. 15-17).

The next example (91) of asyndetic irrealis complementation found in this corpus is somewhat ambiguous, due to the preceding clause:

(91) אן לם תקדר תעמל ת[תדכ]ל עלי אלמעלם מחמד פאעד

‘...(even) if you will not be able (to) – you will endeavour to intervene against the teacher Muḥammed Fā‘id.’ (MS Heb.c.72/13, 1r. 17-19).

In the following example (92), the active participle form (i.e., *rāyih*) of the colloquial verb *rāḥ* ‘to go’, functions as a phasal predicate (or auxiliary) with inchoative aspect. This is a common construction in MCA, and is also evident in other genres of late JA texts (cf. Hary 2009: 130). The following complement clause is in the prefix conjugation:

(92) פאנני כנת ראיח אשתכי אלצבי ללמך

‘Indeed, I was going to complain about the youth to the king.’ (MS Heb.c.72/39, 1v. 6).

In example (93), the CTP *q’l* is used in a manipulative sense. The complement clause, which is in the unadorned prefix conjugation, follows the CTP directly, without a complementiser:

(93) ואלמו’ אלמע’ שמואל קאל לי נכתב ללמו’

‘The well-known master Samuel told me (that) I should write to the Rabbi (i.e., to you).’ (MS Heb.c.72/13, 1r. 14-15).

#### *Eighteenth/nineteenth-century folk tales*

The manipulative CTP found in example (94) expresses a request. The following complement clause is introduced without the expected complementiser, suggesting direct dialectal influence:

(94) וכל ביית קד אל בוקעא באגלא תמן תטלוב תכרי

‘“Every house you ask to rent is already on a site (that) is more expensive (than the last)...” (AIU VII.C.16, 1r. 10-11).

In the next examples (95–97), we find three desiderative CTPs, and one instance of asyndetically introduced direct discourse (96). The first two predicates (examples (95) and (96)) are in the prefix conjugation, while the latter example (97)) is a form I active participle. All three predicates are followed asyndetically with a prefix conjugation verb, expressing an unrealised desire:

(95) פִּי סֵאלוּהוּם אִישׁ תְּרִידוּ תֹאכְלוּ

‘They asked them, ‘What do you want to eat?’’ (BnF Hébreu 583, 141r. 7)

(96) קִאֲלוּ לֵהוּ יֵא סִידְנָא בְּרִידוּ נְתוּגָהּ לֹאֲגֹל אֵל דְּעוּוּה תְּתִמְהֵא

‘...they said to him, ‘O our master, we wish to go on account of the appeal (which) you should undertake.’ (BnF Hébreu 583, 140r. 18-19)

(97) וְאֵל רַב אֲבָן עֲזָרָא ע"ה קֹאֵל לֵל וְלֵד אֵלֵּי נֶאֱוִיִּין יֶאֱכֹדוּה יַעֲמְלוּה קוֹרְבָן לֵל ע"ז

‘(Meanwhile,) Rabbi Abraham ibn ‘Ezra, may God help him, spoke to the boy who they were intending to take to make him an offering to the idols...’ (BnF Hébreu 583, 140v. 17-18).

In (98–104), we encounter a series of negated phasal predicates (which function as auxiliaries in MCA) in the suffix conjugation. The first of these (examples 98–100) pertain to (in)ability. The ensuing examples (101–104) refer to the cessation of the action or event in the ensuing complement clauses. In all seven examples, the events or actions in the complement clauses are in the prefix conjugation. In example (102), the utterance predicate *q’l* introduces direct discourse asyndetically:

(98) וְלֹם קִדְרוּ יִפְיִקוּנִי מִן גְּשׁוּוֹתִי

‘...but they were not able to revive me from my fainting fit.’ (T-S Ar. 37.39, 1r. 14-15)

(99) וְלֹם קִדְרוּ יִכְלִצוּנִי מִן אֵל מוֹת

‘...but they were not able to save me from death.’ (T-S Ar. 37.39, 1v. 4-5)

(100) וְלֹם קִדְרוּ יִפְוֹקוּנִי מִן גְּשׁוּוֹתִי

‘...but they were not able to revive me from my fainting fit.’ (Cairo JC 104, 5v. 4-5)

(101) לֹם עֹדְנָא נִטְלָב וְאַחַד כָּל סְנָה אֲבָדָן

‘...we will no longer claim one (of your people), each year.’ (BnF Hébreu 583, 141r. 17-18)

(102) פִּי קֹאֵל לְהוּם אֵל רֹאב לֹם עֹדְתוּ תִכְאֲטְבוּנִי פִּי שֶׁאֵן דְּאֵלֶךְ

‘The Rabbi replied, ‘You should no longer address me with regard to this matter...’ (BnF Hébreu 583, 140r. 19-20)

(103) וְלֹם בִּקָּא יִנְפָּעְהוּם אֵל נִדָּם בַּעַד אֵל עֵדָם

‘But remorse is no longer any use to them after the lack (of it).’ (T-S Ar. 37.29, 3r. 2-3)

(104) וְלֹם בִּקָּא יִפִּידְהוּם אֵלְנָדָם בַּעַד אֵל עֵדָם

‘But remorse is no longer any use to them after the lack (of it).’ (Cairo JC 104, 13r. 7-8).

A further example (105) of a phasal CTP occurs in the eighteenth-century text T-S Ar. 46.10. In keeping with the above-mentioned examples, the predicate is in the suffix conjugation, while the complement clause verb is in the prefix conjugation:

(105) קעדו יקרן לבעד ארבעית סאעא

‘And they continued to recite for four hours.’ (T-S Ar. 46.10, 1v. 11).

The modal CTP in both of the next examples (106) and (107) is in the prefix conjugation and occurs before a prefix conjugation verb, in what has been termed by some as ‘verb sequence’ or ‘verb serialisation’. The subject of both the main and complement clauses is coreferential:

(106) כאן אללה סו יג[דד] לי גלד גירו חתא אקצר אתבית עלא עדאבי

‘‘God – may He be praised – was renewing my skin until I am able to withstand my punishment.’’ (T-S Ar. 37.39, 3v. 9-10)

(107) כאן אללה סות״ יגדד לי גלד גירו חתא אקדר אתבת עלה דאלף אל עדאב

‘‘(and) God – may He be praised and exalted – was renewing (my) skin for me until I am able to withstand that punishment.’’ (Cairo JC 104, 15r. 7-11).

#### *Eighteenth/nineteenth-century letters*

In this first example (108) of asyndetic predication found in the later letter corpus, we encounter two types of predicate. The first of these pertains to the utterance CTP *q'l* (underlined), which introduces indirect discourse. The second construction comprises the auxiliary verb *bq'* (MCA: *baqā*) ‘to be’ and a prefix conjugation *niktibū* verb. Inserted between the auxiliary verb and prefix conjugation is the colloquial 1.c.sg. independent pronoun.<sup>136</sup> This may have been included for additional emphasis:

(108) וקאל לנה ס״ עזרי ה״ אן כאן יחצר שי בע״ה מן בארה נבקו אחנה נאכדו אלדי יוקצם לנה

‘And *s(ayyid)* ‘Ezrī – may God comfort him – said to us (that) if anything arrives – with the help of God – from abroad, we should continue to take that which is distributed to us... (T-S 13J25.24, 1v. col.3, 3-4).

<sup>136</sup> Blau records this phenomenon as occurring frequently in classical JA literary texts after the complementiser ‘n, but not as it is found here (1981: 86; cf. also Blau 1980: 221, §3).

The MCA auxiliary verb *bq* 'is also found in the 2.m.sg. prefix conjugation, followed asyndetically by a prefix conjugation verb in the following two examples (109) and (110). In example (110), the asyndetic verb sequence is separated by a prepositional phrase:

(109) מן פצלכם תבקו תלקו באלכם לנובה אוכ'רה

Please begin to turn your attention to another occasion...'. (T-S 10J16.35, 1r. 13-15)

(110) ואלס' פואה ה' בייעמיל בי עלשאן אן הווה לם יעאריה ולם יבקה בעדהא יתעב מעו

'... and *s(ayyid)* Puwah – may God comfort him – works with me because he does not condemn him, and he should not continue to work with him after it.' (T-S 13J25.24, 1v. col.2, 25-27).

As we have already seen in examples (11), (17), (21) and (22), a participle form may be used as a phasal predicate, followed asyndetically by a prefix conjugation verb. In examples (111) and (112), the participle expresses inchoative aspect in a common colloquial construction:

(111) ועטאנה • אלפ פ'צה פילוס<sup>137</sup> וראיח יעטינה אל פולסה

'And he gave us 50 thousand coins and he is going to give us the money...' (T-S 13J25.24, 1v. col.1, 16-17)

(112) אחנה ראיחין נביע בסער

'(We said) we are going to sell (it) at a price (that we consider suitable).' (T-S 10J16.35, 1r. margin 2).

Modal predicates also occur in eighteenth/nineteenth-century letters to introduce unrealised complement clauses. In example (113), the common active participle *l'zym* (CA: *lāzim*; MCA: *lāzim*) functions as an impersonal modal predicate. In keeping with both CA and MCA convention, the following complement clause is introduced asyndetically:

(113) לאן לאזים נקבחו מנדולפו

'...because it is necessary that we denounce Mandolfo...' (T-S 13J25.24, 1v. col.2, 25-27).

Another popular impersonal modal CTP is found in example (114). In CA (*yumkin*), this modal CTP is generally followed by the complementiser *'an*, while in MCA (*yimkin*) it may introduce a complement clause asyndetically, as is its wont here:

(114) בע'ה ימכין נרסלו סבובה בינתנה אחנה

'... with the help of God, it is possible that we will send goods between us (i.e., to one another).' (T-S

<sup>137</sup> In MCA, *filūs faḍḍa* translates as 'coins' (Hinds and Badawi 1986: 668).



13J25.24, 1v. col.2, 28-30).

The following example (115) contains two types of CTP. The first of these is a modal CTP in the suffix conjugation, which expresses permission. The second comprises two CTPs, the first of these denotes continuation (and is thus a phasal CTP). This is followed by a participle expressing unfulfilled desire. The following complement clause, introduced *asyndetically*, is in the 3.m.pl. prefix conjugation.

(115) לם כלאנה נתקדימו אלה <sup>א</sup> וקעדין מתווקפין בעה יוקצמו לנה ונכלו פיהום אל עיש

‘...he only allowed us to advance (the) value of 18, and we are still expecting – with the help of God – (that) they will be distributed to us and we can eat bread from it (i.e., make a living from it).’ (T-S 13J25.24, 1v. col.1, 28-31).

In the next example (116), the modal predicate is implied, rather than explicitly stated. The construction refers to a hypothetical scenario, and is, therefore, unrealised:

(116) ואנכאן לם ירסלו לנה ויתעבונה נרסלן עליהום אורדנס

‘If they do not send (it) to us, they will cause us the inconvenience of having to send an injunction against them.’ (T-S 13J25.24, 1v. col.2, 19-20).

In the following examples (117–122) of *asyndetic non-factual complementation* from this corpus (all of which originate in the letter T-S 13J25.24), we encounter two forms of desiderative CTP. The first of these (117–119) is the verb *rdy* (CA: *raḍiya*; MCA: *riḍi*, *riḍa*) ‘to be pleased, satisfied with (s.th.)’. This verb is used in MCA as an auxiliary verb to mean ‘to be willing to (do s.th.)’ (cf. Hinds and Badawi 1986: 340; Abdel-Massih, Abdel-Malek and Badawi 2009: 271). In the following examples this CTP is used in three different forms; in example (117), it is used in the 3.m.sg. suffix conjugation. In the following example (118), the form is ambiguous, obscured by unorthodox orthography. It may either be the 3.m.sg. suffix conjugation verb or a form I active participle. In example (119), we find the *bi*-prefix form of the verb, which serves in MCA to indicate the indicative mood. In all three examples, the complement clause is introduced *asyndetically*, and is in the prefix conjugation:

(117) ולם רצי ינתקל מן ענדהום ס׳י עזרי לאן חאגה טייבה ואלדי פיל בנצ׳ר בוצאעה עייאנה

‘... *s(ayyid)* ‘Ezrī was not willing to leave for it to be moved from their place because it is (such) a good thing, (whereas) that which is in the commercial town is bad merchandise.’ (T-S 13J25.24, 1v. col.2, 36-37)

(118) ולם ראצה ינתקל אלה בסולחנה ותעזר לנה ואכד בכטרנה פי כדה סמחנה להו ולם רצינה נכסרן בכטרו מעאכום

‘...but he would only leave with our reconciliation, and it was putting us in a difficult situation and it hurt our feelings,<sup>138</sup> so we forgave him; we did not want to damage his reputation with you for your sake.’ (T-S 13J25.24, 1v. col.1, 14-15)

(119) ולם ביירצו יביעוֹע 20 ריאל

‘... and they are not willing to sell (it) (at the) price of 20 *riyāl*.’ (T-S 13J25.24, 1v. col.2, 39).

In the next three examples (120–122) of desiderative predicates, the CTP is in the participle form of the verb *nw*’ (CA: *nawā*; MCA: *nawa*) ‘to intend’, also commonly used in MCA as an auxiliary verb (Abdel-Massih, Abdel-Malek and Badawi 2009: 271). The participle precedes a prefix conjugation verb in all three cases (although in example (121), the verb sequence is interrupted by a Hebrew blessing abbreviation):

(120) ונווין נעטלן שאגלנה ונצורו מעה אל מזכור עלא אל חריר ונלימו אל מוגוד ונכוושה

‘We intend to suspend our work, while we look, with the aforementioned, for the silk and we will gather (what is) available and we will amass it.’ (T-S 13J25.24, 1v. col.1, 28-31)

(121) ודיל וקתי בקאנה וכדין בקדר כמס תאלפ ריאל ונווין בעה גרסלו לכום

‘...but now we have accrued (some money) and we are keeping an amount of five thousand *riyāl* and we intend – with the help of God – to send (them) to you.’ (T-S 13J25.24, 1v. col.2, 44-45)

(122) לסי נצר אללה מסך לאן למ באקה ענדו קועאד הנאך לאן למ בייעגבו אל חאל ונאווי יחצר פיל צאפ

‘...to *s(ayyid)* Naṣṣar Allah Msk because he is no longer staying there with him because they are not pleased with the situation, so he intends to be present in the rank (i.e., to be at the forefront (?)).’ (T-S 13J25.24, 1v. col.2, 21-22).

The following example (123) comprises an utterance CTP in the prefix conjugation, which is followed by a prefix conjugation verb asyndetically:

(123) ונערפכום תתפען לכלתי אישת המנווה חיים מאיס 500 פצה

‘And we (are writing to) inform you (that) you should pay my aunt, the wife of the deceased Hayyim Mais, 500 coins (?).’ (T-S 13J25.24, 1v. col.1, 35-37).

#### + suffix conjugation

<sup>138</sup> MCA: *ḥad ‘ala ḥaṭr-u* ‘he felt offended, his feelings were hurt’; *kasar bi-ḥāṭir* ‘to hurt the feelings of s.o.’ (Hinds and Badawi 1986: 256).

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century folk tales*

In examples (124–127), the CTP expresses the phasal sense of continuation (or more specifically resumption) of an action or event,<sup>139</sup> whereas in examples (128) and (129), the auxiliary verb is used in the inchoative sense. Both of these verbs are used in MCA as auxiliaries. In all of the following examples, the complement clause is introduced asyndetically and is in the suffix conjugation:

(124) ורגעו קאמוני וקעדוני וקאלו לי האדה אלעדאב כולו מן כותר דנובך

‘And they started raising me up again and they restrained me, and they said to me, ‘All of this torment is due to the abundance of your sins.’’ (Cairo JC 104, 9v. 14-10r. 3)

(125) ורגעו קאמוני וקעדוני וקאלו לי יא וילך ויא עקבך

They started raising me up again and they restrained me, saying to me, ‘O, woe unto you! O, your end!’ (Cairo JC 104, 10r. 9-10)

(126) פי רגעו צרבוני צרבה אוכרה

‘Then they recommenced hitting me once more.’ (Cairo JC 104, 10r. 6-7)

(127) ורגע קאל להא יא גמגמה כלמיני וחדתיני כיף ראיתי אחוואל גהינם

‘But he started to say to it again, ‘O skull, speak to me and tell me what you say of the conditions of hell?’’ (Cairo JC 104, 12r. 7-8)

(128) ועאד [ד] ג[ושי] תאני מרא

‘And he again fainted for a second time.’ (T-S Ar. 37.39, 3v. 4-5)

(129) ועאד גושי תאני

‘And he again fainted for a second time.’ (Cairo JC 104, 14v. 12-13).

*Eighteenth/nineteenth-century letters*

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<sup>139</sup> In examples (127) and (128) the first verb in the sequence may either be interpreted as an auxiliary verb, or the link between the first and second verb may be purposive, i.e., ‘they returned (in order) to raise me up’. As this verb is used as an auxiliary in less ambiguous contexts in the same texts, I have chosen to categorise it thus here.

Phasal CTPs used in the inchoative sense are also found in contemporaneous letters. However, unlike the examples found in the folk tales (124–129), the CTP is not a verbal form, but a participle in the following examples (130) and (131). The following verbs are in the suffix conjugation:

(130) ונערפכם אן חוצ'רת מכת'יב אלא גמעא תגאר בטרפ'נה מן קבל סער אל בון אן עאוד נזל אלא 47 פרנסה ועליה ברוד פ'י טרפכם

‘And we inform you that letters (addressed) to a group of traders arrived at our place concerning the price of coffee, (stating) that it has started decreasing again to 47 francs and (as a result) a coldness/frigidity (has descended) on it at your place.’ (T-S 10J16.35, 1r. margin 6-7)

(131) וכדה עאודנה רגענה עלא אלס'י זבאד

‘So, we started returning to the *s(ayyid)* Zbād again...’ (T-S 13J25.24, 1v. col.2, 33-34).

+ **verbal noun/direct object of a preposition** (required by the main clause verb); **nominal clause**

#### *Fifteenth/sixteenth-century folk tales*

The use of the verbal noun complements is limited in these corpora to fifteenth/sixteenth-century folk tales. However, in this corpus it is used relatively frequently and with a great variety of modalities. In the first example (132), the negated impersonal modal verb *ymkn* (CA: *yumkin*; MCA: *yimkin*) ‘to be possible’ precedes a definite verbal noun in an expression of unrealised action:

(132) קאל אלמלך הדא אלאמר לא ימכן {אלרקאד} ענה

‘The King said, ‘It is not possible to rest with regard to this matter!’’ (Evr.Arab.I 2996, 3r. 4-6).

In the following examples (133) and (134), the complement clause (in the form of a definite verbal noun) follows a preposition governed by the main clause verb. The predicate is separated from the preposition by a common Arabic invocation:

(133) פנעזם אן שא אללה להם עלי אלגהאד

‘So, we are resolved – God willing – to wage war (against) them.’ (Evr.Arab.II 1528, 1v. 23)

(134) פנעזם אן שא אללה עלי אלגהאד

‘And we resolved to wage war (against them).’ (Evr.Arab.II 852, 3v. 21).

The desiderative CTPs found in the following two examples (135) and (136) are in the 3.m.pl. suffix conjugation, while the complement clause, introduced asyndetically, is a verbal noun made definite by the 2.m.sg. pronominal suffix attached to it:

(135) אני ראית גיוש אלטיור קאצבה ירגו לקאד

‘I saw armies of the birds, all together; they hope to encounter you...’ (Evr.Arab.II 852, 5v. 18-19)

(136) אנני ראית גיוש אלטיור קאטבתהא ינוו לקאך

‘Indeed, I saw the armies of the birds, all together; they intend to meet you...’ (Evr.Arab.II 1528, 2v. 6-7).

In the following example (137), a manipulative CTP is directly followed by a definite verbal noun:

(137) ואחרמתיני אלנום מן אלעשא אלי בכרה

‘And you forbid me to sleep from evening until morning.’ (Evr.Arab.I 2996, 10v. 25-11r. 2).

As we have seen in a number of other examples, the verb ‘*d* (CA: *āda*; MCA: *ād*) ‘to return’ may be employed in both CA (with a prefix conjugation verb) and MCA to express continuation or (in MCA) inception. In example (138) this auxiliary verb precedes a definite verbal noun:

(138) ועאד אלתחם חאיט אלקצר כמא כאן

‘And the wall of the palace began to stick together just as it had been (before).’ (Evr.Arab.II 1528, 3r. 2-3).

In the next example (139), the suffix conjugation verb *tm* (CA: *tamma*; MCA: *tamm*) ‘to complete; to continue’ functions as an auxiliary verb to express continuation. It is followed by an indefinite form III verbal noun:

(139) ותמת מראבצה עלי הדא אלמתאל אלי תאני סנה

‘And she continued to persevere in this manner for another year.’ (Evr.Arab.I 2996, 8r. 9-10).

In example (140), the subject of the main clause is placed between the auxiliary and main verbs. The auxiliary verb *z’l* is used to express continuative aspect, the following main verb is in the unadorned prefix conjugation:

(140) פמא זאל אלתעלב יקץ אלתאך ויאכד אלאכבאר ויסיר אלליל ואלנהאר

‘The fox did not stop following the tracks, taking the news (with him) and walking night and day...’ (Evr.Arab.II 1528, 2r. 9-11).

In the following examples (141) and (142), we find further instances of CA constructions in which the

first verb in each example functions as an auxiliary before a 3.m.sg. prefix conjugation verb. In both examples, verb sequence is used to introduce direct discourse asyndetically:

(141) וגעל יקול אנני אתיתך יא צלטאן בלכברי

‘And he began to say, ‘Indeed I bring you, O sultan, the news...’ (Evr.Arab.II 852, 5v. 17-18)

(142) ואנטלק יקול איהא אלמלך אן אטלאב אלטיור קד תחרכת

‘And he suddenly started to say, ‘O, king, verily the troops of the birds have already marched forth...’ (Evr.Arab.II 1528, 2v. 7-9).

#### *Late fifteenth-century folk tales*

N/A

#### *Eighteenth/nineteenth-century folk tales*

N/A

#### *Eighteenth/nineteenth-century letters*

N/A

#### *Summary*

Non-factual complement clauses asyndetically followed by a prefix conjugation verb are common to all periods and both genres of written JA. However, the frequency of asyndetic non-factual complementation increases notably over time, and they are ultimately marginally more common in letters than in folk tales. This is a reflection of more frequent colloquial forms in letters than in folk tales.

The CTP modalities that occur are also fairly consistent across both period and genre; desiderative, modal and phasal predicates are found in all the corpora. However, utterance predicates introducing direct discourse are, for the most part, limited to folk tales, in keeping with their narrative style.

Asyndetic non-factual complement clauses containing the suffix conjugation do not occur in the fifteenth/sixteenth-century folk tales or letters. They occur only (and exclusively with phasal predicates) in the eighteenth/nineteenth-century folk tales and (to a greater extent) contemporaneous letters.

The situation with regard to the use of verbal nouns or nominal forms is, yet again, different to the

above-mentioned types of complement clause. Verbal nouns are used only in the fifteenth/sixteenth-century folk tales, and do not occur in the other material.

3.1.1.2.2. Factual

**+ prefix conjugation**

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century letters*

N/A

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*

N/A

**+ suffix conjugation**

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century letters*

The following example (143) contains an utterance CTP in the suffix conjugation which is directly followed by a suffix conjugation verb. As the CTP is assertive in nature, one would expect to find the complementiser 'anna in CA:

(143) ומהמא כאן לסיידי מן חאגה ערפני נפז בקצאהא

‘Whatever happened to my lord in (this) thing/affair, he told me (that) he enforced its judgement.’  
(MS Heb.c.72/13, 1r. 20-21).

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*

In this eighteenth-century letter, we find a similar situation to that seen in the previous documentary example (144); an utterance CTP is followed by a suffix conjugation verb without the anticipated complementiser:

(144) אַחנָה ראיִחִין נביע בסער וְנַעֲרַפְכֶם בַּעֲנָה בסער דֶּה

‘(We said) we are going to sell (it) at a price (that we consider suitable) and we tell you (that) we sold something at this price.’ (T-S 10J16.35, 1r. margin 2).

**+ verbal noun**

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century letters*

N/A

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*

N/A

**+ nominal sentence**

*Fifteenth/sixteenth-century folk tales*

N/A

*Late fifteenth-century letters*

The utterance CTP in this example (145) introduces indirect discourse. Yet, irrespective of CA or MCA norms, the following complement clause is introduced asyndetically:

(145) ואנא קולת לה פיה ואחד אסמו ר' משה

‘But I said to him (that) there is one (such man) whose name is R. Mošeh...’ (MS Heb.c.72/18, 12-13).

*Eighteenth/nineteenth-century folk tales*

N/A

*Eighteenth/nineteenth-century letters*



In the following example (146), the colloquial verb *šāf* is used, not in the sense of immediate perception, but as a knowledge CTP. The following complement clause is introduced asyndetically:

(146) לאן שאפ ענדנה אצעאר אל חריר סער אללה ואל האצה

‘...because he saw (that) at our place the prices of silk are the price of God and favourable!’ (T-S 13J25.24, 1v. col.3, 3-4).

In example (147), the utterance CTP and the verb of the complement clause are separated by a parenthetical remark:

(147) ונערפכום מן קבל נו 20 ונוי 1 ונוי 2 אתצרפנא פיהום ערך 150 ביל אצעאר אל קדימה

‘We inform you (that), in terms of orders no. 20, no. 1 and no. 2, we have already dispatched them at the value of 150 according to the old prices...’ (Rylands L192, 1r. 7-8).

### *Summary*

Examples of asyndetic factual complement clauses are rare in these corpora. They are limited to fifteenth/sixteenth- and eighteenth/nineteenth-century letters. With one exception (cf. example (149)), the CTP expresses utterance, and is used to introduce indirect discourse.

#### 3.1.1.3. Conclusions

The most common forms of complementation across all periods and both genres are syndetic factual and asyndetic non-factual. The former favours suffix conjugation verbs and nominal clauses, while the latter occurs most frequently with prefix conjugation verbs. The distribution of these different types of complementation is remarkably consistent; there are approximately 60 instances of each found in these corpora. Occurrences of syndetic non-factual complementation are limited to approximately 27 examples, while asyndetic factual complement clauses are even rarer, occurring only six times in all the material.

In general, folk tales display a wider variation in the use of CTP modalities than those found in the letter corpora. Utterance predicates which refer to indirect discourse are by far the most frequently used modality in letters of either period. Phasal, desiderative and modal predicates introduced asyndetically increase in number between fifteenth/sixteenth- and eighteenth/nineteenth-centuries in both genres. It is probable that this trend is a result of the increased use of colloquial features in written JA during this period. Furthermore, the omission of CTP, which occurs infrequently in the

eighteenth/nineteenth-century corpora, is more common in the letters than in the folk tales.

The most frequently used complementisers are *'n/ 'nn/ 'yn* and *b- 'n/b 'yn*. Whereas the appearance of *b- 'n* is rare in fifteenth/sixteenth-century folk tales, it becomes increasingly common in the eighteenth/nineteenth-century texts of the same genre. The *plene* spelling of /i/ in *'yn* is limited to the eighteenth/nineteenth-century material, yet the seemingly indiscriminate use of the JA complementiser *'n*, suggests that the MCA complementiser *'inn* was a well-established feature of all the texts examined here.

### 3.1.2. Relative clauses

A relative clause comprises ‘a head and a modifying part’ (Nikolaeva 2006, II: 502). The antecedent of a relative clause is usually a common noun, yet may also be a proper noun, personal pronoun, or demonstrative pronoun (Nikolaeva 2006, II: 502; Khan 2016b: 460–2). The modifying part may delimit the reference of the antecedent in the relative clause, e.g., ‘The book [I bought yesterday] was a trade paperback’ (example from Andrews 2007, II: 206), or it may provide additional contextual information ‘without delimiting [the antecedent’s] reference’ (Andrews 2007, II: 207; Khan 2016b: 455), e.g., ‘The Japanese, [who are industrious], now outcompete Europe’ (example from Andrews 2007, II: 207). The former type of relative clause is referred to as a restrictive relative clause, while the latter is termed a non-restrictive relative clause.<sup>140</sup>

Syndetic relative clauses involve the use of a relative pronoun (or equivalent) to connect the antecedent to the following relative clause. Conversely, asyndetic clauses do not contain a connective. In CA, relative clauses with definite antecedents are syndetic; the relative pronoun *'allaḏi* ‘that, which’ follows the antecedent, agreeing in gender, number and definiteness with it, e.g., *'al-raḡulu 'allaḏi qad ḏarabanī* ‘the man who hit me’ (example from Fischer 2002: 219, §428). Indefinite relative clauses are asyndetic in CA, e.g., *raḡulun qad ḏarabanī* ‘a man (who) struck me’ (example from Fischer 2002: 219, §428). With regard to CA free relative clauses, *man* ‘who’ and *mā* ‘that which, what’ are used to denote indefinite animate and inanimate entities, respectively, while *'allaḏi* ‘the one who’ represents a definite entity.

<sup>140</sup> Andrews (2007) distinguishes between restrictive relative clauses and ‘so-called’ non-restrictive relative clauses, on the basis that non-restrictive relative clauses do not conform to the definition of a relative clause as identifying the referent. While this is strictly speaking the case, here we follow Nikolaeva (2006) and Khan (2016b) in referring to both types as relative clauses. However, it must be noted that Khan also draws our attention to the difference between restrictive and non-restrictive relative clauses on the basis that both the semantic and syntactic relationship of a non-restrictive relative clause to the antecedent in Urmi Christian Neo-Aramaic is ‘looser’ than that of a restrictive relative clause to its antecedent (2016b: 455).

The MCA equivalent relative pronoun *'illi* is used invariably in relative clause constructions with a definite antecedent, e.g., *šuft 'il-wilād 'illi gābu l-gawabāt* 'I saw the boys who brought the letters.' (example adapted from Abdel-Massih, Abdel-Malek and Badawi 2009: 234; cf. also *ibid.*:31, 235).<sup>141</sup> *'Illi* also appears in place of the free relative pronouns *mā* and *man* (MCA: *mīn*) in some free relative clause constructions, e.g., *'illi fāt māt* 'What is done, is done' (lit. 'That which has passed has died') (example adapted from Abdel-Massih, Abdel-Malek and Badawi 2009: 235); *'illi ḥad ag-gurnān bitā'-i ygīb-u* 'Whoever took my paper, give it back!' (example adapted from Hinds and Badawi 1986: 33).

The CA relative pronoun *'alladi* is rendered אֵלֶּי/אֵלֶּיךָ *'ldy/'lḏy* in written JA. This relative pronoun, which rarely inflects for gender or number, is a well-documented feature of JA texts of all genres and periods (Blau 1980; 1981: 53, 87–8; 2002: 55, §139; Khan 1992: 234; 2006: 56; 2012: 827; 2013a: 245; Wagner 2010: 215–6; 2014: 154–5; Hasson-Kenat 2016: 95). As Blau (1981: 53), and later Wagner (2010: 215–6; 2014: 154), note the MCA relative pronoun *'illi* 'who, which, what' is conspicuously absent in written JA. The lack of *'illi* is generally ascribed to general avoidance of overtly colloquial forms in written JA (Blau 1981: 53; Khan 2006: 53).

In what follows, I examine the types and relative frequency of syndetic (§3.1.2.1), asyndetic (§3.1.2.2) and free (§3.1.2.3) relative clauses,<sup>142</sup> paying particular attention to the use of relative pronouns, throughout.

### 3.1.2.1. Syndetic Relative Clauses

#### 3.1.2.1.1. Definite Nominal Antecedent

##### *Fifteenth/sixteenth-century folk tales*

As has already been mentioned, syndetic relative clauses are preceded by a definite antecedent in CA. In the following examples (1–15), the relative pronoun אֵלֶּי *'ldy* follows a definite substantive before a restrictive or non-restrictive relative clause:

(1) וקאל יא אמרה כיף הדה אלכבר ומא הדה אלעדו אלדי קד צֶהר

'And he said, 'O princes, what is this news? And who (lit. what) is this enemy who has appeared?'' (Evr.Arab.II 852, 3v. 15-17)

<sup>141</sup> In MCA relative clause constructions with an indefinite antecedent, however, the relative pronoun is omitted, as it is in CA (Abdel-Massih, Abdel-Malek and Badawi 2009: 234–5).

<sup>142</sup> In the structure of this section, I follow the example and layout of Khan (2016b).

(2) ומא הדה אלעדו **אלדי** קד טמ טמר

‘...And who (lit. what) is this enemy who has risen up<sup>143</sup> (against me)?’ (Evr.Arab.II 1528, 1v. 17-18)

(3) תם אמר בעד דלך אלמקדאם ולשאבק אלחמאם **אלדי** הו חאפץ לדולתה תאבת וקדמת עלי טיור אלפאכר

‘Then after that, he commanded the officer, the foremost (of) the pigeons, who guarded his state steadfast(ly), and he appointed him over the birds of glory.’ (Evr.Arab.II 852, 3r. 6-8)

(4) תם אמר בעד דלך אלפארס אלמקדאם ואלסאבק אלך {ח}מאם **אלדי** הו עלי חפץ אלוראד תאבת וקדמה עלי טיור  
אלנאגחתם

‘Then he commanded after that the valiant knight, the pure-blooded leader, who was guarding the flight of birds, steadfast[ly], and he appointed him over the birds of success.’ (Evr.Arab.II 1528, 1v. 4-7)

(5) יקול [אנא אלעל] >ב אלגאסוס **אלדי** ולדת {בחילה} [א]לדי תעגז אלבטאל ען חילי

‘...saying, ‘I am the fox, the spy who was born with a resource [...] (even) the champions will be weakened by my trick(s).’ (Evr.Arab.II 1528, 2r. 1-5)

(6) וקמת אלי אלפראש **אלדי** אבאת

‘And I rose from the cushions on which I sleep’ (Evr.Arab.I 2996, 6r. 13)

(7) וקאל לה אלחמד ללה **אלדי** מן עלינא

‘Praise be to God who is from above us!’ (Evr.Arab.I 2996, 13r. 10-11)

(8) פקאל לה יא סידי מן ברכה בין ארבע גבאל תחת הדא אלגבל אלכביר **אלדי** פי טאהר מדינתך

‘He replied, ‘O, my lord, (I fished it) from a lake (which stretches) between four mountains under this large mountain, which is on the outskirts of your city.’ (Evr.Arab.I 2996, 3r. 8-10)

(9) פתם אדעא אל סלטאן באלציאד **אלדי** כאן סבבא” לכלאץ אלשאב

‘Then, the Sultan summoned the fisherman, who was the cause of the release of the youth...’ (Evr.Arab.I 2996, 14v. 19-23)

(10) פוצלכם ענדי **אלד** >י מן אלמאני

‘...so, he brought you to my place, which was one of the wishes.’ (Evr.Arab.I 2996, 8v. 18)

(11) וגעל יקול אנא אלעל אלשוואש **אלדי** מא {זאלת} די חילתי אנא אלדי תעזז אלבטאל ען חילתי

And he started saying, I am the fox, the gate-keeper who continues this is my trick. I, whose tricks even the warriors are weakened by! (Evr.Arab.II 852, 4r. 11-12)

(12) תם אמר בעד דלך אלבטאל **אלדי** הו עלי אלחרוב צאבר {אלאמיר}

‘Then after that, he commanded the warrior, who was steadfast throughout the wars, (to be) the

<sup>143</sup> I have interpreted **טמר** here as *tamara*, *tumira* ‘to be/become high, rise’ and also ‘to descend’ (Lane 1863: 1931).

prince...' (Evr.Arab.II 852, 3r. 1-3)

(13) זעקת אלשאושיאת **אלדי** >ללגרבאן<sup>144</sup> באעל[א] אלסואת

'The sergeants, who were of the ravens, shrieked in the highest voices.' (Evr.Arab.II 1528, 3v. 32-34)

(14) ואתוזג אלכרי אלשאב **אלדי** כאן אלמסחור

'And the youth, who was enchanted, married the other (daughter). (Evr.Arab.I 2996, 15r. 1-2)

(15) ואסתקר אלסלטאן ואלשאב **אלדי** כאן מסחור ואלציאד פי [מ]קל גמיע מא תרכה לי מן אלמאל [ו]אלנואל

'And the sultan and the youth, who was bewitched, and the fisherman were left destitute of everything that is left to me in terms of money and possessions.' (Evr.Arab.I 2996, 15r. 12-15v. 15).

In the following examples (16–18), the antecedent reference has a non-subject role in the relative clause. This role is indicated by a resumptive pronoun in accordance with CA convention, e.g.,

(16) ודכלת מן אלמוצע **אלדי** כרגת מנה

'And she entered from the place where she had left' (Evr.Arab.I 2996, 1v. 5-6)

(17) תם דכלת אלי הדא אלקצר ונמת פי אלמוצע **אלדי** אנת פיה קא[ימ]א"

'Then, she entered this palace and she hid in the site that you are standing in (now).' (Evr.Arab.I 2996, 5r. 10-11)

(18) הדא אלקחבה סתנא הי תכליה בחסב אכתיארה אלא תעמל לה פי קדח שראבה **אלדי** יבאת עליה מרקד ותסקיה לה

'This whore, our lady, will release him depending on his choice, unless she makes for him (a concoction) in his drinking goblet which will trick him into bed, and she will make him drink it.' (Evr.Arab.I 2996, 6r. 1-4).

In the next two examples ((19) and (20)) from Evr.Arab.II 2996, *'lady* is preceded by f. sg. nouns, yet does not inflect for gender. Blau proposes that this phenomenon is indicative of the separation of the relative pronoun from the main clause (as it is in CA), and its subsequent evolution into a subordinator used to introduce relative clauses (1981: 87–8), e.g.,

(19) הדא אלקחבה **אלדי** כל לילה מא תנאם אלא ברא

'This is the whore who only sleeps outside each night.' (Evr.Arab.I 2996, 5v. 23-24)

(20) ואן דלך סבב גיבתה אלסנה **אלדי** גאבהא

'...and if that (was) the cause of his disappearance (during) the year during which he was absent.'

<sup>144</sup> <> are used here to indicate sections in examples, which have been reconstructed using Evr.Arab II 852.

(Evr.Arab.I 2996, 14r. 13-14v. 1).

### *Late fifteenth-century letters*

In comparison to contemporaneous folk tales, syndetic relative clauses with a definite nominal antecedent are relatively infrequent in fifteenth-century letters. It is also worth noting the complete absence of the resumptive pronoun in the following instances:

(21) קאצינה כתיר פי אל טריק מן גהה אל אל מרכב אלדי כאנת תעמל מא אכתיר

‘We went very far away on the route on account of the ship which was no longer working.’ (MS Heb.c.72/18, 1r. 2-3)

(22) נעלמך באן אל ספרים אלדי ועתך באש אבעתך אן מא כאן לי זמן נכתובם לך לאכן מן דאלך אלדי ועתך] מוסרע  
יגיאוך

‘I inform you that the books which I promised you that I would send to you – I have not had time to transcribe them, but of those which I promised you, they will arrive with you soon.’ (MS Heb.c.72/18, 1r. 16-17)

(23) ואנא אערף אן מא עמלו דלך אלא מן גהה אלפרט אלדי תאכד להם פי אלמביע

‘And I know that they only did that on account of the interest which you took for them in the sale.’ (MS Heb.c.72/39, 1v. 8-9)

(24) ארסלתה לך צחבת אלקאצד אלדי מן ענד אלפרנג

‘I sent it to you (via) the associates of *al-qāṣid* who (is) from among the Europeans.’ (MS Heb.c.72/39, 1r. 3)

(25) נאס אל בלד זמו אל קארב ואל נאס ואל יהוד אלדי כאנו מן פוק ועמרו זוג מראכב באש יאכדו אל מרכב מתענה

‘The people of the town tied up the boat, (with/while) the people and the Jew(s) who were on board. They repaired a pair of boats so that they could take the boat belonging to us.’ (MS Heb.c.72/18, 1r. 6-7)

(26) ובחצור {סדי} צלאח אלדין אלדי בי

‘And with the arrival of my lord Slāḥ ’al-Dīn, who is with me (now).’ (MS Heb.c.72/39, 1r. 12-13).

### *Eighteenth/nineteenth-century folk tales*

Syndetic relative clauses with a definite nominal antecedent are common in the eighteenth/nineteenth-century folk tales. However, the use of the resumptive pronoun in the following relative clauses is infrequent (cf. examples (45) and (46)), and the relative pronoun is – with only one exception (cf. example (115)) – invariable:

(27) ואמא אל ריפ' למ תנצ'ר פיהא גייר אלכלאב **אלדי** תגרי

‘And as for the countryside, there is nothing to see there except dogs, which run (around).’ (AIU VII C.16, 1r. 6-7)

(28) ואלתאלת לל גרים **אלדי** יתגייירו מן אונפוסהום

‘And the third (level) is for the sojourners, who changed of their own volition.’ (Cairo JC 104, 11r. 4-5)

(29) ואל ווגה **אלדי** כליף סדרהו ינצ'ור בהו לאהל אל כופאר

‘...while the face which is behind his breast, he looks with it at the kin of the disbelievers’ (T-S Ar. 37.39, 1v. 19-20)

(30) כאן אל ווגה **אלדי** עלא ימינהו יקבץ בהו ארוואח ישראל ואל ווגה **אלדי** עלא יסרהו ינצ'ור בהו אל אהל אל סמוואת אל אל עלייא

‘The face which was on his right he seizes in it the souls of Israel, while the face which is on his left he gazes with it at the inhabitants of the highest heavens.’ (T-S Ar. 37.39, 1v. 15-18)

(31) ואל ווגה **אלדי** פוק ראסו ינצ'ור בהי לאהל אלסמוואת אלעאלייה ואל ווגה **אלדי** תחת דקנו ינצ'ור בהי לאהל אלארץ ואל ווגה **אלדי** כלפ סדרו ינצ'ר בהי לאהל אלנאר

‘And the face which is above (/on top of) his head, he looks with it at the inhabitants of the highest heavens, while the face which is under his chin, he looks with it at the inhabitants of the earth, and the face which is behind his breast looks at the inhabitants of hell.’ (Cairo JC 104, 7r. 10-15)

(32) ואל ווגה **אלדי** עלה יסארו יקבץ בהי ארוואח אומות העולם

‘And the face which is on his left, he seizes the souls of the world’s nations.’ (Cairo JC 104, 7r. 8-9)

(33) נקול לך עלה מענת האדה אלווגה והוא אן אלווגה **אלדי** עלה ימינו יקבץ בהי ארוואח אסראיל

‘I will tell you about the significance of this face; it is that the face which is on his right, he seizes the souls of Israel with it.’ (Cairo JC 104, 7r. 5-7)

(34) ואסקאני כאס אלמות **אלדי** אמר מן אל עלקם

‘...and he made me drink (from) the cup of death, which was made from colocynth.’ (Cairo JC 104, 6v. 3-4)

(35) ואל שיטאן **אלדי** כאן מווכל עלייא פי דאר אל דונייא ויגויני לל פסד וגיר

‘And the devil, who was in charge of me in the present world, enticed me to corruption, and so forth.’ (T-S Ar. 37.39, 3v. 11-12)

(36) וכאן מיעאד **אלדי** יאכדו אל ולד יקרבוה יחכום אוול לילת פסח

‘And the date on which they would take the boy to sacrifice him was decided as the first evening of

Passover.’ (BnF Hébreu 583, 140r. 6)

(37) ואל רב אבן עזרא ע"ה קאל לל ולד אלדי נאווין יאכדוה יעמלוה קורבן לל ע"ז

‘And the R. Ab(raham) ibn ‘Ezra – peace be upon him – said to the boy whom they intended to seize (to) make him a sacrifice to the idols...’ (BnF Hébreu 583, 140v. 17-18)

(38) ושרוקת שרקה אן עטימה ומן שדת אלשרקה פזעית אלנאס אלדי כאנו חדאיה

‘I choked hard and the force of the choking terrified the people who were in front of him.’ (Cairo JC 104, 8r. 5-7)

(39) ומאדא יכון אליום אלדי אנתה פי בטני

‘And which (day) will be the day that you are in my belly?’ (Cairo JC 104, 10v. 7-8).

As is expected in written JA, the relative pronoun tends not to inflect for gender or number. In the following examples (40–44), we find a series of f.sg. nouns, or inanimate pl. nouns, which in CA would be followed by the f.sg. relative pronoun *'allati*, but which here are referred to by the invariable relative pronoun *'ldy*:

(40) פי אל חין אל כאליק תוע עז וגל נזיל אל נעמה אלדי כאן אנעמהא עלייא

‘In due course, the almighty Creator – Glory and Honour – curtailed the blessing, which He had bestowed on me.’ (T-S Ar. 37.39, 1r. 4-5)

(41) [ל]מא סמע אל שכץ דאלף אל אמור כולהא אלדי נטקת אל גמ[גמה] ביהום וכאן גושי

‘When the man heard all of these things, which the skull voiced, he fainted...’ (T-S Ar. 37.39, 3v. 1-2)

(42) ונדה על ע"ז אל כבירה אלדי ביעמלו להא אל קורבאן

‘And he called up to the large idols which they make the sacrifice(s) to.’ (BnF Hébreu 583, 141r. 9)

(43) תום חאסבוני עלה גמיע אפעאלי אלדי פעלתהא פי האלהי אלדונייה

‘Then, they called me to account for all my deeds which I had done in this world.’ (Cairo JC 104, 9r. 6-8)

(44) ואל עסאכר אלדי ימשו קודאמי

‘And the troops, who march(ed) before me.’ (Cairo JC 104, 15v. 10-12).

In the following two examples ((45) and (46)), the invariable JA relative pronoun is preceded by a m.pl. definite Hebrew noun. In keeping with the vast majority of instances in these later folk tales, however, the relative pronoun does not inflect for gender or number. However, the resumptive pronoun (which is highlighted, here) found in the following relative clause agrees with the m.pl. noun in the previous clause:



(45) פי אלתפת אל חכם ואגד אל אתניין תלמידים **אלדי** כאן ארסלהום [ליל] רב אברהם

‘Then the Rabbi turned (and) found the two students, whom he had sent to R. Abraham.’ (T-S Ar. 46.10, 1v. 27-28)

(46) אלתפת אל חכם וגד אל אתנין אל תלמידים **אלדי** כאן ארסלהום למצר לל רב אברהם ן עזרא

‘The Rabbi turned (and) found the two students, whom he had sent to Cairo to (seek for) the R. Abraham ibn ‘Ezra.’ (BnF Hébreu 583, 140v. 12-13).

#### *Eighteenth/nineteenth-century letters*

There is a notable reduction in the number of syndetic relative clauses with a nominal antecedent in eighteenth/nineteenth-century letters as compared to contemporaneous folk tales. When they do occur, the resumptive pronoun is rarely used (cf. examples (50) and (51)), and only the invariable relative pronoun *‘ldy* is in evidence:

(47) ואין שא אללה יכון וצלוחם מכאטיבנא ואל מכתוב **אלדי** פי אל בוואלץ

‘And God willing, our letters will have reached you, (including) the letter which contains the insurance policy.’ (Rylands L192, 1r. 11-12)

(48) וסתלמנה מנו אל פלוס **אלדי** כאנו מעו

‘We (also) received from him the money which was with him.’ (T-S 13J25.24, 1v. col.3, 7-8)

(49) ואל מחביב **אלדי** פי נו ٢ באקיה טרפנא מן קלית אל ביע ואל שרה

‘The gold coins, which were in (order) no. 2, remain at our place due to the lack of buying and selling.’ (Rylands L192, 1r. margin 3)

(50) ואל חאל אן אל קטעתין **אלדי** בענאהום גיה אל פארג בתאעהום רטל עג ١ ואל אוכ’רין **אלדי** פאצלין פצלין

‘And the situation now is that the two pieces which we sold, the useless one belonging to them arrived (at the rate of) 31 *ratl* (?). And the other two, which are of excellent (quality), are left over...’ (T-S 10J16.35, 1r. 9-13)

(51) ונערפכם אן קטעא מן אל אתנין **אלדי** בענאהום כ’סת רטל עג ٣

‘And we (are writing to) tell you that a portion of the two which we sold to you fell in value (to) 3 *ratl* (?).’ (T-S 10J16.35, 1r. 16-17)

(52) נשופ’ אל תזכיר **אלדי** מעאנה לל נאס נערפ פ’י כדה לם תאכ’דו באלכם שאי מן דאלך

‘We saw the note that was with us for the people (who) knew. So, you should not pay attention to any of that.’ (T-S 10J16.35, 1r. margin 5-6).

## 3.1.2.1.2. Pronominal Antecedents

Although infrequent in these corpora, the antecedent of a syndetic relative clause may be a demonstrative pronoun, an independent personal pronoun or a quantifier.

*Fifteenth/sixteenth-century folk tales*

In a few examples (53–56) found in the fifteenth/sixteenth-century folk tale corpora, the antecedent of the relative clause is a demonstrative pronoun (examples (53–55)) or an independent personal pronoun (56). These are then followed by the invariable relative pronoun *'lady* and the relative clause. It is perhaps significant that all of the following constructions occur in direct discourse:

(53) מא הדה אלדי חדרך {נפסך} אלכביתה עליה

‘What (i.e., who) is this who warns you yourself of the maliciousness of it?’ (Evr.Arab.II 852, 6r. 10-11)

(54) תנבינ[א] מא הדה אלדי חמלך עלי הדה

‘Tell us what it is this that has induced you to (do) this?’ (Evr.Arab.II 1528, 2v. 28-39).

The following two examples are cleft constructions in which the relative pronoun has the syntactic status of a free relative at the head of the relative clause:

(55) פהדא אלדי ימנע גואבי לכי וכלאמי

‘This is the one who has prevented my answer to you and my words.’ (Evr.Arab.I 2996, 11r. 5)

(56) ואנת אלדי פעלת מעי הדה אלפעלה

‘And you are (the one) who committed these deeds with me!’ (Evr.Arab.I 2996, 9v. 25-26).

*Late fifteenth-century letters*

There is only one occurrence of this phenomenon in the earlier letters. Here, the demonstrative pronoun, which indicates far deixis (i.e., *d'lk*; CA: *dālika*), is used anaphorically to refer to ‘the books’ mentioned in the previous clause:

(57) נעלמך באן אל ספרים אלדי ועתך באש אבעתך אן מא כאן לי זמן נכתובהם לך לאכן מן דאלך אלדי ועתך] מוסרע יגיאוך

‘I inform you that the books which I promised you that I would send to you – I have not had time to transcribe them, but of those which I promised you, they will arrive with you soon.’ (MS Heb.c.72/18, 1r. 16-17).

*Eighteenth/nineteenth-century folk tales*

In these later texts, we find two examples in which the antecedent of a syndetic relative clause is the quantifier *kwll* (CA: *kullun*) ‘all’. In both instances the antecedent is followed by the invariable relative pronoun *’ldy*:

(58) וכול אלדי יטלובו ינולו

‘And all that they ask, they will obtain.’ (T-S Ar. 46.10, 1r. 31)

(59) וכל אלדי יטלוב ינול

‘And all that he asks, he will obtain.’ (BnF Hébreu 583, 140r. 1-2).

*Eighteenth/nineteenth-century letters*

This phenomenon has not been observed in the later letter corpus.

3.1.2.1.3. Indefinite Nominal Antecedent

*Fifteenth/sixteenth-century folk tales*

In the following examples (60 and 61), the indefinite antecedents are followed by the particle *’n*, overtly marking these two indefinite substantives as heads of restrictive relative clauses. This is a phenomenon that has been documented in written JA texts of all periods (Blau 1981: 176; cf. Baneth 1945-1946: 141–53; Blau 1981: 167–212 and Wagner 2010: 175–88 for detailed discussions of this feature). This separate entity is thought to have evolved from the CA accusative *tanwīn* ending *-an*,<sup>145</sup> found in written JA in a variety of instances and forms,<sup>146</sup> into a marker of an attributive adjective or relative particle used to introduce a relative clause. It is highly probable that this innovation was born of analogy with the homophonous and homographic complementiser *’n* (CA: *’an*), used to introduce complement clauses (Wagner 2010: 180):

(60) מא הדה אלדי חדרך {נפסך} אלכביתה עליה וחדרתך באמר אן למ תתצל {אליה}

‘And who (lit. what) was this who warned you yourself of the maliciousness of it? And I warned you of a power that you cannot reach/attain.’ (Evr.Arab.II 852, 6r. 10-11)

<sup>145</sup> In CA, indefinite nouns are marked according to their syntactic position within a clause with either nominative *-un*, accusative *-an* or genitive *-in* endings. Although lost in spoken forms of Arabic and written Middle Arabic (cf. Blau 1981: 202–3), there remain ‘vestiges’ of the *tanwīn* ending in JA, (infrequently) in Bedouin poetry, the Marazig Tunisian dialect and written Spanish Arabic, where it has in turn developed new morphological forms and syntactic functions (Blau 1981: 193, n. 1).

<sup>146</sup> The *tanwīn* ending is most commonly found in written JA texts on adverbs, where it may be indicated by *’alef*, *hey* or *nun*. It is also found as a separate entity in between a noun and adjective (cf. Blau 1981: 175; Wagner 2010: 177–9).

‘And it was just as it is called in the sayings, a valley that rings with its birds on their (lit. f.sg.) branches...’ (Evr.Arab.II 852, 4v. 20-22).

### *Late fifteenth-century letters*

In the following two examples (62 and 63), we find further instances of indefinite antecedents being referred to syndetically. In the first of these examples (62), the *tanwīn*-derived particle *’n* introduces the relative clause of an indefinite antecedent:

(62) ועקוב דלך יחצרו לך פי אול מרכב אן תדכל אלכליג

‘...and subsequently they will arrive with you on (the) first ship that enters *’al-ḥalīḡ*.’<sup>147</sup> (MS Heb.c.72/39, 1v. 11-12).

In the second example (63), the relative pronoun *’ldy*, separated from an interrogative noun it refers to by a prepositional noun phrase, modifies the indefinite noun *’ns ’n* (CA: *’insānun*) ‘a man’:

(63) דאלך אל נצראני אסתקצה אש אנסאן פי סכנדרייה אלדי הו יסוא יאקף פי מטגר וגיירה

‘That Christian asked what man in Alexandria is his equal to support him in trade, and so forth.’ (MS Heb.c.72/18, 1r. 11-12).

The complementiser *’n* and relative pronoun *’ldy* are sometimes used interchangeably in late JA texts. It is possible that the indefinite *tanwīn* ending *’n*, employed as it is here to introduce relative clauses, may have been indistinguishable from the complementiser *’n*, and so in turn (in terms of function) the relative pronoun *’ldy*. The use of *’ldy* here may be regarded as a more advanced stage of the independent *tanwīn* ending’s development.

### *Eighteenth/nineteenth-century folk tales*

In one of the two examples (64) of this phenomenon in the eighteenth/nineteenth-century folk tales, the temporal noun *ywm* (CA: *yawmun*) ‘day’ is followed by the separate particle *’n*, which – as with the preceding example – appears to be functioning as a relative pronoun:

(64) ויא וילך מן דאלך אליום אלדי תנהתך פיה ויום אן יחכום פיך אלמלך אל גבאר

‘O, woe unto you on that day that you will settle (your account); a day on which the mighty angel will pass judgement on you.’ (Cairo JC 104, 9r. 12-15).

<sup>147</sup> *’Al-ḥalīḡ* most probably refers to ‘Cairo’s ancient city canal that was abandoned and leveled at the end of the

In the second example (65), we find the free relative pronoun *m*’ (CA: *mā*) ‘what’, which is usually reserved for indefinite free relative clauses, used here before an indefinite antecedent to introduce the following relative clause:

(65) ותגאובני שכל מא יתכלם אלאנסאן מעה צאחבו

‘And you should speak to me in a manner (in) which the man speaks with his friend’ (Cairo JC 104, 3r. 2-3).

#### *Eighteenth/nineteenth-century letters*

In the following three examples (66–68), the indefinite antecedent is referred to syndetically. In the first example (66), we find the Hebrew relative pronoun *š*- prefixed to a verb, while in the second example (67), the indefinite antecedent is followed by the invariable relative pronoun *’ldy*. In the third example (68), we find another instance of the *tanwīn*-derived particle *’n* being used as a relative pronoun:

(66) ואלדי אכדנאה מן נאמון באקה כולו מטלוב לנה בעה יום שיגי נרסלו לכום ביה קאימה

‘And (as for) that which we took from Alexandria, all of it remains owed to us. With the help of God, (the) day that (it) arrives, we will send you a list of it.’ (T-S 13J25.24, 1v. col.3, 8-9)

(67) ויסלמנה חיסאב אלדי אשתראה מן רשיד מן ורק וחריר וצאבון

‘...and he will give us an account, which he bought from Rashīd, concerning paper, silk and soap.’ (T-S 13J25.24, 1v. col.1, 18-19)

(68) פי כדה אחנה כול שי אן כדנה נרסלו לכום

‘So, everything that we have taken, we will send (it) to you.’ (T-S 13J25.24, 1v. col. 1, 32-33).

In the following instance (69), the the *tanwīn* ending *-n* is suffixed to the indefinite noun *’hd* (CA: *’ahadan*), and appears to function similarly to the separate *tanwīn*-derived particle *’n* in so far as it is followed by a relative clause (cf. Wagner 2010: 183):

(69) ונערפכום מן גיהת אל חריר אן צורנה אל בנצר ולם לקאנה בוצאעה נציפה ולם אחדן רצי יפרט לנא

‘And we (also write to) tell you that concerning the silk that we searched the commercial town, but we did not encounter clean merchandise, or anyone (who) was willing to part (with it) for us.’ (T-S 13J25.24, 1v. col. 2, 31-32).

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19th century’ (Wehr 1979: 293).

### Summary

The findings of this brief exploration of the relative frequency of syndetic relative clauses with a definite nominal antecedent in late written JA letters and folk tales suggests that the relative distribution is determined not by diachronic changes, but by genre. Folk tales of the both fifteenth/sixteenth- and eighteenth/nineteenth-centuries occur contain almost three times as many syndetic relative clauses with a definite nominal antecedent than is found in either letter corpora. A similar trend is evident in the use of a pronominal antecedent: the majority of (an albeit very limited number) of occurrences are found in the fifteenth/sixteenth- and eighteenth/nineteenth-century folk tales.

The appearance of a relative pronoun after an indefinite nominal antecedent occurs in all of the corpora found here, but it is not a frequently occurring phenomenon in any of the texts. At least one instance of 'n + a verbal relative clause is found in all of the corpora, yet *m'* and *'ldy* and even the Hebrew relative pronoun *š-* are also employed. This phenomenon occurs most frequently in the late letter corpus. Yet, it must be noted that, within this corpus, all examples of syndetic indefinite relative clauses are limited to the manuscript T-S 13J25.24. Wagner does note further examples in her contemporaneous letter corpus (cf. 2010: 222), however relative to the use of *'ldy* after definite nominal antecedents it does not appear to be a common phenomenon.

#### 3.1.2.2. Asyndetic Relative Clauses

##### 3.1.2.2.1. Indefinite Nominal Antecedent

###### *Fifteenth/sixteenth-century folk tales*

Asyndetic relative clauses with an indefinite nominal antecedent occur relatively frequently in the fifteenth/sixteenth-century folk tale corpus:

(70) את[י] אלמלוך באכבאר תסר בהא

'I will bring the kings news, which you will delight in.' (Evr.Arab.II 1528, 2r. 3-5)

(71) פוגד ואדי" יקאל לה ואדי אלגולאן

'Then, he found a valley, which was called 'the valley of the gazelles.' (Evr.Arab.II 1528, 2r. 11-12)

(72) והו כמא קאל אלקאיל ואדי תרנג[ת] טירה בגזונה

'It was (just) as the saying said; a valley in the branches of which a bird emitted a sound.' (Evr.Arab.II 1528, 2r. 14-15)

(73) פראו בר"ה מתסעה לם ירוהא פי מדה"

‘They saw a wide steppe, which they had not seen during (their journey).’ (Evr.Arab.I 2996, 4r. 12-13)

(74) פקאל יא איהא אלמלך אמא תמן אלממלוך פפרס ארכבה מסרוג מלגום

‘Then he said, ‘O king! As for the value of the slave, (it is like) a horse, which I ride saddled and bridled.’ (Evr.Arab.I 2996, 15v. 23-25)

(75) פתכל[מ]ת עלי אלבאב יא סידי בכלאם לא אפהמה

‘Then, she spoke to the gate, O my lord, in words that I did not understand!’ (Evr.Arab.I 2996, 7r. 12-13)

(76) ותכלם בכלאם ישבה לכלאם אלעבד

‘And he spoke in words which were like the words of the servant.’ (Evr.Arab.I 2996, 10v. 17-18)

(77) וכאן פי קלבי מנה נאר לא תטפא

‘And there was a fire in my heart that w(ould) not be extinguished!’ (Evr.Arab.I 2996, 10r. 13)

(78) והם קכלק לא ליחצא להם עדד

‘And they are creatures which are innumerable.’ (Evr.Arab.II 1528, 2v. 10)

(79) ומא גארי "אנהא {ר}" ואשגא {ר} ואזהאר "ואתמאר" קד תגורת עליהא אלטיורי

‘And water flowed (through) the streams and the trees, flowers and fruit where the birds lay down (to rest).’ (Evr.Arab.II 1528, 2r. 17-19).

#### *Late fifteenth-century letters*

Comparatively, asyndetic relative clauses with an indefinite antecedent are uncommon in contemporaneous letters:

(80) וקד ארסל הו כתאב ידכר פיה אן קרקשונה טלבהם לאגל וגואב אלכתאב

‘And he had already sent him a letter, in which he mentions that Qarqašūnah asked them for a deadline and the reply of the letter (i.e., a response to the letter).’ (MS Heb.c.72/13, 1r. 11-14)

(81) ואצל לם בדר אלדין מפצל ען כל שי אלמעטמד עליה פי דאלך

‘I will communicate to s(ayyid) Badar ad-Dīn in detail about everything (that) depends on him in that (matter).’ (MS Heb.c.72/13, 1r. 13-14).

#### *Eighteenth/nineteenth-century folk tales*

Asyndetic relative clauses with an indefinite antecedent also occur infrequently in this corpus. Those

that do occur are found in the seventeenth/eighteenth- and eighteenth/nineteenth-century folk tales AIU VII.C.16 and T-S Ar. 37.39. There is no evidence of asyndetic relativisation in the nineteenth-century folk tales:

(82) אווריד פֿי באב זוויילע שי ידהש מן אל פואכה ואל אבקאל

‘I will show you at *bāb zawīlah* something which will astonish you in terms of fruit and legumes.’  
(AIU VII.C.16, 1r. 12-13)

(83) ואן כאן תרוח לל וראקין תנצור הנאך שי ינעש

‘And if you go to the stationers, you will see something there that revives you.’ (AIU VII.C.16, 1r. 13-14).

### *Eighteenth/nineteenth-century letters*

T-S 13J25.24 is the only letter in this corpus which contains an asyndetic relative clause with an indefinite antecedent. As we have seen in the previous section (§3.1.2.1.3), all other examples from this letter of indefinite antecedents are marked syndetically. The following example is also a little ambiguous in so far as the indefinite antecedent is inserted between the auxiliary verb *q’d* (used here in the sense of ‘to continue’ (CA: *qa’ada*); cf. Hasson-Kenat (2016: 110) for a brief discussion of the use of *q’d* in late JA folk tales) and the following verb *thk* (CA: *ḏahaka*) ‘to laugh’:

(84) ולם תחרקוה מתל אל כיס אלדי ארסלנא לכום לאן קעדו נאסת יתחכו עלא אל־ע אלדי בעתוה

‘...and you should not burn it, like the bag which we sent you because there are people who continue to jeer at the p(rice) which you sold it for.’ (T-S 13J25.24, 1v. col.2, 41-42).

### 3.1.2.2.2. Definite Nominal Antecedent

#### *Fifteenth/sixteenth-century folk tales*

In the only unambiguous<sup>148</sup> example (85) of an asyndetic relative clause with a definite nominal antecedent in this corpus, we find the definite antecedents are marked as definite not by the definite article, but by the 1.c.sg. pronoun suffix. The lack of an overt marker of definiteness (or at least the most common one) may have provoked confusion, resulting in the omission of the relative pronoun:

(85) פקאל אלמלך אדי סמעיי ובצרי ועקלי האצ־רין ואעיינ

‘Then the king said, I give you my hearing, my sight and my mind, (which) are present and clear.’

<sup>148</sup> Another potential example of an asyndetic relative clause with a definite nominal antecedent is the following instance from the fifteenth/sixteenth-century folk tale Evr.Arab.II 1528; צפקת ורקצת אלבאזאת באגנחתהא קד (Evr.Arab.II 1528, 2r. 26). Depending on the interpretation it may be read as ‘The falcons with their wings, (which) flapped and danced’ or ‘The falcons flapped and danced with their wings’. If the former, then it would fall into the category of asyndetic relative clauses with a definite nominal antecedent.



(Evr.Arab.I 2996, 4v. 18-19).

#### *Late fifteenth-century letters*

Asyndetic relative clauses with a definite nominal antecedent are slightly more common in the late fifteenth-century letter corpus than in contemporaneous folk tales:

(86) פקצדו אן יעומו עלי אלפרט יאכדוה אללה אללה

‘They intended to float on the interest which they took, (O) God, (O) God!’ (MS Heb.c.72/39, 1v. 9-10)

(87) פנערף אלמכדו אנני אכדת לך אלגזא אלאול פי ורק דיואני כאן אסתנסכני פיה שכץ מן זמאן

‘I informed the Master that I took for you the first repayment in/on an administrative paper, (which) someone asked me to copy a while ago.’ (MS Heb.c.72/39, 1v. 13)

#### *Eighteenth/nineteenth-century folk tales*

As with the earlier fifteenth/sixteenth-century letters, asyndetic relative clauses which have a definite nominal antecedent are rare in this later collection of folk tales:

(88) אל ווגה תחת דקנהו ינצור בחו אלאהל אלארץ

‘The face (which is) beneath his chin, he looks at the inhabitants of the earth with it...’ (T-S Ar. 37.39, 1v. 18-19).

#### *Eighteenth/nineteenth-century letters*

This (89) is the only example I have found of a definite antecedent followed by an asyndetic relative clause in this late letter corpus:

(89) וצלנא מכתובכום מחרר י' תא וארסלתו תערפונא [ ] תחריג עלא אל פצה

‘We received your letter, (which was) dated 21st day (of the month). You (had) sent (it) to inform us [...] of the difficulty with the silver.’ (Rylands L192, 1r. 16-17).

#### *Summary*

In this section, we have examined examples of asyndetic relative clauses with both indefinite and definite nominal antecedents. Relative to the occurrence of syndetic relative clauses, this cannot be regarded as a common phenomenon in either of the two genres of late written JA studied here.

Asyndetic relative clauses with an indefinite antecedent are found to occur in the fifteenth/sixteenth-century folk tales with a far greater degree of consistency than in any of the other corpora examined. This perhaps reflects a greater adherence to, and awareness of, conventional CA writing habits, which decreases over time. In terms of synchronic differences, the folk tale corpora display a greater number of asyndetic relative clauses with an indefinite nominal antecedent than is found in the letter corpora. However, particularly in the eighteenth/nineteenth-century corpora, the difference between the two genres is marginal.

Asyndetic relative clauses with definite nominal antecedents, yet again, seldom occur in these corpora. Yet, it must be noted that in the fifteenth/sixteenth-century letters, the number of instances of this type of relative clause construction is slightly more common than in all the other corpora.

### 3.1.2.3. Free Relative Clauses

Free relative clauses<sup>149</sup> are introduced with the pronouns *man* ‘who’, *mā* ‘what’, or *’alladi* ‘the one who’ in CA (Fischer 2002: 216, §421). The former two pronouns are reserved for indefinite free relative clauses (§3.1.2.3.1), while the latter is the preserve of definite free relative clauses (§3.1.2.3.2) in CA. In MCA, *’illi* replaces *’alladi* (and its inflected forms) in definite constructions, and in some indefinite free relative clause constructions, while *mīn* ‘who’ is used in place of CA *man* to denote animate objects referred to in indefinite free relative clauses.

#### 3.1.2.3.1. Indefinite Free Relative Clauses

##### *Fifteenth/sixteenth-century folk tales*

With only one exception (cf. example (99)), the free relative pronoun *mā* (CA: *mā*) ‘that which, what’ is used exclusively to represent indefinite inanimate entities in the fifteenth/sixteenth-century corpus (cf. examples 90–97), while *mmn* (CA: *mimman*) ‘from whom’ denotes an animate entity (example 98):

(90) פרחת במא נטרת מן אלכטרא" ואלמא

‘They delighted in what they saw of the greenery and the water.’ (Evr.Arab.II 1528, 2r. 29)

(91) פלמא ראי אלתעלב מא אדהשה ואהאלה בקי מתפכרא" פי גמיע אחואלה

‘When the fox saw what astonished him and scared him, he remained considering all its circumstances.’ (Evr.Arab.II 1528, 2r. 32-34)

(92) פלמא ראי אלתעלב מא אדחשה ואלהאה בקי מתפכר פי גמיע אחואלה

<sup>149</sup> Free relative clauses are also referred to as ‘headless’ or ‘substantive’ relative clauses.

'When the fox saw what astonished him and scared him, he remained pondering all its circumstances.' (Evr.Arab.II 852, 5r. 10-11)

(93) תם עבא מא יחתאג אליה

'Then he prepared what he would need.' (Evr.Arab.I 2996, 13v. 17-18)

(94) וטאועתך נפסך אלכביתה עליה וחדתתך מא לא תצל אליה

'And (why) your wicked soul has induced you to it and talked you into what you cannot achieve!' (Evr.Arab.II 1528, 2v. 29-31)

(95) פארתגף אלסלטאן ואלוזיר ואנתטרו מא יאתי

'Then, the sultan and the vizier trembled and anticipated (/waited for) what was to come...' (Evr.Arab.I 2996, 2v. 17-18)

(96) וקד חכמה פי מא אראד ואשתהא

'And he appointed him to whatever he wanted and wished.' (Evr.Arab.II 852, 1v. 13-14)

(97) פקאלת פען אדנך אכלצה ממא הו פיה

'She said, 'with your permission, I will release him from that which he is in.' (Evr.Arab.I 2996, 11r. 6)

(98) היהא היהאא אן ירגע מא פאת או תחיא אלאמואת לכן ימכנני אללה ממך פעל בי הדא

'It is absolutely out of the question that what has passed will resume or (that) you will live through deaths, but God places whomever did this to me in my hands...' (Evr.Arab.I 2996, 10r. 10-12).

In the following example (99), the relative pronoun *'ldy* replaces *m* in the denotation of an indefinite, inanimate entity acting as the head of a free relative clause. This is an early manifestation in a literary text of a trend that – as we will see below – has already become popular in contemporaneous letters. It is probable that *'ldy* is used here as *'illi* would be in spoken MCA; it simultaneously reflects colloquial influence, while also displaying a desire to emulate the CA form:

(99) ודכר לה אלדי גרי פי קציה אלסמך

'And he mentioned to him what had happened in the matter of the fish.' (Evr.Arab.I 2996, 1v. 10-11).

#### *Late fifteenth-century letters*

The indefinite free relative clauses found in this late fifteenth-century corpus employ three different pronouns. The first (example 100) conforms to CA norms in the use of *m*. In the second (example 101), we find another instance in which *m* is supplanted by *'ldy*, while in the examples (102–104),

the particle *mn* refers to animate beings. In examples (102 and 103), the pronoun is followed by a prefix conjugation verb, while in example (104), the pronoun precedes a prepositional noun phrase:

(100) ומעכום נערף אנך מא תכלם קרקשונה **מא** ארדת נקול לה דאלך בל קלת לה אני נכתב לך

‘And with you (all), I know that you are not telling Qarqašūnah that which I wanted us to say to him. Rather, you said to him that I will write to you...’ (MS Heb.c.72/13, 1r. 15-17)

(101) אלפרט כארג ען **אלדי** פ[י] אלמצטור

‘...the interest excluding what was in the store.’ (MS Heb.c.72/39, 1r. 20-22)

(102) וכל **מן** יבוד

‘And everyone who is faithful’ (MS Heb.c.72/13, 1r. 22)

(103) אללה אללה פי אלגואב סרעה צחבת **מן** יחצר סרעה

God, God! (Send) the answer quickly (with one of the) associates who will visit soon.’ (MS Heb.c.72/39, 1v. 10-11)

(104) וכל **מן** פי ביתהא וכל **מן** פי אלהארה

‘...and every(one) who is in her house, and every(one) who is in the (Jewish) quarter.’ (T-S 13J26.7, 1r. 26).

### *Eighteenth/nineteenth-century folk tales*

The free relative pronoun *m*’ is used alongside *’ldy* to denote indefinite, inanimate objects in this folk tale corpus. However, it is worth noting that there is a division in the use of these relative pronouns; the CA free relative particle *m*’ is found in all texts, but is used to the exclusion of *’ldy* in seventeenth/eighteenth-century folk tale AIU VII.C.16, the eighteenth/nineteenth-century text T-S Ar.37.39, and the late nineteenth-century folk tale Cairo JC 104. The relative pronoun *’ldy* is used as a free relative pronoun in the eighteenth-century folk tales T-S Ar.46.10 and the nineteenth-century folk tale BnF Hébreu 583:

(105) ו**מא** טלבתו הוא מווגוד פי אל חאל

‘‘And whatever you demand, it is available, immediately!’’ (AIU VII.C.16, 1v. 13-15)

(106) ו**מא** כוטור לך כוד ואכבש

‘Whatever takes your fancy, take (it) and seize (it)!’ (AIU VII.C.16, 1r. 12-13)

(107) וקאל להום אחכו לי **מא** גרא

‘And he said to them, ‘Tell me what happened!’’ (BnF Hébreu 583, 140v. 13)

(108) נאדמין עלא **מא** פֿעלו ולם בקא ינפֿעהום אל נדם בעד אל עדם

‘(They) regret what they did, but the remorse is no longer any use to them after the lack (of it).’ (T-S

Ar. 37.39, 3r. 2-3)

(109) יא מן לא שכרת אללה תועאללה עלה **מא** אעטאך

‘O, (you) who did not thank God, the Almighty for what he had given to you!’ (Cairo JC 104, 14r. 6-7)

(110) האכו אל [תל]מדים ליל סי' חכם **אלדי** גרא

‘The students told the m(aster) Rabbi (about) what had happened.’ (T-S Ar. 46.10, 1v. 30-31)

(111) קול להום **אלדי** יתמנא רפיקי

‘Say to them, ‘Whatever my companion wishes!’’ (BnF Hébreu 583, 140v. 20)

(112) פי קאל להום אל ולד כדוני אנא ורפיקי מעי ו**אלדי** יתאתא עלייה יתאתא עלא רפיקי

‘Then, the boy said to them, ‘Take me and my companion with me, and whatever will happen to me, will happen to my companion (also).’ (BnF Hébreu 583, 140v. 22-24).

In the seventeenth/eighteenth-century folk tale AIU VII.C.16, we find the interrogative compound pronoun *ʿyyš* (MCA: *ʿēš*) used in place of the free relative pronoun *m*:

(113) אקולך **אייש** הוא חמאמי

‘I will tell you what my *ḥammām* is!’ (AIU VII.C.16, 1v. 1-2)

(114) ואנצור גנדי בדבוס פווק גדיש **אייש** פי אידי יאכדו

‘And (when) I see a soldier with a stick (?) on a mule(?), whatever is in my hand, he will take it!’ (AIU VII.C.16, 1v. 16-17).

There is only one instance in all the eighteenth/nineteenth-century folk tales under consideration in which the f.sg. relative pronoun appears. It refers to a plural inanimate nominal. The construction, however, is that of a cleft sentence and the relative pronoun has the syntactic status of a free relative:

(115) ואפעאלו אלגיידה היא **אלתי** תסלוך קובאלו פי דאר אלאכרה כמא קאל אלנץ

‘And his good deeds are what will go before him in the afterlife, as the Text says.’ (Cairo JC 104, 16r. 3-5).

In keeping with the more conservative use of the free relative pronoun *m* exhibited in the folk tales AIU VII.C.16 and Cairo JC 104, in the following examples (116–118) we find a series of clauses introduced with the indefinite relative pronoun *mn* (CA: *man*) ‘who’ (as opposed to the overtly

colloquial form *myn* found in BnF Hébreu 583, T-S Ar. 46.10 and T-S Ar. 37.39cf. (119–123):

(116) ומן סכן פיהא דאים ישכי בדיקת אל מוצע

‘And whoever live(s) there is always complaining about the narrowness of the place.’ (AIU VII.C.16, 1r. 9-10)

(117) וכל מן ידכול פִי מצר ויכרוג יגרי

‘And every(one) who enters Cairo and leaves (it) is hurrying.’ (AIU VII.C.16, 1v. 13-14)

(118) וקום אמשי יא מן עוצית אלאהך יא מן נצרת חרים גִרְך באל כִיִּאנה יא מן מדית ידך למאל גִרְך יא מן לא שכרת אללה תועאלה עלה מא אעטאך ... יא מן כסרת קלוב אלנאס אלמסכין ואלגורבה ~ ואל אראמל ואלאייתאם

‘...‘Get up! Walk! O, (you) who renounced your God! O (you) who gazed at women other than you(rs)’ in faithlessness! O (you) whose hand seized money other than your(s)! O (you) who did not thank God, the Almighty for what he gave to you!... O you who broke the hearts of (your) people; the beggar(s) and the foreigners, the widows and the orphans.’ (Cairo JC 104, 14r. 3-10).

Not only is the MCA relative pronoun *myn* (MCA: *mīn*) ‘who’ favoured in the folk tales BnF Hébreu 583 and T-S Ar. 46.10, but it also precedes the relative pronoun *’ldy* in the following examples. The JA relative pronoun was perhaps added to raise the register of the text after the use of a colloquial form:

(119) וכאנו אל יאוד יעמלו גוראל אוולאד אל יאוד לאגיל מא יעראפו מין אלדי י[נייל קורבאן אל סנה אל]א[תייה

‘And they were casting lots for the children of the Jews in order that they might know who was to be made a sacrifice the following year.’ (T-S Ar. 46.10, 1r. 28-30)

(120) וכאנו אל יאוד יעמלו גורל עלא אוולאד אל יאוד לאגל מא יערפו מין אלדי ינעמל קורבן אל סנה אל אתייה

‘And they were casting lots for the children of the Jews in order that they might know who was to be made a sacrifice the following year.’ (BnF Hébreu 583, 139v. 21-22).

In the eighteenth/nineteenth-century folk tale T-S Ar. 37.39, we find two different representations of the free relative particle denoting an animate entity. In the first example (121), the colloquial form *myn* is found. In the following example (122) (which constitutes the equivalent passage of example (118)), we find a series of free relative clauses in which *myn* and *mn* are used interchangeably:

(121) ויקולו האלא גזא מין יעצא רבו

‘And they say, ‘This is a punishment (for) whoever renounces his Lord!’ (T-S Ar. 37.39, 2v. 4)

(122) יא מין –[יעצ]ת אללה תוע יא מין נצרת לענך אלא חרים [אל] נאס באל כִיִּינה יא מן מדי]ת מאלך למאל גִרְך יא מן לא שכרת אללה פִיה אע[טא]ך ... יא מן כצרת קלוב אל נאס ואל מסאכין ואל גורבא ואל [אראמ]ל ואל אייתאם

‘...‘Get up! Walk! O, (you) who renounced your God, the Almighty! O (you) who gazed at people

other than you(rs') in faithlessness! O (you) whose hand seized money other than your('s)! O (you) who did not thank God for what he gave to you!... O you who broke the hearts of (your) people; the beggar(s) and the foreigners, the widows and the orphans.' (T-S Ar. 37.39, 3r. 16-22)

#### *Eighteenth/nineteenth-century letters*

Overall, the free relative pronoun *m'* is seldom used to introduce indefinite free relative clauses in the later letter corpus. Where it does occur, it tends to be in established constructions, which denote quantity (cf. §31.2.3.3). The relative pronoun *'ldy* supersedes *m'* in almost all instances of indefinite free relative clauses. It is most probably used in place of the MCA relative pronoun *'illi* in the following examples. A disproportionate number of indefinite free relative clauses occur in the letter T-S 13J25.24. This clause type, whether introduced with *m'* or *'ldy* is rare in the contemporaneous letters in this corpus:

(123) וערפנכום מן מא חסל ביננה ובין אלס' שמעון עזרי ה'י

'And we informed you about what happened between us and the s(ayyid) Simeon 'Ezra, may God comfort him...' (T-S 13J25.24, 1v. col.1, 8-9)

(124) ובע'ה מחר נרסלו לכום אלדי יתוופק לנה

'and with the help of God, tomorrow we will send you what he agreed for us/suits us.' (T-S 13J25.24, 1v. col.1, 34-36)

(125) וקאל לנה ס'י עזרי ה'י אן כאן יחצר שי בע'ה מן בארה נבקו אחנה נאכדו אלדי יוקצם לנה לאן שאפ ענדנה אצעאר אל חריר סער אללה ואל האצה

'And s(ayyid) 'Ezra –may God comfort him – said to us that if something arrives – with the help of God – from abroad, we (should) continue to take what is apportioned to us because he saw at our's (that) the prices of silk are the price of God and fortunate!' <sup>150</sup> (T-S 13J25.24, 1v. col.3, 2-4)

(126) ואלדי יבאן לכום אכטר מנאסיב לנה ארסלו מינו ולאכין אל –מ'ח אשהל לנה

'And whatever seems to you most suitable for us, send it – but the gold coins are easier for us (at the moment).' (T-S 13J25.24, 1v. col.1, 6-8).

#### 3.1.2.3.2. Definite Free Relative Clauses

##### *Fifteenth/sixteenth-century folk tales*

Definite free relative clauses without a specified antecedent are rare in the fifteenth/sixteenth-century

<sup>150</sup> In this, I follow Khan's interpretation of ואל האצה as *'al-hāzza* (2006: 49, n. 19).

folk tales corpus:

(127) פסמעת **אלדי** ענד ראסי תקול ל**אלדי** ענד רגלי

‘Then, I heard the one who was at my head say to the one who was at my feet...’ (Evr.Arab.I 2996, 5v. 16-17).

### *Late fifteenth-century letters*

As with the contemporaneous folk tales, definite free relative clauses are uncommon in the letter corpus:

(128) ו**אלדי** זָהר ל[למ]מלוד

‘The one who showed the servant ....’ (MS Heb.c.72/39, 1r. 20-22).

### *Eighteenth/nineteenth-century folk tales*

Definite free relative clauses occur far more frequently in the later folk tales and letters, than in the fifteenth/sixteenth-century corpora. They are exclusively introduced with the invariable relative pronoun *'ldy*, even when referring to plural animate entities (examples 133–137). In this context, *'ldy* appears to function as the ‘literary’ equivalent of the MCA relative pronoun *'illi*:

(129) ו**אלדי** ילבס קמיץ מגסול מסקול מא עאווזו אלא אלפין סכה

‘And the one who wears a clean and laundered shirt only wants/needs two thousand needles!’ (AIU VII.C.16, 1v. 2-3).

(130) ובע[ד] זאלך אנפאכית מין עדאב פ[י] צובחאן אללה תוע **אלדי** פכני [מן] זאלך אל עדאב לחתא אני אגוובך עלא גמיע מא [סאלתני]

‘...and after that, I was untied from the punishment. The One (who) is on high, God, the Sublime, is the one who untied me from that punishment so that I could answer you about all that you asked me.’ (T-S Ar. 37.39, 3v. 13-15)

(131) ובעד זאלך אנפכית מן אלעדאב סובחאן אללה תועאלה יתבארך אסמו **אלדי** פכאני מן זאלך אלעדאב לחתא אן אגאובך עלה גמיע מא סאלתני

‘After that, I was released from the punishment. God the Almighty who is far above, praise be His name, (he is) the one who untied me from those agonies so that I could answer you about all that you asked me.’ (Cairo JC 104, 15v. 4-8)

(132) האדה כולו ל**אלדי** יעצא אללה

‘All of this is for the one who disobeys God!’ (Cairo JC 104, 15r. 5-6)

(133) ותאלת טבקה ל**אלדי** יכפרו בתחייאת המתים



‘And the third level is for those who do not believe in the resurrection of the dead.’ (T-S Ar. 37.39, 2v. 10-11)

(134) סאתת טבקא לאלדי יעבדו אל אצנאם ואל צולבאן

‘(The) sixth level is for those who worship idols and crosses.’ (T-S Ar. 37.39, 2v. 12-13)

(135) וסאדס טבקא לאלדי יעבדו עבודה זרה

‘And (the) sixth level is for those who worship idols.’ (Cairo JC 104, 12v. 4-5)

(136) וסבע טבקא והי גהנם לאלדי יעבצו אל אצנאם וסבע טבקא והי גהנם לאלדי ליס יאמן באללה תוע ומא יפעל רוצא

‘(As for the) seventh level it is a hell for those who worship idols. (The) seventh level is a hell for the one who does not believe in God, the Sublime, and (who) does not do His will.’ (T-S Ar. 37.39, 2v. 13-15)

(137) ויקולו אלדי מתווכלין עליהום כונתום אמנין צרתו כאיינין

‘Those who are entrusted to them say, ‘You were believers who became faithless....’ (Cairo JC 104, 13r. 8-10)

(138) פי קאלת ל[ה] אלגמגמה הוא כולו לאלד[ין] יעצא אל[לה] ולם יפעל רוצא

‘So, the skull said to him, ‘This is all for the one who renounces God and (who) does not do His will.’ (T-S Ar. 37.39, 3v. 6-7).

#### *Eighteenth/nineteenth-century letters*

There are few examples (139–141) of definite free relative clauses in the letter T-S 13J25.24. As with the examples from the contemporaneous folk tales, all of these definite free relative constructions are introduced with *’ldy*. Unlike the examples found in the folk tales, however, *’ldy* here denotes inanimate entities:

(139) ואלדי פיל בנצר בוצאעה עייאנה

‘... but that which is in the commercial town is bad merchandise.’ (T-S 13J25.24, 1v. col.2, 37-38)

(140) וכדה אסתלמינה מנו חיסאב אלדי אשתראה מן רשיד וארסלו לכום וקידנאה ענדנה

‘And so, we received from him an account of what he had bought from Rašīd and we sent (it) to you and we recorded it in our (records).’ (T-S 13J25.24, 1v. col.3, 5-6)

(141) ואלדי אכדנאה מן נאמון באקה כולו מטלוב לנה

‘And (as for) that which we took from Alexandria, all of it remains owed to us.’ (T-S 13J25.24, 1v. col.3, 8-9).

## 3.1.2.3.3. Quantifiers

The particle *m* 'occurs fairly frequently in late JA folk tales and letters in constructions with quantifiers, such as *kwl* (CA: *kullun*) 'each; all', *gmy* (CA: *ḡamī'un*) 'all', and *k'ml* (CA: *kāmilun*) 'whole, totality' (cf. Wagner 2010: 224–5).

*Late fifteenth-century letters*

The earliest example (142) of this phenomenon found in these corpora is from the late fifteenth-century letter MS Heb.c.72/39.<sup>151</sup> In this construction *m* 'is preceded by the colloquial compound 'ayš/'ēš, an interrogative pronoun formed of the CA interrogative pronoun 'ayy 'what?' and the noun šay 'thing', meaning 'anything' or 'which thing'. This compound pronoun has fallen out of common parlance today, yet its reduced form 'ēh 'what?' may be used as a relative pronoun as well as an interrogative pronoun (Hinds and Badawi 1986: 46). This may explain the use of this interrogative pronoun as a quantifier in this late fifteenth-century letter:

(142) כד לי פיהם איש מא אכרתת גוף או ג'ירה

'Take for me from them whatever you have (already) chosen – cloth or anything else.' (MS Heb.c.72/39, 1v. 19).

*Late fifteenth-century letters*

N/A

*Eighteenth/nineteenth-century folk tales*

These constructions become far more common in the eighteenth/nineteenth-century folk tales and letters. The greatest variety of these constructions is found in the folk tales, where in addition to the aforementioned quantifiers, we also encounter *mtl m* ' (CA: *miṭl mā*) 'just as':

(143) ואייש מא תשתהי יא דל ריפי אנא אשתרי

'And whatever you wish for, O countryman, I buy!' (AIU VII.C.16, 1r. 14-15)

(144) ותעלם יא אייהו אלשכץ כול מא כאן יחתרק גלדי

'...but you should be aware, O human, of everything that was burning my skin.' (Cairo JC 104, 15r. 7-11)

<sup>151</sup> Wagner records a number of instances of the construction 'ayš *m* ' found in thirteenth-century letters (2010: 225).

(145) לחתא אן אגאובך עלה גמיע מא סאלתני

‘...so that I could answer you all that you asked of me.’ (Cairo JC 104, 15v. 7-8)

(146) ואקת מא סמע דאליך אל שכיך גמיע מא תועדה עלא דאלך אל גמגמה לא חולא ולא קווא אלא באללה אל עאלי אל עטים ובכא בוכא שדיד

When the man heard all of what had been done to this skull, (he said), ‘There is no power or strength save in God, the almighty, the great!’ And he wept many tears... (T-S Ar. 37.39, 2v. 5-7)

(147) לקד אמרני אלהק סות" עז וגל אנני אגאובך פי כאמל מא תסאל מני

‘Verily, the Truth – the Sublime, glory and honour– has ordered me to answer whatever/everything that you may ask of me.’ (Cairo JC 104, 3v. 2-4)

(148) ובעד דאלך גדיד אללה סו מתל מא כאן אל אוול

‘And after that, God, who is Sublime, renewed (it) to what/just as it had been before.’ (T-S Ar. 37.39, 3r. 11-12)

(149) ובעד דאלך דכלו עלייא מלאכין אל מתוכלין עלה אל דונייה וקאלו לי אללה יגאזיך פי אפעאלך מתל מא עדמתנא אלראחה פאל דונייה

‘And after that, the angels who are in charge of (this) world came to me, saying, ‘God will punish you for your deeds just as you deprived us of mercy in (this) world.’ (Cairo JC 104, 9r. 2-6).

#### *Eighteenth/nineteenth-century letters*

Manifestations of this phenomenon are limited to the quantifier *k'ml m'* and the construction *mtl m'* in the eighteenth/nineteenth-century letters. We can glean from both Wagner’s analysis of letters and the evidence before us, that *k'ml m'* was quite an often used construction in the eighteenth/nineteenth-century (2010: 225):

(150) ובעדו חין גאנה ישטראך מיננה קולנ>א לו אחנה למ נשארכו חד מתל מא כתבנה לכום

‘Then, when he came to us to take a share from us, we said to him (that) we will not share with anyone, just as we wrote to you.’ (T-S 13J25.24, 1v. col.1, 10-12)

(151) נערפכם יא מחבנה באן אמס תאריכ'ו וצלנה מכתביכם 3 וכאמל מא שרחתו צאר מעלומנא

‘...we (are writing to) inform you, O our friend, that yesterday, we received 3 of your letters and everything that you explained to us became known to us.’ (T-S 10J16.35, 1r. 4-5)

(152) וכאמל מא לכום מן אל כדאם ואל מצאליה

‘And (let us know) everything that (we can do) for you in terms of service(s) and favours.’ (Rylands L192, 1r. margin 2-3).

### Summary

Synchronically, indefinite free relative clauses are significantly more common in folk tales than in the letters in both the fifteenth/sixteenth and eighteenth/nineteenth centuries. Within the folk tale genre, there is also a decided diachronic increase in the use of free relative particles between fifteenth/sixteenth and eighteenth/nineteenth centuries. With the increase in the number of indefinite free relative clauses comes an increase in the variety of particles used to introduce them. In the eighteenth/nineteenth-century folk tales, the pronouns *m'*, *mn* and *'ldy* are used alongside the colloquial particles *myn* and *'yyš*. However, the frequency of indefinite free relative clauses does not alter diachronically in the letter corpora.

It is in the eighteenth/nineteenth-century folk tales that definite free relative clauses also occur with greatest frequency. There is a marginal increase in the use of definite free relative clauses in eighteenth/nineteenth-century letters as compared to fifteenth-century texts of the same genre. This type of free relative clause is exclusively introduced with the pronoun *'ldy* in all the corpora. Quantifiers are also found to occur more frequently in the later corpora, particularly in the eighteenth/nineteenth-century folk tales.

#### 3.1.3. Adverbial clauses

Unlike coordinate clauses, adverbial clauses are considered hypotactic;<sup>152</sup> they do not carry equal status to that of the main clause, but instead furnish the main clause with additional detail(s) (Häcker 1999: 21). An adverbial clause may modify either the verb in a main clause, or the main clause in its entirety (Thompson et al 2007, II: 238).

Adverbial clauses may be finite, non-finite or verbless (Häcker 1999: 26; Popa 2008: 330). In Arabic as in English, finite adverbial clauses occur more frequently than non-finite and verbless clauses (Popa 2008: 330). In relation to the main clause, adverbial clauses most commonly occur prepositionally in Arabic.

Adverbial clauses may be divided into two categories, those that may be supplanted by an adverb (temporal, locative and manner clauses) and those that may not (such as purposive, causal, concessive and conditional clauses) (Thompson et al 2007, II: 243-5). The adverbial subordinators used to

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<sup>152</sup> Hypotaxis is also referred to as 'co-subordination' (cf. Olson 1981). It refers to a type of clause structure that is dependent on the main clause, but not embedded (Häcker 1999: 21; Aarts 2006: 252). What constitutes an 'embedded' clause is, however, much contested (Häcker 1999: 22).

introduce adverbial clauses are often regarded as being of paramount importance to the categorisation of the clause as either ‘complement’ or ‘adverbial’. Adverbial subordinators are classified in generative theory as prepositions (Kortmann 1997: 24).<sup>153</sup>

Of the first category, temporal adverbial clauses occur more frequently in the JA texts under consideration than locative or manner adverbial clauses. Location and manner are expressed with relative clause constructions, adverbs or adverbial phrases rather than adverbial clauses. The following investigation reveals that there is significant inter-genre variation in the frequency of purposive and temporal as opposed to causal and conditional clauses in JA.

The following discussion concerns (i) the types of adverbial clauses that occur in JA letters and folk tales; (ii) the frequency of adverbial clauses per text, and genre, and (iii) the formal complexity and semantic functions of clause markers used to introduce adverbial clauses in these late JA texts.

#### 3.1.3.1. Temporal adverbial clauses

As Arabic (and JA) displays a rich variety in its markers of temporal adverbial clauses, those discussed here are initially categorised according to the type of semantic connection (i.e., the English equivalents of ‘when’, ‘until’ or ‘after’) that they express. Once established, the frequency of adverbial clauses and the nature of subordinators used to introduce them are discussed in greater detail.

The expansion of the main clause by temporal adverbial clauses in the JA material under consideration here falls into three distinct categories:

- (i) Adverbial clauses that refer to a specific point in time at which an event took place, be it immediately following an event/action (sequence), or the implicit result of the action/event in the main clause (time/cause) (i.e., ‘when’) (Thompson et al 2007, II: 245–7).
- (ii) Adverbial clauses that specify ‘up to the time that; to the point or degree when’ an event/action in the main clause occurs (i.e., ‘until’) (OED online: 09/08/17).
- (iii) Adverbial clauses that contain an action/event that is ‘subsequent to or later than (an event or point in time)’ expressed in the main clause (i.e., ‘after’) (OED online: 09/08/17).

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<sup>153</sup> This categorisation is suggested on the basis that prepositions, adverbs and adverbial subordinators should be

## 3.1.3.1.1. 'When'

*Fifteenth/sixteenth-century folk tales*

Temporal adverbial clauses denoting 'when' an action or event in the main clause occurred are introduced with the subordinator *f-lm* (CA: *fa-lammā*) 'when, after' in the fifteenth/sixteenth-century folk tales examined here. The subordinator *f-lm* /*lm* – used according to CA convention immediately preceding a finite verb in the suffix conjugation (Fischer 2002: 226, §443) – expresses both time/causal and sequential relationships between the main and adverbial clauses. Only in the first example (found in Evr.Arab.II 1528), is the CA convention of introducing the main clause with the bound particle *fa-* observed:<sup>154</sup>

(1) **פלמא** סמעו אלוהוש כלם אלאסד פמא מנהם אלא מן כר וסגד

'When the beasts heard the Lion's speech, there was not (one) among them who did not bow and prostrate (himself before him).' (Evr.Arab.II 1528, 1v. 25-26)

(2) **פלמא** עלם אלדב אנה מתזהגן<sup>155</sup> אלי [מד]ינה אלאטיאר אסתכדם מעה תלאת אנפאר

'When the bear learned that he (must) get ready (to go) to the city of the birds, he employed three individuals (to) accompany him...' (Evr.Arab.II 1528, 3r. 1-3)

(3) **פלמא** שמע אלאסד אלדרגאם קאם מן דלך אלמקאם ואשתדעה באמרת דולתה

'When the lion heard the (other) lion's words, he rose from that place and called the princes of his state...' (Evr.Arab.II 852, 3r. 13-4r. 14)

(4) **פלמא** סמעת כלאמי ותבת קאימה וקאלת ואלך יא כלב ואנת אלדי פעלת מעי הדה אלפעלה

'When she heard my words, she jumped up and exclaimed, 'Woe unto you, O dog! You who committed this deed with me!' (Evr.Arab.I 2996, 9v. 24-26)

(5) **פלמא** פרג מן כלאמה וחסן נטאמה זאד פי תקריבה ואכראמ[ה] ועלם אנה נאצח לדולת[ה] ואיאמה

'When he had exhausted his words and his well-worded speech, he rose in his estimation and his dignity and he knew that he was a sincere advisor to his state and his time.' (Evr.Arab.II 1528, 2v. 14-16)

(6) **פלמא** פרג מן כלאמה קאל לה אלמלך {סיר} 'אהו אלנאצח אבו אלחצין'

'When he had finished his speech, the King said to him, 'Go! O successful fox!'' (Evr.Arab.II 852, 4v. 14-16)

(7) **פלמא** גאב אלעבד קאל אלמלך הדא אלאמר לא ימכן {אלרקאד} ענה

regarded, not as distinct categories, but as subcategories of 'Prepositions' (Kortmann 1997: 25–6).

<sup>154</sup> The practice of introducing the main clause with the bound particle *fa-* is not universally observed, even in CA. Its omission in the vast majority of instances here, therefore, is not unusual. Rather, its inclusion suggests an awareness of CA convention that is worthy of note.

<sup>155</sup> מתזהגן: a metathesised form whose original root is *ḡīm, hā, zayn*; 'to prepare oneself, to get ready' (cf. §2.3, p.

‘When the servant had vanished, the king said, ‘It is not possible to keep quiet about this matter!’’ (Evr.Arab.I 2996, 3r. 3-5).

The folk tales Evr.Arab.II 1528 and Evr.Arab.I 2996 each contain one instance in which the prevalent temporal subordinator *lm*’ is supplanted by the adverbial-derived subordinators *wqt* and *hyn*, respectively:

(8) ומא אתפק אליים-אלבום ואלגראב אלא וקת אתו באלכראב

‘And the owl and the crow only agreed when they brought the destruction.’ (Evr.Arab.II 1528, 1v. 21-22)

(9) חין יקום פיא כסארתה מעהא

‘When he rises, the shadow of his loss/damage is with her.’ (Evr.Arab.I 2996, 6r. 7).

Common to all three folk tales from this period is the use of the CA temporal subordinator אדא *’d*’ (CA: *’idā*), which is used in CA to introduce a temporal adverbial clause with a conditional sense. In all examples (from Evr.Arab.II 852 and 1528, I 2996, respectively), the temporal/conditional subordinator precedes a suffix conjugation, in keeping with CA convention (Fischer 2002: 235, §464), e.g.,

(10) וכאנת תחבני מחבה עטימה בחית אני אדא גבת ענהא אליום אלכאמל לא תאכל ולא תשרב חתי תראני ענדהא  
‘...and she was deeply in love with me so that when/if I was absent from her for an entire day, she would neither eat nor drink until she saw me with her (once again).’ (Evr.Arab.I 2996, 5r. 3-6).

#### *Late fifteenth-century letters*

The CA-derived subordinator (*f*-)*lm*’ also occurs in the late fifteenth-century letter MS Heb.c.72/39. In the first example from this documentary text, the main clause is introduced with the bound particle *f*- (CA: *fā*-), e.g.,

(11) פלמא ו[צ]ל אלמצאטיר בתאע אלדכירה פמא אכדו מן אלמצאטיר ש[י] אל[א] בעד מות זין אלדין

‘When the secret things belonging to the suppl(ies) arrived, they did not take anything from the secret things except after the death of Zayn ad-Dīn.’ (MS Heb.c.72/39, 1r. 17-19)

(12) תם אן אלממ למא וצל אלי אלקא הדה חאסבת זין {אלדין} וולדה עלי האדה אלחסאב ואכצמת פי חסאבהם באלארבע מאיה סתה ועשרין אשרפי באסם אלדכירה

‘Then, indeed, the servant, when he arrived to present this, I entered Zayn al-Dīn and his son into this account and I deducted from their invoice four hundred and twenty-six *’šrfy* in the name of the

storage.’ (MS Heb.c.72/39, 1r. 15-17).

However, in the contemporaneous letter T-S 13J26.7, ‘when’ is conveyed with the substantive-derived subordinator *hyn* in construction with the preposition *mn* (CA: *min*) rather than the subordinator (*f-*)*lm*’:

(13) **ומן חין פארקנאכם ונזלת אלמרכב ומה עוומת לבעד עשאת אללאכיר**

‘And when we left you and the boat disembarked, it did not launch until after (the) last call to prayer.’ (T-S 13J26.7, 1r. 9-11).

Instances of temporal adverbial clauses denoting ‘when’ are scarcer in fifteenth-century letters than in contemporaneous folk tales; there are no instances of this type of temporal adverbial clause in the contemporaneous letters MS Heb.c.72/13 or MS Heb.c.72/18.

#### *Eighteenth/nineteenth-century folk tales*

The CA-derived subordinator (*f-*)*lm*’ is used by-and-large with the same semantic and syntactic functions – and with comparable frequency – in the eighteenth/nineteenth- and nineteenth-century folk tales T-S Ar. 37.39 and Cairo JC 104 as in the fifteenth/sixteenth-century folk tales discussed above. The subordinator precedes a verb in the suffix conjugation, and the main clause is occasionally marked with the bound particle *f-*:

(14) **פִּי לִמָּא פֶּאָק מִן גִּשְׁוֹתָהּ בְּכִי דָּאֵלֶךְ אֶל שׁ[כֹּ]ץ בְּכָה אֵן שְׂדִיד**

‘When he woke from his fainting fit, that man cried many tears.’ (T-S Ar. 37.39, 3r. 3-4)

(15) **פִּי לִמָּא פֶּאָת כְּאָמֶס יוֹם וְכָאֶמֶס – וְאָקַת [וּכ]א[נִן] מִסְ[תַּנְ]טְרִין אֶהְיִי אַעֲרָק בְּקָא עוֹוֹאֵץ אֶל עֶרֶק אַצְפֵּר וּגְהִי וְנִזְעִית עַלִּיָּא סְכָרִית אֶל מוֹת**

‘When five days and five moments had passed, my people were expecting me to perspire longer, but instead of sweating, I grew pale and the agony of death descended on me.’ (T-S Ar. 37.39, 1r. 19-1v. 1)

(16) **פִּלְמָא פֶּאָת עַלִּיָּא כְּאָמֶס יוֹם וְכָאֶמֶס וְקַת וְכָאֶנּוּ מִסְתַּנְטְרִין אֶלְגַּמְאָהּ אֶנְנִי אַעֲרָק בְּקָא עוֹוֹאֵץ אֶלְעֶרֶק אַצְפֵּר וּגְהִי וְנִזְלַת עַלִּיָּא סְכָרַת אֶל מוֹת**

‘When five days and five moments has passed, the group was expecting that I would perspire longer (but) instead of perspiring, I grew pale and the agony of death descended on me.’ (Cairo JC 104, 5v. 12-6r. 3)

(17) **פִּי לִמָּא סִמַּע דָּאֵלֶךְ אֶלְשִׁכָּן דָּאֵלֶךְ אֶלְאֶמֹר כּוֹלֵהָ אֶלְדִּי נִטְקַת פִּיהוֹם אֶלְגַּמְאָהּ וְקַע וּגְוִשִּׁי**

‘When that man heard all of these things that the Skull spoke about, he fell and fainted.’ (Cairo JC 104, 14v. 8-10).



Whereas the fifteenth/sixteenth-century folk tales contain no explicit deviations from the CA norms in relation to the use of (*f-*)*lm'*, the late nineteenth-century tale Cairo JC 104 does. In the next example (18), the subordinator *lm'* separates the auxiliary verb *kāna* from the following verb in the prefix conjugation (expressing continuous action in the past):

(18) וכוונת למא נרכב ונטלע ללצייד וללקנץ כאנו ירכבו מעי אורבע מאית אלף נפֿר

‘When I used to ride and go off hunting and shooting, four hundred thousand soldiers used to ride with me’ (Cairo JC 104, 3v. 13-4r. 3).

In another deviation from the CA norm, the subordinator *lm'* is found in a construction with a complementiser. While a similar construction does occur in CA, the complementiser *'an* ‘to’ (Fischer 2002:226, §443) – as opposed to the *'anna* found here – is used. The addition of the complementiser does not affect the semantic function of the subordinator, but rather serves to reinforce the marking of its subordinating syntactic function:

(19) למא אנני וצלת לבאב גהינם פֿי ראית עלה באב גהינם שיך כביר מוחתרם

‘When I arrived at the gate(s) of hell, I saw a great, respected man above the gate(s) of hell.’ (Cairo JC 104, 11r. 11-14).

In addition to the subordinator *lm'*, temporal adverbial clauses are introduced with lexically-derived subordinators such as *fy + wqt + m'* found in the following two examples (20 and 21). This subordinating construction is semantically synonymous with the subordinator *lm'* in that it locates an event in the main clause at a specific moment in time:

(20) פֿי וקת מא סמע דֿאלך אלשכֿץ מא תועדא עלה תלך אלגמגמה קאל לא חולא ולא קותא אלא באללה אל עאלי אלעטֿים

‘When that man heard what had been done to this skull, he said, ‘there is no strength or power save in God, the Almighty!’’ (Cairo JC 104, 12r. 3-6)

(21) פֿי ואקת מא סמע דֿאליך אל שכֿץ גמיע מא תועדה עלה דֿאלך אל גמגמה לא חולא ולא קווא אלא באללה אל עאלי אל

עטֿים

‘When that man heard all that had been done to this skull, (he said,) ‘There is no strength or power save in God, the Almighty, the Great!’’ (T-S Ar. 37.39, 2r. 4-6).

As with all the folk tales examined so far, temporal adverbial clauses occur regularly in BnF Hébreu 583 and T-S Ar.46.10. However, the simple subordinator *lm'* found in the texts so far is supplanted in these manuscripts by the frequent use of lexically-derived subordinators and complex subordinating constructions. ‘When’ is commonly expressed with the lexically-derived subordinator *hyn* (CA: *hīna*), usually in a construction with the complementiser *m'* (CA: *mā*) (examples (22–24)). It appears alongside another lexically-derived subordinator, *wqt* (CA: *waqt*) (example (25)):

(22) **פִּי חֵין מֵא** שֶׁאָפּוּ אֶל עֵרְלִים כְּדֹאֲלֶךְ וְקַעֲיִת קְלוּבֵהוּם וְגִשִּׁית עֵינֵיהוּם

‘When the uncircumcised saw that, their hearts stopped, and their eyes were covered.’ (BnF Hébreu 583, 68-69)

(23) **חֵין מֵא** יָגוּ בֶּאֱל מוֹכֵב יֹאכְדוֹךְ קוֹל לְהוּם אֵן נִכּוֹן אֲנִי מֵעֶאךְ

‘When they come in the procession to take you, say to them that I will be with you.’ (BnF Hébreu 583, 48-49)

(24) **פִּי חֵין אֱלֹדִי** טִלַּע אֶל גֹּרֶל עֵלֵא אֶל וְלֹד קֶאֱמוּ בֶּאֱל בּוֹכָא וְאֵל צִיִּיאָה

‘When the lot fell on the boy, they all began weeping and screaming...’ (BnF Hébreu 583, 8-10) (cf. §3.1.1.1 for a discussion of the use of *’ldy* as a complementiser)

(25) **אֲנִי וְקַת מֵא** נִרִיד נְתוּגָה

‘‘When I want, I will go.’’ (BnF Hébreu 583, 25)

(26) **וְחֵין יָגִי** [אֶל מִ] יַעֲדֵא יִכְדוּ בְּמוֹכֵב עֲטִים וְכוֹל אֱלֹדִי יִטְלוּבוּ יְנוּלוּ

‘When the appointed time comes, they take (him) in a great procession and all that he asks for is granted.’ (T-S Ar. 46.10, 1r. 30-1).

### *Eighteenth/nineteenth-century letters*

As with the early letters, the nineteenth-century letters display fewer instances of temporal adverbial clauses than contemporaneous folk tales. Adverbial clauses expressing a temporal/causal or sequential connection with the main clause occur only in T-S 13J25.24. In this text, neither the CA-derived particle *lm*’ or complex subordinators occur. Instead, we find several examples of the substantive-derived subordinator *hyn* (CA: *hīna*):

(27) **וְלֹם עֲטֵאָהוּם לָנָה וְבַעֲדוּ חֵין גֵּאנָה יִשְׁטַרְאָךְ מִינְנָה קוֹלֵנָ לֹו אַחְנָה לֹם נִשְׁאָרְכוּ חֵד**

‘...but he did not give them to us. Afterwards, when he came to us to take a share from us, we said to him that we will not share with anyone....’ (T-S 13J25.24, col. 1, 10-11)

(28) **פִּי כֹדָה חֵין** טוֹסִלְכוּם תִּתְּפַעוּהָא וְתִרְסְלוּ לָנָה רִגְעָתָהָא

‘So, when you receive it, pay it and send us the receipt for it.’ (T-S 13J25.24, col. 2, 4)

(29) **וְכֹדָה חֵין** יוֹסִלְכוּם אֶל סִבֵּב בֵּיל סִלְאָמָה לֹם תִּסְתַּעְגְּלוּ עֲלֵיהָ

‘And so, when the assignment reaches you safely do not be hasty with it...’ (T-S 13J25.24, col. 2, 40-41)

(30) **וְלֹאֲכִין חֵין** יִחְצֹר לְכוּם חִיסְבְּכוּם וְתִתְּלָסוּ עֵלֵא אֶל צֶאֱף בְּעֵה יִמְכִּין נִרְסְלוּ סְבוּבָה בִּינְתָנָה אַחְנָא וְאֲנָתוּ

‘But when he presents you with your accounts and you pay it, in turn, God willing, we will be able to send goods to one another.’ (T-S 13J25.24, col. 2, 27-30).

Genre & Date	Classmark	Subordinator	Frequency	Formal complexity	Syntactic function
15th c. folk tale	Firk. Evr.Arab.II 852	פלמא/למא	10	simple	AS
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	פלמא/למא	7	simple	AS
		וקת	1	simple	non-AS
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	פלמא/למא	13	simple	AS
		חין	1	simple	non-AS
late 15th c. letter	Bodl. MS Heb.c.72/13	—	—	—	—
late 15th c. letter	Bodl. MS Heb.c.72/39	פלמא/למא	2	simple	AS
late 15th c. letter	CUL T-S 13J26.7	ומן חין	1	complex	non-AS
late 15th c. letter	Bodl. MS Heb.c.72/18	—	—	—	—
17th/18th c. (?) folk tale	AIU VII.C.16	למא	1	simple	AS
18th/19th c. folk tale	CUL T-S Ar. 37.39	למא	5	simple	AS
		פי ואקת מא	1	complex	non-AS
18th/19th c. folk tale	CUL T-S Ar. 46.10	וקת מא	1	complex	non-AS
		וחין	1	simple	non-AS

19th c. folk tale	BnF Hébreu 583	וחין	1	simple	non-AS
		חין מא	3	complex	non-AS
		פי חין אלדי	1	complex	non-AS
		וקת מא	1	complex	non-AS
19th c. folk tale	Cairo JC 104	פלמא/למא	7	simple	AS
		למא אנבי	1	complex	AS
		פי וקת מא	1	complex	non-AS
18th/19th c. letter	CUL T-S 13J25.24	חין	4	simple	non-AS
18th/19th c. letter	Man. Rylands L192	—	—	—	—
18th/19th c. letter	CUL T-S 10J16.35	—	—	—	—

Table 2.1. Temporal adverbial subordinators: ‘when’

### Summary

It is notable that temporal adverbial clauses occur rarely in any of the letters examined in either the late fifteenth- or eighteenth/nineteenth-century letter corpora. The two exceptions to this trend are the fifteenth-century letter MS Heb.c.72/39 and nineteenth-century letter T-S 13J25.24, the lengthiest and most descriptive of the letters in either corpus.

As for the nature of the subordinators themselves, the fifteenth/sixteenth-century folk tales display a decided preference for the simple, CA-derived subordinator (*f-*)*lm*’. This same subordinator is found in the seventeenth/eighteenth-century tale AIU VII.C.16, once and more frequently in the

eighteenth/nineteenth- and nineteenth-century folk tales T-S Ar.37.39 and Cairo JC 104. Its appearance in the documentary corpora is limited to the late fifteenth-century letter MS Heb.c.72/39, where it occurs twice.

Complex adverbial subordinators, comprising substantive-derived adverbials or prepositions first make their appearance (within these small corpora) in the late fifteenth-century letter T-S 13J26.7. There, the construction *w-+mn+hyn* occurs without a complementiser. Not until the eighteenth/nineteenth-century does the use of complex adverbial subordinators consisting of lexically-derived adverbials and a complementiser become a common phenomenon in the marking of temporal adverbial clauses designating ‘when’ an action/event in the main clause occurs. The two recurring complex subordinators, common to many of the late folk tales, have at their semantic centre the lexically-derived adverbials *hyn* (CA: *hīna*) and *wqt* (CA: *waqtan*). While these two subordinators each occur once in the fifteenth/sixteenth-century folk tales Evr.Arab.II 1528 and Evr.Arab.I 2996, respectively, they appear without a complementiser in both cases.

Yet, the use of these complex subordinators is not ubiquitous in the eighteenth–nineteenth-century corpora. While complex subordinators appear fairly frequently in the folk tales, they are notably absent in the contemporaneous letter corpus. There, as with the fifteenth/sixteenth-century folk tale Evr.Arab.I 2996, the simple subordinator *hyn* is favoured (cf. T-S 13J25.24).

Adverbial subordinators, both simple and complex, occur more consistently in the folk tale corpora than in the letter corpora. Furthermore, the growing use of complex adverbial subordinators evident in the eighteenth–nineteenth-century folk tales and their simultaneous absence in contemporaneous letters, suggests that these complex subordinators were considered literary or archaising by JA writers in the eighteenth and nineteenth centuries.

### 3.1.3.1.2. ‘Until’

#### *Fifteenth/sixteenth-century folk tales*

A different facet of temporal sequence expressing ‘up to the point that’ (Fischer 2002: §344) an event or action occurred is also commonly to these texts. This type of adverbial clause is introduced exclusively in Evr.Arab.II 1528 with the CA complex prepositional subordinator *’ly/’l’ ’n* (CA: *’ilā ’an*), followed by a verb in the suffix conjugation:

(31) ויסיר אלליל ואלנהאר אלי אן אשרף עלי אלדיאר

‘And he walked night and day until he reached the dwellings (of the birds).’ (Evr.Arab.II 1528, 2r. 10-11)

(32) ומא זאל באלפרח מסרור ... אלי אן וצל אלי מדינ[ה] אלטיור

‘And he continued [thus] with joy... until he arrived at the city of the birds.’ (Evr.Arab.II 1528, 3r. 13-15)

(33) וינקשע ויעלא וירתפע **אלי אן** דכל [**<אלי>**] אלאסד

‘...and he was carried away and raised up (by the winds) and he rose until he entered upon the lion.’ (Evr.Arab.II 1528, 3v. 3-4).

In the two (roughly) contemporaneous texts Evr.Arab.II 852 and Evr.Arab.I 2996, *’ly ’n* (34 and 35) is used alongside the CA subordinator *ht*’ (CA: *hattā*) (36–39).<sup>156</sup> While *’ly ’n* continues to only precede verbs in the suffix conjugation, *ht*’ is used in conjunction with prefix and suffix verbal forms in Evr.Arab.I 2996:

(34) ויסיר ליל ונהאר” **אלי אן** אשרף עלי אלדייאר

‘And he walked night and day until he reached the dwellings (of the birds).’ (Evr.Arab.II 852, 4v. 18)

(35) תם תמשא **אלי אן** דכלא אלי אלקצר

‘Then, they (dual) walked until they came to the palace.’ (Evr.Arab.I 2996, 12v. 1-2)

(36) ומא זאל אלאמיר קטב אלדין אלפארס אלשאהין ירתב אלאטלאב בהמתה ומערפתה **חתי** נזל כל אחד פי מנזלתה

‘The Prince, the pivot of the religion, the falcon, the knight, continued arranging the warriors with his zeal and his knowledge until each one had reached his position.’ (Evr.Arab.II 852, 9r. 13)

(37) פקמת יא סידי תבעתהא **חתי** כרגת מן אלקצר

‘I rose, O my lord, and followed her until she left the palace...’ (Evr.Arab.I 2996, 7r. 8-9)

(38) וכרגת ותבעתהא **חתי** אנתהת אלי בין אלכימאן

‘And she left. I followed her until she reached the place between the hills...’ (Evr.Arab.I 2996, 6v. 14-15)

(39) לא תאכל ולא תשרב **חתי** תראני ענדהא

‘She (would) neither eat nor drink until she saw me with her.’ (Evr.Arab.I 2996, 5r. 5-6).

#### *Late fifteenth-century letters*

A temporal adverbial clause specifying up to the point at which an event/action took place occurs only once in the late fifteenth-century JA letter corpus examined here. In this instance, the CA-derived

<sup>156</sup> *hattā* ‘until, to’ is a primary preposition that is most commonly used as a subordinating conjunction in CA (cf. Fischer 2002: 223-4, §439). When used as a preposition (i.e., followed by a noun in the genitive), it tends to mean ‘even’ (Fischer 2002: 165, §304.1).

subordinator *ht*’ is followed by a verb in the prefix conjugation:

(40) פלעל פצלך ואחסאנך וצדקאתך לא [ת]דע האדה אלכתאב מן ידך **חתי**’ תנהי לי האדה אלשגל

‘Perhaps your grace, kindness and righteousness, you should not promise this letter (written) in your hand until you have finished this work for me.’ (MS Heb.c.72/39, 1v. 4-5).

It is worth noting the source of this example. It occurs in MS Heb.c.72/39, the only letter in this corpus in which the CA-derived subordinator *lm*’ occurs and which contains the highest degree of adverbial clauses of all four letters in the fifteenth-century documentary corpus.

### *Eighteenth/nineteenth-century folk tales*

In both Cairo JC 104 and T-S Ar. 37.39, ‘until’ is expressed with the subordinator *ht*’/*hth* (CA: *hattā*), which appears both with (42 and 45) and without (41, 43 and 44) the bound morpheme particle *l-* (CA: *li-*). The addition of the bound particle does not appear to affect the subordinator’s semantic or syntactic functions.<sup>157</sup> As with the fifteenth/sixteenth-century folk tale Evr.Arab.I 2996, *ht*’/*hth* occurs with both prefix and suffix conjugations:

(41) כאן אללה סו יג[דיד] לי גלד גירו **חתא** אקצר אתבית עלא עדאבי

‘God – may He be praised – was renewing my skin until I was able to withstand my punishment.’ (T-S Ar. 37.39, 3r. 9-11)

(42) תום חמלוני אלא גהנם ושחטאטוני<sup>158</sup> עלא וואגהי **לחתא** וצלת לגהנם

‘‘Then, they carried me to hell and they dragged me on my face until I arrived at hell.’’ (T-S Ar. 37.39, 3v. 16-17)

(43) יא איוהא אל שכץ כלמני וחדתני **חתא** אגאובך

‘‘O human! Speak to me and tell me until I answer you!’’ (Cairo JC 104/3r. 13-14)

(44) כאן אללה סות” יגדד לי גלד גירו **חתא** אקדר אתבת עלה דאלך אל עדאב

‘‘God – may He be praised – was renewing my skin, and so on, until I was able to withstand that punishment.’’ (Cairo JC 104/15r. 9-11)

(45) ויעמלו כדה **לחתא** אקדם אתבת עלה עדאבי

‘‘And they did this until I was able to withstand my torture.’’ (Cairo JC 104/13v. 11-12).

In the contemporaneous folk narrative BnF Hébreu 583, however, the nominally-derived subordinator *hyn* appears. The semantic function of *hyn* as it is used in the following examples (46–50), however,

<sup>157</sup> The insertion of *l-* before the subordinator *ht*’ may be indicative of the prestige attached to complex adverbial subordinators by eighteenth- and nineteenth-century writers.

<sup>158</sup> ושחטאטוני: ‘and they dragged me’ (ECA: *šahṭaṭ* ‘to drag, lug’) (Hinds and Badawi 1986: 454).

appears transformed from ‘when’ > ‘until’ by the addition of the bound particle *l-*. In all occurrences of the subordinating construction save one, the construction employs a complementiser, forming the complex subordinator *l-+hyn + m*’:

(46) ותרבטו פֿום אל זכיבה פֿאל תכתרוואן לחין ינתם אל מוכב

‘‘And you should tie the mouth of the sack to the sedan chair until the procession is over.’’ (BnF Hébreu 583, 57-58)

(47) יציר סבעת אושהור לחין מא תחצרו

‘‘...it will be seven months until you return.’’ (BnF Hébreu 583, 17)

(48) קעדו לארבע סעאת מן אל ליל לחין מא פֿרגית אל קראייה

‘They sat for four hours during the night until the recitation was finished.’ (BnF Hébreu 583, 27-29)

(49) ואל רב אברהם מאשי קודאמהום לחין מא וצלו לבית אל חכם פֿי טרקו עלא אל באב

‘And the Rabbi Abraham walk[ed] in front of them until they arrived at the house of the sage. Then they knocked on the door...’ (BnF Hébreu 583, 23-38)

(50) נחן נצרוֹפֿ עליהום לחין מא תחצרו ובשרט לם תתעווקו פֿאל טריק

‘‘We will pay them until you return, and on the condition that you do not tarry on the way.’’ (BnF Hébreu 583, 14-15).

#### *Eighteenth/nineteenth-century letters*

Temporal adverbial clauses denoting ‘until’ are scarce in the eighteenth/nineteenth-century letter corpus. I have identified only once instance of this type of temporal adverbial clause (51). In this case the CA-derived subordinator *ht*’ occurs in conjunction with the CA-derived particle *’dh* (CA: *’idā*), a construction often found in CA texts:

(51) בקה חתא אלה כונה לאינין

‘He stayed until they became unreliable.’ (T-S 10J16.35, 1r. margin 3).

Genre & Date	Classmark	Subordinator	Frequency	Formal complexity	Syntactic function
15th c. folk tale	Firk. Evr.Arab.II 852	אלי אן	4	complex	AS
		חתי	1	simple	AS
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	אלי אן / אלא אן	6	complex	AS
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	אלי אן / אלא אן	3	complex	AS
		חתי	4	simple	AS
late 15th c. letter	Bodl. MS Heb.c.72/13	—	—	—	—
late 15th c. letter	Bodl. MS Heb.c.72/39	חתי	1	simple	AS
late 15th c. letter	CUL T-S 13J26.7	—	—	—	—
late 15th c. letter	Bodl. MS Heb.c.72/18	—	—	—	—
17th/18th c. (?) folk tale	AIU VII.C.16	—	—	—	—
18th/19th c. folk tale	CUL T-S Ar. 37.39	לחתא	1	complex	AS
18th/19th c. folk tale	CUL T-S Ar. 46.10	—	—	—	—
19th c. folk tale	BnF Hébreu 583	לחין	1	complex	non-AS
		לחין בא	4	complex	non-AS
19th c. folk tale	Cairo JC 104	חתא	2	simple	AS
		לחתה	1	complex	AS
18th/19th c. letter	CUL T-S 13J25.24	—	—	—	—

18th/19th c. letter	Man. Rylands L192	—	—	—	—
18th/19th c. letter	CUL T-S 10J16.35	חתא אזה	1	complex	

Table 2.2. Temporal adverbial subordinators: ‘until’

### Summary

In keeping with the findings from the previous section (§3.1.3.1.1), temporal adverbial clauses which designate up to the point at which an event or action continued are more often found in the folk tales of all periods than in the letters.

The post-CA subordinator *’ly ’n* (CA: *’ilā ’an*), which appears frequently in all three fifteenth/sixteenth-century folk tales, is notably absent in the eighteenth/nineteenth-century folk tales and both letter corpora.<sup>159</sup> It appears to be superseded in later texts by the CA subordinator *ḥt’/ḥth* (CA: *ḥattā*), present in two of the three fifteenth/sixteenth-century folk tales and once in the contemporaneous letter MS Heb.c.72/39. In later manuscripts, *ḥt’/ḥth* most commonly forms the semantic base of complex subordinators, either prefixed with the particle *l-* (CA: *li-*), and/or followed by the complementiser *’n/’nn* (CA: *’an, ’anna*).

<sup>159</sup> Wagner records the complex prepositional *’ly ’n* as also occurring in the fifteenth/sixteenth-century letters MS Heb.c.72/27 and MS Heb.c.72/38 (2014: 150-1).



In a more unusual development, the semantic function of the adverbial subordinator *hyn* is altered by the addition of the bound particle *l-* (CA: *li-*) from ‘when’ > ‘until’. When performing this function, *hyn* is often followed by the complementiser *m’*.

### 3.1.3.1.3. ‘After’

#### *Fifteenth/sixteenth-century folk tales*

Adverbial clauses referring to an event or action after which the event of a following main clause takes place, occur infrequently in the early letter and folk tale corpora. In the fifteenth/sixteenth-century folk tales Evr.Arab.II 852 and Evr.Arab.II 1528, this meaning is conveyed, not by adverbial subordinators, but by adverbial phrases such as *w-b’d dlk* (CA: *wa-ba’dā dālīka*). The only occurrence of an adverbial clause denoting ‘after’ in contemporaneous folk tales occurs in Evr.Arab.I 2996 (example (52)), in which the preposition/adverbial *b’d* (CA: *ba’dā*) appears in conjunction with the complementiser *m’* to introduce a temporal adverbial clause (a construction common in CA texts),:

(52) **בעד מא כאנו קטעו איאסהם {מנה} תם זינו אלמדינה**

‘After they had overcome their despair, then they decorated the city’ (Evr.Arab.I 2996, 14r. 4-5).

Also found in this folk tale is the rare occurrence of a non-finite adverbial clause. In the following example (53), the form II gerund follows the preposition *b’d*:

(53) **בעד תהביב אלטאגן ווקד אלנאר**

‘After blackening the frying pan, he lit the fire.’ (Evr.Arab.I 2996, 2v. 14-15).

#### *Late fifteenth-century letters*

This type of temporal adverbial clause does not occur in the late fifteenth-century Egyptian letters MS Heb.c.72/13, MS Heb.c.72/39 or T-S 13J26.7. However, in the contemporaneous Magribi letter MS Heb.c.72/18, written in Syracuse, Sicily, a prepositional construction which takes a complementiser when acting as the head of a temporal adverbial clause is found:

(54) **בעד אלדי אפתרקנה מנכום קאציינה כתיר פי אל טריק**

‘After we were separated from you, we travelled very far along the way...’ (MS Heb.c.72/18, 2).

The use of the complementiser in this prepositional construction is not unprecedented. Prepositional constructions which take a complementiser when acting as heads of adverbial clauses occur

frequently in written CA (cf. *ba'da mā*; *ba'da 'an*) and occasionally in fifteenth/sixteenth-century JA folk tales (as seen in the previous example from Evr.Arab.I 2996). However, the substitution of the complementisers *'an* or *mā* with the (invariable) JA relative pronoun *'ldy* (CA: *'alladī*) is worthy of note. It appears to be an early manifestation of the phenomenon found more frequently in nineteenth-century folk narratives in which the opacity concerning the function of the free relative particle/complementiser *m'* affects the use of the relative pronoun *'ldy*.

### *Eighteenth/nineteenth-century folk tales*

In neither Cairo JC 104 nor T-S Ar.37.39 are there many examples of temporal adverbial clauses which refer to an event/action after which the event/action specified in the main clause takes place. As with the fifteenth/sixteenth-century folk tales, adverbial phrases are favoured. Where they do occur, both manuscripts display the complex subordinating construction *w-b'd m'* as their sole indicator of temporal adverbial clauses expressing 'after':

(55) **ובעד מא** אסקוני אתנתר לחמי ולחם ווגה ואתקטעית גלודי מן עלא כדודי

'After they made me drink (it), my flesh and the flesh of my face was scattered (from my bones), and my skin was hacked off from my cheeks.' (T-S Ar. 37.39, 2v. 9-11)

(56) **ובעד מ[א]** אסקוני אתנתר לחמי ולחם ווגה ואתקטעית גלודי מן עלה לחמי

'After they made me drink, my flesh and the flesh of my face fell off and my skin was hacked off from my flesh.' (Cairo JC 104, 13v. 6-8).

Not only are temporal adverbial clauses denoting an 'after' relationship more common in the contemporaneous folk tale BnF Hébreu 583, the literary text also displays a greater variety of adverbial clause markers than the other folk tales in this corpus. In the following example (57), the complex prepositional phrase *mn b'd* (CA: *min ba'di*) acts as the head of a prepositional phrase with nominal dependents, e.g.,

(57) **מן בעד** תלת אושהור חוצרו פי מצר

'After three months they arrived in Cairo.' (BnF Hébreu 583, 19).

This prepositional phrase construction is extended by the addition of a complementiser to include that of head of an adverbial clause, a phenomenon present in CA:

(58) **מן בעד מא** עמל אל רב בדיקת חמץ ואראחו פי קראייה קעדו לארבע סעאת מן אל ליל

'After the Rabbi did the *chametz* check, they went for recitation (and) they stayed for four hours during the night.' (BnF Hébreu 583, 25-27).

In a phenomenon analogous to that found in the two preceding examples (57 and 58), the syntactic function of the adverbial phrase *fy m' b'd* (CA: *fīmā ba'du*) 'afterwards, later' is extended by the

addition of the complementiser *m* ' to include the function of head of an adverbial clause:

(59) **פִּי מֵא בַעַד** נָדָה אֶל רַב אַבְי' עַל מִמְזֵרְתִּי וְקָאֵל לְהָא אִנּוּלִי מִן מִכְאֲנִיד וְלַעִי אֶל נָאֵר לְאִגֵּל מֵא נִטְבּוֹךְ אֶל פֶּרָאךְ  
'Afterwards, Rabbi Abraham called up to his female idol, saying to her, 'Get down from your place and light the fire so that I may cook the chicken.' (BnF Hébreu 583, 66-67)

(60) **פִּי מֵא בַעַד מֵא** צִלוּ פֶּאֶל כְּנִיס חֲכוּ אֶל תַּלְמִידִים לֵל סִי' חֲכֹם בְּאֵלֶי גֵּרָא  
'After they prayed in the synagogue, the students told the rabbi about what happened.' (BnF Hébreu 583, 45-46).

Thus, the extension of the syntactic function of a preposition by the addition of a complementiser from head of a prepositional phrase with nominal dependents to the head of an adverbial clause (i) is analogous to the extension of the adverbial phrase (ii), which by the addition of a complementiser comes to fulfil the same function:

(i) prep. + nom. dep. = prep. phrase > prep. + compl. = adv. clause marker

(ii) adv./adv. phrase > adv. phrase + compl. = adv. clause marker

A comparable manifestation of this phenomenon is found in the contemporaneous text Cairo JC 104 in which the syntactic function of the adverb *tm* (CA: *tumma*) 'then' is enlarged by the addition of the complementiser 'nn to include that of head of an adverbial clause denoting 'after':

(61) **תָּם** חָפְרוּ לְהוּ קִבֵּר וְחִטּוּהָ פִּיהָ  
'Then, they dug a grave for him and put him in it.' (Cairo JC 104/8v. 11-12)

(62) **תָּוֶם אֲנָהוּם** חֲמִלוּנִי וְדוֹנִי לִגְהֵנָם וְשַׁחֲטוּנִי עֲלֵהּ וְגַהִי  
'After they picked me up, they threw me into hell and dragged me along on my face.' (Cairo JC 104/11r. 5-8).

#### *Eighteenth/nineteenth-century letters*

Finite temporal adverbial clauses denoting 'after' do not occur in T-S 13J25.24, Rylands L192 or T-S 10J16.35. However, there is one instance in the letter T-S 13J25.24 in which a non-finite clause appears:

(63) **וְחִסְבְּנָה עֲלֵאֵךְ ١٧٣** אֶל רִיאַל וְעִטְאָנָה פּוֹלְסָה בְּאַלֵּף וְתַמְנִיָּה ٢٠ רִיאַל פְּרַנְסָה **לְבַעַד** וְסוֹלָהּ לִיִּדְכּוֹם בַּעֲשֵׂר תִּיַּאֵם  
'We calculated that the value was 173 per *riyāl* and we gave (him) a sum of one thousand and eight and 20 French *riyāl* (to be cashed) after its arrival into your hands in ten days.' (T-S 13J25.24, col. 1, 42-col.2, 2) (Khan 2006: 46).

Genre & Date	Classmark	Subordinator	Frequency	Formal complexity	Syntactic function
15th c. folk tale	Firk. Evr.Arab.II 852	—	—	—	—
15th/16th c. folk tale	Firk. Evr.Arab.II 1528	—	—	—	—
15th/16th c. folk tale	Firk. Evr.Arab.I 2996	(non-finite) בעד	1	simple	non-AS
		בעד מא	1	complex	non-AS
late 15th c. letter	Bodl. MS Heb.c.72/13	—	—	—	—
late 15th c. letter	Bodl. MS Heb.c.72/39	—	—	—	—
late 15th c. letter	CUL T-S 13J26.7	—	—	—	—
late 15th c. letter	Bodl. MS Heb.c.72/18	בעד עלדי	1	complex	non-AS
17th/18th c. (?) folk tale	AIU VII.C.16	—	—	—	—
18th/19th c. folk tale	CUL T-S Ar. 37.39	אפי בעד מא	2	complex	non-AS
18th/19th c. folk tale	CUL T-S Ar. 46.10	בעד מא	1	complex	non-AS
19th c. folk tale	BnF Hébreu 583	מן בעד מא	1	complex	non-AS
		פי מא בעד מא	1	complex	non-AS
19th c. folk tale	Cairo JC 104	—	—	—	—
18th/19th c. letter	CUL T-S 13J25.24	(non-finite) בעד	—	—	—
18th/19th c. letter	Man. Rylands L192	—	—	—	—
18th/19th c. letter	CUL T-S 10J16.35	—	—	—	—

Table 2.3. Temporal adverbial subordinators: ‘after’

### Summary

Temporal adverbial clauses referring to a subsequent action/event (i.e., ‘after’) are far rarer than other forms of temporal adverbial clauses in these documentary and literary corpora. This is in part due to the popularity of adverbial phrases, particularly prevalent in the folk literature of all periods.

When this type of temporal adverbial clause does appear, it is generally introduced with a complex subordinator, comprising the prepositional/adverbial form *b’d* and a complementiser. The latter is most commonly the free relative particle *m’*, although the invariable JA relative particle *’ldy* is also used as a complementiser in two instances (cf. MS Heb.c.72/18 and BnF Hébreu 583).

The importance of the complementiser in marking prepositional/adverbial constructions as adverbial clause markers is made apparent in the role it plays in extending the syntactic function of an adverbial phrase to a complex adverbial subordinator (cf. BnF Hébreu 583).

In the later texts, complex adverbial clause markers are limited to folk tales, suggesting that they may have been regarded as literary features.

### 3.1.3.2. Purposive/resultative clauses

In Arabic and JA, purposive and resultative clauses are introduced with the same subordinators. Therefore, drawing distinctions between the two types of clause relies on the semantic context in which they appear. For this reason, I have chosen to examine these two types of adverbial clauses together. The former clause type refers to ‘a motivating event which must be unrealized at the time of the main event [i.e., in the main clause]’ (Thompson et al 2007: 250), whereas the latter expresses a direct causal (and sometimes temporal) link between the event/action of the main clause and the event/action in the subordinate clause (Häcker 1999: 184). Purposive clauses appear far more frequently in the corpora than resultative clauses.

In English, purposive subordinators are often followed by modal verbs, such as ‘can, should, could, would’ (Häcker 1999: 170, 182). Unlike temporal adverbial clauses, purposive clauses occur post-positionally in relation to the main clause in JA, and Arabic in general.

#### 3.1.3.2.1. ‘In order that/to’/ ‘so that’

##### *Fifteenth/sixteenth-century folk tales*

Purposive clauses are scarce in the fifteenth/sixteenth-century JA folk tales. Of the two instances of purposive clauses I have identified – which both occur in Evr.Arab.I 2996 – one is introduced by the semantically poly-functional subordinator *ḥt* (CA: *ḥattā*) ‘even, until, so that’ (Fischer 2002: 224-5, §229), while the other is headed by the bound particle *l-* + prefix conjugation (CA: *li-* + subjunctive):

(64) פקאל אלמלך בכלאם כאפי תעאלי אקרבי מני חתי אלחצק אליך פתקרבת מנה

‘The king replied with a suitable word, ‘Come, draw close to me so that I (can) hold you. So, she drew near to him...’ (Evr.Arab.I 2996, 12v. 17-19)

(65) תם אני אכדת סיפי וגרדתה ופי כפי אשהדתה וצובת [ ] הא לאקתלהא

‘After that, I took my sword and unsheathed it, and in my palm I called upon it (as my witness) and I aimed (it at) her in order to kill her.’ (Evr.Arab.I 2996, 10r. 5-7).

Both of these means of introducing purposive adverbial clauses are found in CA texts.<sup>160</sup>

In the following example (66), we find an asyndetic purpose clause:

<sup>160</sup> In CA, *ḥattā* + subjunctive occurs only ‘if an intention or possible result is expressed. Otherwise, the perfect or imperfect is used.’ (Fischer 2002: 109, §196.1). In post-CA, however, the subjunctive is used regardless of the context.

‘So, he sat down in front of him to write the letter.’ (Evr.Arab.II 1528, 3r. 24-25).

### *Late fifteenth-century letters*

Purposive clauses with a subordinator occur more frequently in the late fifteenth-century letter corpus than in the contemporaneous folk tale corpus. Evidence of this particular clause type is limited to the Magribi letter MS Heb.c.72/18.<sup>161</sup> The purposive clauses that occur in the letter are all introduced with the unusual subordinator *b-’š*:

(67) נזל ר' צוריאל ור' מצלח באש יאשתריו אל כובו ואל נביד

‘R. Tsurī’el and R. Mšlḥ disembarked in order to buy the bread and wine.’ (MS Heb.c.72/18, 1r. 5-6)

(68) ואפתרקנה מאע ואחד אל בארכה<sup>162</sup> באש נמורו פי סרקוסה

‘And we parted company with one (of them) yesterday so that we could go to and fro to Saraqūsa/Syracuse.’ (MS Heb.c.72/18, 1r. 4-5)

(69) ועמרו זוג מראכב באש יאכדו אל מרכב מתענה

‘They repaired (the) pair of boats so that they could take the boat belonging to us.’ (MS Heb.c.72/18, 1r. 7).

Wagner interprets the subordinator *b-’š* באש ‘in order to, so that’ as ‘a colloquial form of *bi-mā*’ (2014: 149), an Arabic compound subordinator comprising the bound preposition *bi-* and the free relative particle *mā* ‘since.’ The poly-functional Arabic free relative pronoun *mā* (whose many functions include that of interrogative) is supplanted by the colloquial interrogative *’ayš*, ‘which is then either monophthongised to *ēš* or shortened to *aš*.’ (ibid.). It is also worth noting the semantic development evident in this innovative colloquial adverbial subordinator. In CA and MSA, equivalent subordinators such as *bi-’an*, *bi-mā ’an/’anna* and *bi-mā ’inn* are generally understood to mean ‘since, because, for the reason that...’. Thus, they indicate a causal link between two clauses. The compound subordinator *b-’š* instead denotes a purposive relationship between the main and subordinate clauses.

### *Eighteenth/nineteenth-century folk tales*

Purposive adverbial clauses occur relatively frequently in the eighteenth/nineteenth-century folk tales. However, the simple subordinators seen in the earlier material appear to have been supplanted, on the whole, by complex subordinators, comprising preposition(s) and a complementizer. The most frequently recurring complex subordinator, common to all four manuscripts in this corpus is *l- + ’ǧl +*

<sup>161</sup> Wagner purports that this letter is ‘from Alexandria’ (2014: 148), thus implying that it was written by an Egyptian hand. However, various linguistic features found in the text (such as the particle of possession *mt/mt’* ‘of, belonging to’ suggest that this text was composed by a Magribian writer. The address on the recto of the letter also states that it was sent from סרקוסה *srqwsḥ*, which may be interpreted as either Syracuse, Sicily or Zaragoza, Spain. Given the time at which the letter was written, the former seems a more probable place of origin.

<sup>162</sup> cf. p. 60, n.69.

*m'/'n/'nn* 'in order to, so that' (CA: *li-'ağli 'an*). In this complex construction, the complementizers *'n/'nn* and *m'* are used interchangeably, marking the construction as head of an adverbial clause rather than head of a prepositional phrase (*l-'ğl*) with nominal dependents:<sup>163</sup>

(70) וכאנו אל יאוד יעמלו גוראל אוולאד אל יאוד לאגיל מא יעראפו מין אלדי ינ[עמ]ל קורבאן אל סנה [אל א]תייה  
'And the Jews used to cast lots for the children of the Jews in order to know who was to be made a sacrifice the following year.' (T-S Ar. 46.10, 1r. 28-30)

(71) וכאנו אל יאוד יעמלו גורל עלא אוולאד אל יאוד לאגל מא יערפו מין אלדי ינעמל קורבן אל סנה אל אתייה לאגל אן  
יטלע מצרופו מן ענד אל ערלים טול אל סנה

'And the Jews used to cast lots for the Jewish children in order that they would know who was to be made an offering the following year so that he might receive his expenses from the uncircumcised throughout the year.' (BnF Hébreu 583, 3-5)

(72) וקאל להא אנזלי מן מכאניך ולעי אל נאר לאגל מא נטבוך אל פראך

'He said, 'Come down from your place and light the fire so that we/I may cook the chickens.' (BnF Hébreu 583, 66-67)

(73) פי בעד סאעתין אלא וגו אל ערלים במוכב עטים לאגל אנהום יאכדו אל ולד יווכבו בו פאל בלד  
'After only two hours, the uncircumcised came in a great procession in order to take the boy to parade him through the town.' (BnF Hébreu 583, 51-52)

(74) פאל חין אנגמעו גמיע אלחוכמה ואלאטיבה לאגל אנהום ידאוני

'Then they gathered all the sages and physicians so that they (could) treat me. / Then, all the sages and the physicians gathered so that they (could) treat me.' (Cairo JC 104/5v. 8-10)

(75) פי אל חין אסתגמעו אל חוכמה ואל אטיבה לאגל מא ידווני

'Then they gathered the sages and the physicians so that they could treat me.' (T-S Ar. 37.39, 1r. 13-14).

In both the manuscripts Cairo JC 104 and T-S Ar. 37.39, we find an alternative complex construction acting as head of a purposive adverbial clause. In these examples (76 and 77), the CA-derived, semantically multi-functional subordinator *ħt* occurs as follows: *l- + ħt' + 'n/'nn* 'so that, in order to/that':

(76) אללה תועאלה יתבארך אסמו אלדי פכאני מן דאלך אלעדאב לחתא אן אגאוובך עלה גמיע מא סאלתני

'God, the Almighty, blessed be His name, who released me from that punishment so that I could

<sup>163</sup> In only one instance in the folk tale T-S Ar. 46.10 is the complementiser omitted from the construction when introducing a purposive adverbial clause, e.g., *זרה* 'Every year during their festival, they took one of the Jews so that they could make a sacrifice to (their) idol.' (T-S Ar. 46.10, 1r. 27-28).

answer you all that you asked me.’ (Cairo JC 104/15v. 5-8)

(77) פ[י] צובחאן אללה תוע אלדי פכני [מן] דאלך אל עדאב **לחתא אני** אגוובך עלא גמיע מא [סאלתני]

‘Praise be to God, the exalted, who untied me from that punishment so that I could answer you all that you asked me.’ (T-S Ar. 37.39, 3r. 14-15).

This subordinator minus the complementiser (i.e., *l-ht*) occurs in these two folk tales to introduce ‘until’ clauses (cf. §3.1.3.1.2). It would appear, therefore, that whereas in CA the semantic function of the subordinator *hattā* may be inferred only from the immediate context, in eighteenth/nineteenth-century JA a complementizer was consistently inserted into the construction when introducing purposive adverbial clauses, distinguishing between its various semantic functions and aiding comprehension.

In the eighteenth/nineteenth century folk tale T-S Ar.46.10, the complex subordinator *l-+ky + ’yn* ‘in order that’ (CA: *li-kay-mā*) acts as the head of a purposive adverbial clause, again attesting to the inter-changeability of the complementisers ‘*n*’, ‘*nn*’ and ‘*m*’:

(78) וכאנו אל יאוד יעמלו גוראל אוולאד אל יאוד לאגיל מא יעראפו מין אלדי י[[נייל קורבאן אל סנה [אל א]תייה **לכי אין**  
יטלע מצרופו מין ענד אל ערלים טול אל סנה

‘(Every year), the Jews used to cast lots for the children of the Jews in order to know who would be made a sacrifice the following year so that he (might) claim his expenses from the uncircumcised throughout the year.’ (T-S Ar. 46.10, 1r. 28-30).

In one instance in Cairo JC 104 and T-S Ar. 37.39, the overwhelming preference for introducing purposive adverbial clauses with complex subordinators is supplanted by the simple bound preposition *l-* + 1.c.sg. prefix conjugation verbal forms (CA: *li-* + subjunctive):

(79) וכונת יום דללת ללחמאם לנסתחמא פי דוכת גוא אלחמאם ווקעת וגושת

‘One day, I was entering the *ḥammām* in order to bathe, thereupon I became dizzy inside the *ḥammām* and I fell and fainted.’ (Cairo JC 104/5r. 13-15)

(80) וכונת יום דללת לל חמאם לנתגסיל פי אכדתני אל סכרא וגשיה פי אל חמאם

‘(One) day, I was entering the *ḥammām* in order to bathe (when) intoxication seized me and I fainted in the *ḥammām*.’ (T-S Ar. 37.39, 1r. 12-13).

#### *Eighteenth/nineteenth-century letters*

Purposive adverbial clauses seldom occur in the eighteenth/nineteenth-century letter corpus. Complex subordinators introducing this type of adverbial clause are also rare. The following example (81) contains the only instance in which a complex adverbial subordinator occurs. However, due to the physical state of the manuscript, the clause introduced by the subordinator is unfortunately lost:

(81) ולם תכלונא מן גיר אל שטר ואל לולי ואל שעיר בתוע אברהם מימון **לאגל מא** נס[למהום] לו

‘And you should not leave us without the ..., the pearls and barley belonging to Abraham Maimon so



that (we may give them) to him.’ (Rylands L192, 1 margin 1-2).

### *Summary*

Purposive adverbial clauses occur infrequently in the fifteenth/sixteenth century corpora, and where they do occur they are introduced by simple subordinators. An exception to this general trend – in terms of frequency – is MS Heb.c.72/18, in which there are four purposive adverbial clauses. Not only is the high level of distribution of purposive clauses notable in this Magribian letter, but so too is the simple, colloquial subordinator used to introduce them (cf. Wagner 2014). This subordinator is not evident in any of the other manuscripts I have edited or studied.

The simple subordinators favoured in the earlier corpora are almost universally supplanted by complex subordinating constructions in the late literary and documentary corpora. These prepositional constructions consistently take a complementiser when acting as head of a purposive adverbial clause. The complementizer appears necessary to differentiate between the prepositional and adverbial functions of a given construction, and to distinguish between different semantic functions of a subordinating construction. In general, purposive adverbial clauses are more common in late JA folk tales than in the contemporaneous letters.

In the later folk tales we see a minor increase in the use of CA-derived subordinators, such as *l-* and *l-+ky + 'n*.

### *3.1.3.3. Causal clauses*

Adverbial clauses expressing a reason for, or cause of the event/action in the main clause are most commonly introduced in CA with the compound subordinator, *li'anna* ‘because, for’, comprising the bound preposition *li-* ‘for’ and the complementiser *'anna* ‘that’. In CA, this subordinator is immediately followed by a substantive or suffix pronoun.

### *Fifteenth/sixteenth-century folk tales*

There are no instances of causal adverbial clauses in any of the fifteenth/sixteenth century folk tales examined here.

### *Late fifteenth-century letters*

There are no certain cases of causal adverbial clauses in this corpus.

### *Eighteenth/nineteenth-century folk tales*

Causal adverbial clauses occur a little more frequently in the eighteenth/nineteenth-century folk tales

than in earlier corpora, but only in the two versions of *Qiṣṣat al-ḡumḡuma* (T-S Ar. 37.39 and Cairo JC 104). In examples (82–85), *l'nn* is followed by a 3.m.sg. suffix pronoun, which in turn precedes the auxiliary verb *k'n* and a suffix conjugation, used to express continual or habitual action, e.g.,

(82) איצה קאלו לל ארץ כודיה ואסתנק[מי] מנו לאנו כאן יאכול זיר ויעבד גירו

‘Also, they said to the earth, ‘Take him and wreak your revenge on him because he destroys goodness and he worships others.’ (T-S Ar. 37.39, 3v. 2-3)

(83) איצה קאלו ללארץ כודיה ואסתנקמי מנו לאנהו כאן יאכול זיר אללה ויעבד גירו

‘Also, they said to the earth, ‘take him away and take your revenge on him because he destroys the goodness of God and he worships others than Him.’ (Cairo JC 104, 10r. 12-14)

(84) קאל להום אל שיד<sup>164</sup> כודו ועלקו פי סגרא טולהא סבעין דראע לאנהו כאן יאכול זיר אללה ויעבד גרו

‘The old man said to them, ‘Take him and tie him to a tree seventy *dirā*’<sup>165</sup> long because he destroys the goodness of God and worshipping others.’ (T-S Ar. 37.39, 3v. 20-2)

(85) פי קאל אלשיך כודוה ועלקוה פי סלסלה טולהא סבעין דראע לאנהו לם כאן יאמן באל תועאלה

‘Then the *ṣayḥ* said, ‘Take him and tie him in chains seventy *dir’a*’ long because he was not a believer in the Almighty!’ (Cairo JC 104, 11v. 3-6).

In the final example (86) found in Cairo JC 104, the subordinator is followed by the conditional particle *lw* (see §3.1.3.4.):

(86) וליס שביה להאזה אלחייאת ולהאזה אלעקארב . לאן לו כאן יאזן אללה סו" בוואחדה מנהום כאנת תזעזע אלארץ

‘(Surely) it was not equal to these serpents and these scorpions because if God, the Almighty, had permitted one of them, it would have convulsed the earth!’ (Cairo JC 104, 11v. 9-11).

### *Eighteenth/nineteenth-century letters*

The use of causal clauses is notably more consistent in the eighteenth/nineteenth-century letters than in contemporaneous folk tales or earlier letters and folk tales. These causal clauses are introduced using the CA-derived subordinator *l-’nn/l-’ynn* (MCA: *li-’inn*) (87–93) and the MCA compound subordinator *lš’n* ‘because, in order to’<sup>166</sup> (MCA: *’alašān*; *’ašān*) (94). Although these subordinators are used to introduce verbal clauses, in none of the instances found in these letters is the pronoun suffix attached to the subordinator:

(87) ומתווקף פי שי קליל מעאנה לאן כאן טאלב ۲۰ ריאל

‘...and he is expecting a little something from us because he had asked for 20 *riyāl*...’ (T-S 13J25.24, 1v. col. 1, 26-7)

(88) ולם תחרקוה מתל אל כיס אלדי ארסלנא לכום לאן קעדו נאסת יתחכו עלא אל־ע אלדי בעתוה

‘... and do not burn it, like the sack that we sent to you, because (some) people are talking about the

<sup>164</sup> Despite representing the Arabic grapheme *hā’* in this context (i.e., *ṣayḥ*), *kaf* contains a central diacritical dot, usually reserved for the denotation of Arabic *kāf*. This is the only instance in the text and, therefore, may be regarded as an error on the part of the writer.

<sup>165</sup> One *dir’a* is equal to 58 metres.

<sup>166</sup> *lš’n* (ECA: *’alašān*) may be used to introduce both causal and purposive subordinate clauses.

price which you sold it for.’ (T-S 13J25.24, 1v. col. 2, 41-2)

(89) אחנה נאכדו אלדי יוקצם לנה לאן שאפ ענדנה אצעאר אל חריר סער אללה ואל האצה

‘We will take what is apportioned/allotted to us because he saw (that) with us the prices of silk are the price of God and favourable...’ (T-S 13J25.24, 1v. col. 3, 3-4)

(90) וכדה וחיות אל עיש ואל מלח ואל מוחבה אן למ כונה רצין בידיל כלאם אלה לולה עלשאן כאטר {כום} לאן לאזים  
נקבחו מנדולפו ונעארוה

‘...and so, by the life of bread, salt and love (we swear) that we would not be satisfied with these words unless it was for your sake because it is necessary for us to condemn Mandolfo and (to) expose him!’ (T-S 13J25.24, 1v. col. 2, 23-6)

(91) למ יעיקו אין כאן אסערהא טרפכום מהאווד [ ] אל אחריות לאין אחסבו חסאבכום פי אלדי [ ] פ' בסבעין  
פצה אל אלפ' ביל צאג לאין [ ] חו צור טרפנא חאסן אבו אל פצל

‘...they will not be a hindrance if its prices are moderate in your region. [...] because you should do your account in which [...] at 70 silver (pieces to) the thousand in the standard currency because [...] Hāsan ‘Abū al-Faḍal visited our region...’ (Rylands L192, 1r. 19-21)

(92) תעטיהום למר חמי ותרטלו תטמנונא עלא אל דורה אין כאן אתצרפתו פיהא לאין זוהור כאבר פי טרפנא אין חצור  
ארבע מראכיב פרנסאוי פי נא א[מון] ופיהום מתגאר

‘You should give them to our teacher (and) Rabbi, my father-in-law and send (word) to reassure us about the maize (and) whether or not you have already disposed of it because news has emerged in our place that four French ships have arrived in Alexandria which contain (new) wares.’ (Rylands L192, 1r. 28-30)

(93) אעלמו אין נתוגהו טרפכום סאעה עלא גאפלה [ ] אל לאין זעלנא קאוי

‘...(you should) know that we will come to (your) region at an unspecified time [...] because we are very tired (of this state of affairs).’ (Rylands L192, 1r. margin 1).

In T-S 13J25.24, we find an instance in which the colloquial subordinator ‘*alašān*’ appears in conjunction with a complementiser (i.e., ‘*lš’n ’n*’), when introducing a causal clause. This may have resulted from an awareness of its colloquial origin and a desire to raise the subordinator above the quotidian, and in so doing ‘improve’ the language of the text:

(94) ואלס' פואה ה' בייעמיל בי עלשאן אן הווה למ יעאריה

‘... and Mr. Puwwa (may God bring him comfort) does it with me(?) because he does not condemn him...’ (T-S 13J25.24, 1v. col. 2, 26).

### *Summary*

Causal clauses are less frequent in these folk tales and letters than temporal and purposive adverbial clauses. Their most regular appearance is in the eighteenth/nineteenth-century letters. This may suggest that their function is predominantly communicative rather than descriptive.

The majority of causal subordinators that occur in these texts are introduced with the CA subordinator *l-'nn/l-'ynn*. In the eighteenth/nineteenth-century letters, the colloquial subordinator *'lš'n* appears, infrequently. In one occurrence, *'lš'n* is used in construct with the JA complementiser *'n/'nn*. This may be regarded as an attempt to elevate the colloquial form.

### 3.1.3.4. Conditional clauses

Conditional clauses may be broadly organised into two categories: those that depict an event or action that is grounded in reality; and those that refer to an imaginative or predictive scenario (Thompson et al 2007: 255–6). In CA, the former is generally introduced with the particle *'in* ‘if’, while the latter is preceded by the particle *law* ‘if’ (Fischer 2002: 227, §445).

The apodosis of an *'in* conditional clause is generally headed with the bound particle *fa-* in CA texts, while the apodosis of a *law* clause is introduced with the bound particle *la-*.

It is not unusual in CA for the particle *'in* to be followed by the auxiliary verb *kāna* (in either imperfect or perfect tense) when an identified event/action has been called into question. In this context, the imperfect form indicates an event/action that is likely to take place, whereas the perfect form denotes an event/action that has already happened (Fischer 2002: 229–30, §450b).

#### *Fifteenth/sixteenth century folk tales*

There is limited evidence in the fifteenth/sixteenth-century folk tales of *'in* and *law* conditional clauses, which only occur in the folk tale Evr.Arab.I 2996. In this manuscript, the CA distinction between *'in* and *law* are observed. The first two examples (95 and 96) from this text, in which the protasis is introduced with *'n knt*, pertain to ‘real’ events which are expected to be realised. In the first example (95), the apodosis is preceded by the particle *f-*, but this is omitted in the second example (96):

(95) **ואן כנת בקית הכדא מן סחרי ומכרי פאכרג מן הדה אלצורה אלי צורתך אלאולאנ'ה באדן כאלק אלבר'ה**

‘‘If you remained this way due to my witchcraft and my trickery, then leave this image to your first image with the permission of the Creator of creation.’’ (Evr.Arab.I 2996, 11r. 13–11v. 16)

(96) **פקאל אלשאב לה יא איהא אלמלך אן כנת נאים אסתיק'ן**

‘Then the young lad said to him, O King! If you were asleep, (then) wake up!’ (Evr.Arab.I 2996, 13r. 3–4).

In the following example (97) from the same manuscript, *lw* introduces a hypothetical clause. The apodosis is prefixed with the particle *l-* in keeping with CA convention:

(97) **לו כתב באלאבר עלי אמאק אלבצר לכאן עברה למן אצתבר**

‘If one wrote with the needle on the inner corner of the eye, it would be a warning to whomever was patient.’ (Evr.Arab.I 2996, 4v. 22–3).

This folk tale also exhibits a single example (98) of a negative conditional clause introduced with the compound particle *lwl* 'if not' (CA: *law-lā*). In keeping with CA practices, the particle is followed by a nominal (or in this case demonstrative) form, rather than a verb:

(98) **ולולא** הדא ואלא כנת קד תעאפית מן {זמאן}

'If it were not for this, you would have recovered long ago.' (Evr.Arab.I 2996, 11r. 3-4).

#### *Late fifteenth-century letters*

The use of conditional clauses in contemporaneous letters is notably more widespread, if not greater, than in the folk tales examined above. In these letters, the particle *'n* is used most commonly, followed either by *kana* or a prefix conjugation verb:

(99) בל קלת לה אני נכתב לך ואנך תסאעד ותעמל פאלקצד אנך **אן** לם תקדר תעמל ת[תדכ]ל עלי אלמעלם מחמד פאעד  
ויעמל אללה אללה פי דאלך

'Instead, you told him that I will write to you and that you will help and you will act upon the intention that – if you are not able (to) – you will contrive (to) intervene against the teacher Muḥammed Fā'id. May God, (O) God be active in this (matter).' (MS Heb.c.72/13, 1r. 18-9)

(100) **ואן כאן** תאכד עליהם שיי בעד דלך ארסל אעלמני

'...and if you take anything from me after that, send (word), informing me (of it).' (MS Heb.c.72/39, 1r. margin 2)

(101) **ואן** אלתארו יכשפו מן חסאב אלדכירה מן קדאם אלשהוד כאן אחסן

'If they had chosen to disclose/investigate the accounting/account of the supplies in front of witnesses, it would have been better.' (MS Heb.c.72/39, 1v. 3-4)

(102) **ואן כאן** אנטון יאכדהם אעטיהם לה

'...but if Anton takes them, give them to him.' (MS Heb.c.72/39, 1v. 20-1).

In MS Heb.c.72/18, there is one instance of a conditional clause. Despite its seemingly prosaic content, the protasis is introduced with the hypothetical conditional particle *lw*:

(103) נעלמך באן יגי ענדך ואחד אל נצראני קטלאני אסמו מיסר ברנארד **לו** אזינה נסראני גיד נרגבך באן תאקף שוי מעה  
בפיידה מתעך ומתעה

'I (am writing to) inform you that a Christian, a Catalanian called *mīsr* (i.e. 'mister') Bernard, is coming to your place. If I consider(ed) him (to be) a good Christian (then) I (would) request of you that you support him a little for your own benefit and for his (benefit)...' (MS Heb.c.72/18, 1r. 9-11).

#### *Eighteenth/nineteenth-century folk tales*

Conditional clauses are similarly infrequent in eighteenth/nineteenth-century folk tales as in fifteenth/sixteenth-century tales. *'n* conditional clauses are entirely absent from all four texts. Its hypothetical counterpart occurs once in T-S Ar. 37.39 and Cairo JC 104. In both instances, it is used

in conjunction with the auxiliary verb *k'n* and the apodosis is unmarked:

(104) לו כִּאֵן יֵאָדִין אֱלֵלָה לְוָאֲחַדָּה מִנְהוּם כִּאֵנַת תּוֹעֶזֶע אֶל אֶרֶץ

‘Even if God had condemned (only) one of them the earth would be convulsing (in fear).’ (T-S Ar. 37.39, 2r. 2-3)

(105) וְלִים שְׁבִיָּה לְהֵאֲדָה אֱלֹחֵיָאֵת וְלֵהֲאֲדָה אֱלֵעֲקָאֲרַב . לֵאֵן לֹ כִּאֵן יֵאָזֵן אֱלֵלָה סוֹ" בּוֹוֹאֲחַדָּה מִנְהוּם כִּאֵנַת תּוֹעֶזֶע אֱלֵאֲרֵץ  
‘(Surely) it was not equal to these serpents and these scorpions because if God, the Almighty had permitted one of them (to do so), it would have convulsed the earth!’ (Cairo JC 104, 11v. 9-11).

The CA temporal/conditional particle *'d'* (CA: *'idā*) occurs once in BnF Hébreu 583. Although strictly speaking a temporal subordinator ‘with conditional implication’ (Fischer 2002: 235, §464a), it is included here as its conditional implication outweighs the temporal in this context:

(106) פִּי קֵאלוּ אֶל עֲרֵלִים אֲחֵנָּה לֵנָּה וְאֶחָד וְאֵלֶּא כִּאֵן תַּעֲטוּנָה אֲתַנִּין אַחֲסָן וְאַחֲסָן

‘Then the uncircumcised said, ‘We have one (already), but if you give us two, so much the better!’ (BnF Hébreu 583, 140v. 24-141r. 1).

#### *Eighteenth/nineteenth century letters*

Not only is the use of conditional clauses more widespread in eighteenth/nineteenth-century letters than in the contemporaneous folk tales, but so too is the frequency with which they appear in each letter. As with the late fifteenth century letters, the most common particle used to introduce the protasis of a conditional clause is *'n/yn* ‘if’ (CA: *'in*). In keeping with CA convention, this particle is used to introduce the protasis of ‘real’ conditional clauses:

(107) וְאִין רֵאִינָה אֶל חָאֵל כְּדָה בְּאֶרֶץ אַעֲלָמוּ אִין נִתּוּגָהוּ טְרַפְכוּם סָאֵעָה עֲלָא גִאֲפֵלָה [ ] אֶל לֵאִין זַעֲלָנָה קֵאוֹי

‘If we consider that the situation is becoming more severe, (you should) know that we will come to (your) region at an unspecified time [...] because we are very tired (of this state of affairs)’ (Rylands L192, 1r. 35-margin 1).

In the majority of cases in all three manuscripts, the particle is followed by the 3.m.sg. (or occasionally 3.f.sg.) suffix conjugation of the verb *k'n* ‘to be’ (CA: *kāna*):

(108) וְאִין כִּאֵן קִבְּצָתוּם אֲרִסְלוּ עֲרַפּוֹנָה כִּיפִי קִבְּצָתוּ אֶל מַעֲמָלָה

‘If you have received them, send (word and) let us know what you thought of the (business) deal.’ (Rylands L192, 1r. 13-4)

(109) אִין כִּאֵנַת רֵאִיגָה פִּיל קִבֵּץ אֲרִסְלוּ עֲ[ר]פּוֹנָה נִקְבְּצוּ בּוֹוֹאֲלִיץ בְּתַמֵּן אֶל פֶּצָה

‘If revenue is brisk, send (word) informing us (of it and) we will acquire a policy at the (current) price of silver.’ (Rylands L192, 1r. 14-5)

(110) אִין לֹם יִנְזוּוֹהָ לֵאֲכֹן [ ] לֹם יַעֲיָקוּ אִין כִּאֵן אֲסַעֲרָה טְרַפְכוּם מֵהָאוּד

‘If they do not lower (the price of) it, but [...] they will not be a hindrance if its prices are moderate in your region.’ (Rylands L192, 1r. 17-8)

(111) וְתִרְסְלוּ תַמְנֻנָּה עֲלָא אֶל דּוֹרָה אִין כִּאֵן אֲתַצְרַפְתּוּ פִּיהָ לֵאִין זּוֹהוֹר כִּאֲבֵר פִּי טְרַפּוֹנָה אִין חוֹצוֹר אַרְבַּע מֵרֵאֲכִיב

פרנסאני פי נא א[מון] ופיהום מתגאר

‘...and send word to reassure us about the maize (i.e.,) whether or not you have already disposed of it because news has emerged in our place that four French ships have arrived in Na’ Amōn which contain (new) merchandise.’ (Rylands L192, 1r. 29).

The combined use of *n* and *k’n* appears to be such an established phenomenon in these late letters, that one writer (T-S 13J25.24) goes so far as to write the construction as a single unit, i.e., אנכאן *n-k’n* ‘if’.<sup>167</sup> This orthographic representation of *n* and *k’n* is also common in contemporaneous *šurūḥ* (Hary 2009: 234–5) and MCA:

(112) ואנכאן ילצכום ערפונה

‘If he frees you, let us know.’ (T-S 13J25.24, 1v. col.1, 38)

(113) ואל מזכור אתווגה לרשיד ולם ערפנה אנכאן כלאהא מעו

‘And the aforementioned has gone to Rašīd and he did not tell us whether he left it with him (or not)...’ (T-S 13J25.24, 1v. col.2, 3-4)

(114) ואנכאן דפע לכומ שי אלסי שמעון פראנסיס הי

‘...and (let us know) if Sayyid Simeon Francis, may God comfort him, has paid you.’ (T-S 13J25.24, 1v. col.2, 7).

The apodoses of the majority of conditional clauses found in this late corpus are left unmarked. However, in the following example (115) from T-S 13J25.24, the apodosis is prefixed with the bound conjunction *w-* ‘and’ (CA: *wa-*):

(115) ואנכאן לם ירסלו לנה ויתעבונה נרסלו עליהום אורדנס

‘...and if they do not send (it) to us, then they will force us to send them an injunction’ (T-S 13J25.24, 1v. col.2, 19-20).

In the letter Rylands L192, there is one instance (116) in which the omnipresent JA particle *n* is replaced by the conditional particle *lw* ‘if’ (CA: *law*). This particle is used, in adherence to CA practice, to introduce a hypothetical (unrealised) clause. This suggests an awareness on the part of these letter writers of the distinction between the two conditional particles:

(116) וקאל לנא אל מזכור לו כאן ביערפ אין פיל בובאת לם יפתשו כאן גאב בדאל אל צורה כמסין

‘And the aforementioned said to us if he had known that they would not be checking at the doors he

<sup>167</sup> In only one instance in T-S 13J25.24 is the construction *n k’n* ‘if’ written as two separate entities: וקאל לנה סי ‘Sayyid ‘Ezra, may God comfort him, said to us (that) if anything arrives (with the help of God) from abroad, then we should take what is allotted to us...’ (T-S 13J25.24, 1v. col.3, 3-4). This may have come about due to confusion arising from the use of two *n* particles side by side - one to refer to the verb *qāla*, and one to introduce the protasis of the conditional clause. In CA, *inna* follows *qāla*, while *in* precedes the conditional clause, however, that distinction does not seem to be maintained in written JA of this period.

would have taken out, instead of (only) one purse, fifty (purses).’ (Rylands L192, 1r. 23-25).

### Summary

Conditional clauses are more common in both late fifteenth- and eighteenth/nineteenth-century letters than in the respective contemporaneous folk tales. However, the types of conditional clauses found in each genre also vary; ‘real’ conditional clauses introduced with the particle *’n* are favoured in letters of all periods, while hypothetical conditional clauses preceded by the particle *lw* are more common in folk tales, particularly those of the eighteenth–nineteenth-centuries.

The functional/semantic distinctions between the particles *’n* and *lw* are, for the most part, observed in manuscripts of all genres and periods examined here. The combination of *’n k ’n* ‘if’ used to introduce the protasis of conditional clauses evident in both late fifteenth-century letters and fifteenth/sixteenth-century folk tales becomes a staple of conditional clauses in eighteenth/nineteenth-century letters. In T-S 13J25.24, the two separate entities are combined to form a single, invariable unit, attesting to its ubiquitous usage in letters of the period.

The marking of apodoses is partially observed in early folk tales, where we find both *f-* and *l-* used according to CA convention. Yet, in all other material apodoses of conditional clauses are not overtly indicated.

### 3.1.4. Conclusions

The findings of this comparative, diachronic study of adverbial subordination suggest that there are distinctions in the type of adverbial clause used in each genre. Temporal and purposive adverbial clauses are more common in folk tales than in contemporaneous letters. Yet, causal and conditional clauses appear more consistently in letters than folk tales.

Wagner, in her article on subordination in fifteenth- and sixteenth-century letters, states that ‘adverbial clauses are a phenomenon largely connected to written language’ (2014: 146). The findings of the comparative approach to adverbial clauses adopted here prompts us to go one step further in suggesting that temporal and purposive adverbial clauses are, on the whole, the preserve of written descriptive texts (such as folk tales), while causal and conditional adverbial clauses are favoured in more practical communications (such as letters).

The type of subordinator used also varies according to the type of adverbial clause; ‘complex’ subordinators are more commonly used to introduce temporal and purposive clauses, especially in the eighteenth- and nineteenth-century folk tales. ‘Simple’ subordinators, however, frequently act as heads of causal and conditional clauses and are more prevalent in letters.



To a certain extent, ‘complex’ adverbial subordinators which take a complementiser supplant simple, CA subordinators in later texts, particularly in folk tales. These ‘complex’ subordinators have at their centre lexical items which also function as prepositions and/or adverbs. The complementiser appears to serve an important syntactic (and sometimes semantic) function in demarcating the lexical item’s function in a given context.

#### 4. Concluding remarks

##### 4.1. The present study

This thesis has explored the orthographic, phonological and syntactic phenomena of fifteenth/sixteenth and eighteenth/nineteenth-century folk tales and letters, with the aim of establishing the degrees and nature of the linguistic variation between these two genres. The findings unveil a complex situation in which both inter-genre and diachronic linguistic variation is apparent.

Among the more remarkable discoveries in the linguistic differences between genres is the greater degree of phonetic information – reflected in the more frequent instances of *tafḥīm*, *tarqīq* and graphemic substitutions – found in folk tales compared to letters. A somewhat surprising finding was the higher frequency of phonetic representations in folk tales than letters, such as in the representation of *tā' marbūṭa* in the construct state. This may be a result of the type of literary text studied here; folk literature appears to contain a high degree of colloquial features. While double *vav* and *yod* are common to both genres, it was revealed that these two orthographic features are more common in folk tales than letters. An important contribution of this study to JA philology lies in the diachronic and inter-genre comparative assessment of the diacritical dot. Based on the examination of *ḡīm*'s representation in a small corpus of JA folk tales and letters between ninth and nineteenth centuries, I contend that the diacritical dot serves a predominantly practical, graphical function rather than functioning as a marker of phonetic (i.e. fricative) value. A study of the diacritical dot in *peh* for *fā'*, *dalet* for *dāl*, *kaf* for *ḥā'* and *kāf* and *gimel* for *gayn* in late written JA corroborates the interpretation of the dot as having a graphical, rather than phonetic, function. A further, more minor, contribution is presented in the exploration of possible motivations behind the writing of the definite article as a separate entity. I tentatively present the idea that the separation of the definite article from the substantive it modifies may have been borne of Judaeo-Spanish orthographic influence.

Consistent inter-genre differences are also apparent in the analysis of complement, relative and adverbial clauses and the subordinators used to introduce them. There is a higher degree of variation in the types of modalities of complement-taking predicates in the folk tale corpora than in the letter corpora. Syndetic relative clauses with a definite antecedent are also more common in the folk tale corpora than in either of the letter corpora. Asyndetic relative clauses with an indefinite antecedent are only found consistently in the fifteenth/sixteenth-century folk tales, revealing their more conservative adherence to CA convention. The findings of the study of adverbial subordination reveal distinctive differences in the type of adverbial clause used in each genre; letters favour causal and conditional adverbial clauses, while temporal and purposive adverbial clauses are more common in the folk tales.

Another point of interest is the frequent use of ‘complex’ adverbial subordinators in folk tales, while ‘simple’ subordinators abound in letters. In general, it would appear that relative and some types of adverbial clause are more characteristic of the style of literary texts than documentary texts.

The oft-cited features of late written JA abound in the texts examined in this thesis; phonetic representation of short vowels, defective spelling of long vowels, the writing of the definite article as a separate entity, and the use of double *vav* and *yod*. However, as Khan has remarked<sup>168</sup> these features become consistently used, not in the fifteenth/sixteenth-century material, but in the eighteenth/nineteenth-century manuscripts. This suggests that a major shift occurred in (approximately) seventeenth-century Egypt, or perhaps that the political changes in the fifteenth and early sixteenth centuries caused incremental shifts in the orthographic style of written JA that became cemented in the seventeenth/eighteenth century in Egypt.

#### 4.2. Prospective research

Due to the word limit, it has not been impossible to include a section on morphological variation in Egyptian JA folk tales and letters of the Ottoman period in this present study. I hope to examine this in a future publication. This thesis would also benefit from a more comprehensive study of syntax, including word order and prepositions, than has yet been undertaken. I would like to broaden the present study to include references to other genres, and to extend the diachronic analysis to include all periods of written JA.

The influence of Muslim Arabic evident in the increased use of the diacritical dot and the high degree of colloquial features common to modern Muslim Arabic, have encouraged me to question the current methodology of examining written JA in relation to written CA and contemporary dialects, without systematic reference to contemporaneous written Muslim and Christian Middle Arabic texts. In future I hope to pursue a comparative study of a single genre of written Judaeo-Arabic, Muslim and Christian Middle Arabic, in order to gain a clearer understanding of the degrees of linguistic affinity between the three varieties and to challenge the current methodological boundaries imposed on the philological study of written JA.

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<sup>168</sup> Prof. Khan stated in conversation that a major shift in written Middle Arabic appears to have occurred during the seventeenth century (Ottoman Arabic conference, University of Cambridge, April 2016). The findings of this thesis corroborate this assertion.

## Bibliography

- Aarts, B(2006) .. ‘Subordination’. In: K. Brown, ed., *Encyclopedia of Language and Linguistics*, 2nd ed. Boston: Elsevier, 248–54.
- . (2014) *The Oxford Dictionary of English Grammar* 2<sup>nd</sup> ed. Oxford: Oxford University Press .
- Abdel-Massih, E.T., Abdel-Malek, Z.N. and Badawi, E.M. with E.N. McCarus .(2009) .*A Reference Grammar of Egyptian Arabic* .Washington, DC: Georgetown University Press.
- Ackerman-Lieberman, P.I. (2014). ‘The Disappearance of the Early Phonetic Judaeo-Arabic Spelling (EPJAS) and Sa‘adya Gaon’s Translation of the Bible’. *Jerusalem Studies in Arabic and Islam*, 41, 137–72.
- Al-Ani, S.H. (2008). ‘Phonetics’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, III, 593–603.
- Al-Wer, E. (2008). ‘Phonological Merger’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, III, 603–5.
- (2009). ‘Variation’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, IV, 627–36.
- Andrews, A.D. (2007). ‘Relative Clauses’. In: T. Shopen, ed., *Language Typology and Syntactic Description*. 2nd ed. Cambridge: Cambridge University Press, II, 206–36.
- Arad, D. and Wagner, E.M. *Wisdom and Greatness in One Place: The 15th c. Alexandrian Trader Moses ben Judah and his Circle*. Leiden: Brill. (Forthcoming)
- Avishur, Y. (1992). ‘New Folk Tales about Abraham b. ‘Ezra (and his Sons) from Egypt and Iraq’. In: I. Levin and M. Itzhaki, eds., *Studies in the Works of Abraham b. ‘Ezra*. Tel Aviv: Tel Aviv University Press, 163–92. (Hebrew)
- Badawi, E.M. (1973). *Levels of Contemporary Arabic in Egypt*. Cairo: Dār ‘al-Ma‘ārif. (Arabic)
- Bakalla, M.H. (2009). ‘Tafxīm’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, IV, 421–4.
- Baneth, D.H. (1945–1946). ‘The Nunation (Tanwīn) in Judaeo-Arab Texts and its Development into a

Separate Particle'. *Bulletin of the Jewish Palestine Exploration Society*, 141–53. (Hebrew)

Behnstedt, P. (2006). 'Dialect Geography'. In: K. Versteegh et al., eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, I, 583–93.

—— and M. Woidich. (1985–1999). *Die ägyptisch-arabischen Dialekte*, 5 vols. Wiesbaden:

Harrassowitz. I, II

—— and M. Woidich. (2005). *Arabische Dialektgeographie: Eine Einführung*. Leiden: Brill.

Beinart, H. (2005). *The Expulsion of the Jews from Spain*. Oxford; Portland, Oregon: The Littman Library of Jewish Civilisation.

Benaim, A. (2012). *Sixteenth-Century Judeo-Spanish Testimonies : An Edition of Eighty-Four Testimonies from the Sephardic Responsa in the Ottoman Empire*. Leiden: Brill .

Blanc, H. (1960). 'Style Variations in Spoken Arabic: A Sample of Inter-dialectal Conversation'. In: C.A. Ferguson, ed., *Contributions to Arabic Linguistics*. Boston, Mass.: Harvard University Press, 81–156.

—— (1964). *Communal dialects in Baghdad*. Cambridge. Boston, Mass.: Harvard University Press.

—— (1969). 'The Fronting of Semitic *g* and the *qāl-gāl* Dialect Split in Arabic'. In: *Proceedings of the International Conference on Semitic Studies held in Jerusalem, 19–23 July 1965*. Jerusalem: Israel Academy of Sciences and Humanities, 7–37.

—— (1974). 'The *nekteb* – *nektebu* Imperfect in a Variety of Cairene Arabic'. *Israel Oriental Studies*, 4, 206–26.

—— (1981). 'Egyptian Arabic in the Seventeenth Century: Notes on the Judeo-Arabic Passages of *Darxe No'am* (Venice, 1697)'. In: S. Morag, I. Ben-Ami and N. A. Stillman, eds., *Studies in Judaism and Islam: Presented to Shelomo Dev Goitein on the Occasion of his Eightieth Birthday by his Students, Colleagues and Friends*. Jerusalem: Magnes Press, 185–202.

Blau, J. (1980). *A Grammar of Mediaeval Judaeo-Arabic*. 2nd ed. Jerusalem: Magnes Press. (Hebrew)

—— (1981). *The Emergence and Linguistic Background of Judaeo-Arabic: A Study of the Origins of Middle Arabic*. 2nd ed. Jerusalem: Ben-Zvi Institute.

—— and S. Hopkins. (1984). 'On Early Judaeo-Arabic Orthography'. *Zeitschrift für arabische Linguistik*, 9–27.

—— and S. Hopkins. (1987). 'Judaeo-Arabic Papyri: Collected, Edited, Translated and Analysed'. *Jerusalem Studies in Arabic and Islam*, 9, 87–160.

—— (2002). *A Handbook of Early Middle Arabic*. Jerusalem: The Hebrew University of Jerusalem.

- Boussofara-Omar, N. (2008). 'Diglossia'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, III, 629–37.
- Brockelmann, C. et al. (1935). *Die Transliteration der arabischen Schrift: in ihrer Anwendung auf die Hauptliteratursprachen der islamischen Welt*. Leipzig: Deutsche Morgenländische Gesellschaft.
- Bush, C. (2016). 'The Qāf in Arabic and its Semitic Background: The Gāl/Qāl Split and its Phonetic Origins'. Unpublished Tripos Part II thesis, University of Cambridge.
- Cachia, P. (2008). 'Arabic Literatures, 'Elite' and 'Folk' – Junctions and Disjunctions'. *Quaderni di Studi Arabi*, 3, 135–152.
- Cantineau, J. (1960). *Etudes de linguistique arabe: Mémorial Jean Cantineau*. Paris: Klincksieck.
- Connolly, M. M. (2018). 'A Nineteenth-Century Egyptian Judaeo-Arabic Folk Narrative: Text, Translation and Grammatical Notes'. In: N. Vidro, R. Vollandt, E.M. Wagner, J. Olszowy-Schlanger, eds., *Studies in Semitic Linguistics and Manuscripts*. Uppsala: University of Uppsala.
- (2019). 'Revisiting the question of *ḡīm* from the perspective of Judaeo-Arabic', *Journal of Semitic Studies*. (In Press)
- Cristofaro, S. (2003) *Subordination*. Oxford; New York: Oxford University Press.
- Davies, H.T. (1981). 'Seventeenth-Century Egyptian Arabic: A Profile of the Colloquial Material in Yūsuf al-Šīrbīnī's *Hazz al-quḥūf fī šarḥ Qaṣīd Abī Šādūf*'. Ph.D. Thesis. University of California, Berkeley.
- (2004–2007). *Yūsuf al-Šīrbīnī's Kitāb hazz al-quḥūf bi-Šarḥ qasōīd Abī Šādūf 'Brains confounded by the ode of Abū Shādūf' expounded, edited and introduced by Humphrey T. Davies*. Dudley, MA; Leuven: Peeters.
- Davies, S. (1995). 'Emphasis Spread in Arabic and Grounded Phonology'. *Linguistic Inquiry*, 26 (3), 465–98.
- (2009). 'Velarisation'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, IV, 636–8.
- Den Heijer, J. (2012a). 'Towards an Inventory of Middle and Mixed Arabic Features: The Inscriptions of Deir Mar Musa (Syria) as a Case Study'. In: L. Zack and A. Schippers, eds., *Mixed*

- Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 157–73.
- (2012b). ‘On Language and Religious Identity: The Case of Middle Arabic, with special reference to the Christian Arab communities in the medieval Middle East’. In: G. Mejdell and L. Edzard, eds., *High vs. Low and Mixed Varieties: Status, Norms and Functions across Time and Languages*. Wiesbaden: Harrassowitz, 53–87.
- (2012c). ‘Introduction: Middle and Mixed Arabic, A New Trend in Arabic Studies’. In: L. Zack and A. Schippers, eds., *Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 1–25.
- Diem, W. (2014). ‘Ägyptisch-Arabisch im 17. Jahrhundert. Die arabischen Zeugenaussagen in Mordechai ha-Levis *Sefer Darke no ‘am* (Venedig 1697)’. *Mediterranean Language Review*, 21, 1–89.
- Dikken, B.J. (2012). ‘Some Remarks About Middle Arabic and Sa‘adya Gaon’s Arabic Translation of the Pentateuch in Manuscripts of Jewish, Samaritan, Coptic Christian and Muslim Provenance’. In: L. Zack and A. Schippers, eds., *Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 51–81.
- Eckert, P. and Rickford, J.R. (2001). *Style and Sociolinguistic Variation*. Cambridge: Cambridge University Press.
- Edzard, L. (2009). ‘Qāf’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, IV, 1–3
- Elgibali, A. (1993). ‘Stability and Language Variation in Arabic: Cairene and Kuwaiti Dialects’. In: M. Eid and C. Holes, eds., *Perspectives on Arabic Linguistics V: Papers from the Fifth Annual Symposium on Arabic Linguistics*. Amsterdam; Philadelphia: John Benjamins Publishing Company.
- El-Hassan, S.A. (1977). ‘Educated Spoken Arabic in Egypt and the Levant: A Critical Review of Diglossia and Related Concepts’. *Archivum Linguisticum*, 8 (2), 112–31.
- Esseesy, M. (2010). *Grammaticalization of Arabic Prepositions and Subordinators: A Corpus-Based Study*. Leiden: Brill.
- Ferguson, C.A. (1959). ‘Diglossia’. *Word*, 15 (2), 325–40.
- Fischer, W. (2002). *A Grammar of Classical Arabic*. New Haven: Yale University Press.

- Folmer, M.L. (1995). *The Aramaic Language in the Achaemenid Period: A Study in Linguistic Variation*. Leuven: Peeters.
- Gacek, A. (2008). 'Nasx'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, III, 339–43.
- Gairdner, W.H.T. (1925). *The Phonetics of Arabic: A Phonetic Inquiry and Practical Manual for the Pronunciation of Classical Arabic and of One Colloquial (the Egyptian)*. London: Oxford University Press.
- Gil, M. (1997). *Be-malkhut Yishma 'el bi-tekufat ha-ge'onim*. Jerusalem: Mosad Byalik. (Hebrew)
- Goitein, S.D. (1972). 'Townsmen and Fellah: A Geniza Text from the Seventeenth Century'. *Asian and African Studies*, 8, 257–61.
- Gottheil, R. and Worrell, W.H. (1927). *Fragments from the Cairo Geniza in the Freer collection*. New York; London: Macmillan and Company.
- Greenblatt, J. (2011). *The Jewish Neo-Aramaic Dialect of Amadya*. Leiden; Boston: Brill.
- Greundler, B. (2006). 'Arabic Alphabet: Origin'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, I, 148–55.
- Gutwirth, E' .(1986) .The Family in Judeo-Spanish Genizah Letters of Cairo (XVIth—XVIIIth C.'. *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 73 (2), 210–15.
- (1999). 'A Judeo-Spanish *endecha* from the Cairo Genizah'. *Mediterranean Language Review*, 6-7, 113–20.
- Häcker, M. (1999). *Adverbial Clauses in Scots: A Semantic-Syntactic Study*. Berlin; New York: Mouton De Gruyter.
- Halkin, A.S. (2007). 'Judeo-Arabic Literature'. In: M. Berenbaum and F. Skolnik, eds., *Encyclopaedia Judaica*, 2nd ed. New York: Macmillan, XI, 530–45.
- Hary, B. (1989). 'Middle Arabic: Proposals for new terminology'. *Al-'Arabiyya*, 22, 19–36.
- (1992). *Multiglossia in Judaeo-Arabic*. Leiden: Brill.



- (1996a). ‘The *ḡīm-gīm* in Colloquial Urban Egyptian Arabic’. *Israel Oriental Studies*, 16, 153–68.
- (1996b). ‘Adaptations of Hebrew Script’. In: W. Bright and P. Daniels, eds., *The World’s Writing Systems*. New York; Oxford: Oxford University Press, 727–34.
- (1997a). ‘On Later and Modern Egyptian Judaeo-Arabic’. In: A. Afsaruddin and A. H. M. Zahniser, eds., *Humanism, Culture, and Language in the Near East: Studies in Honor of Georg Krotkoff*. Winona Lake, IN: Eisenbrauns, 199–224.
- (1997b). ‘The Impact of the Cairo Genizah Documents on the Study of the History of Arabic’. *Bulletin of the Israeli Academic Center in Cairo*, 21, 35–40.
- (2009). *Translating Religion: Linguistic Analysis of Judaeo-Arabic Sacred Texts from Egypt*. Leiden: Brill.
- (2010). ‘Cairo Collection’. In N. Stillman, ed., *Encyclopaedia of Jews in the Islamic World*. Leiden: Brill, I, 533–4.
- (2012). ‘Judeo-Arabic as a Mixed Language’. In: L. Zack and A. Schippers, eds., *Middle Arabic and Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 125–44.
- and Wein, M.J. (2013). ‘Religiolinguistics: on Jewish-, Christian-, and Muslim-defined languages’. *De Gruyter Mouton*, 220, 85–108.
- (2017). ‘Spoken Late Egyptian Judaeo-Arabic as Reflected in Written Forms’. *Jerusalem Studies in Arabic and Islam*, 44, 11–36.
- Hasson-Kenat, R. (2012). ‘The Story of Zayd and Kaḥlā’ – A Folk Story in a Judaeo-Arabic Manuscript’. In: L. Zack and A. Schippers, eds., *Middle Arabic and Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 145–46.
- (2016). *New Texts Written in Late Judaeo-Arabic from the Firkovitch Collection: Classification, Description and Sample Texts*. Hebrew University of Jerusalem. (Unpublished) (Hebrew)
- Heselwood, B. and Watson, J.C.E. (2013). ‘The Arabic Definite Article Does Not Assimilate’. *LWPLP*, 18, 34–53.
- Hinds, M. and Badawi, E.M. (1986). *A Dictionary of Egyptian Arabic: Arabic-English*. Beirut: Librairie du Liban.
- Holes, C. (1993). ‘The Uses of Variation: A Study in the Political Speeches of Gamal Abd al-Nasir’. In: M. Eid and C. Holes, eds., *Perspectives on Arabic Linguistics V: Papers from the Fifth Annual Symposium on Arabic Linguistics*. Amsterdam; Philadelphia: John Benjamins Publishing Company.
- (1995). *Modern Arabic: Structures, Functions and Varieties*. London; New York: Longman.

- Hume, E. (2006). 'Diachronic Aspects of Metathesis'. In: K. Brown, ed., *Encyclopedia of Language and Linguistics*, 2nd ed. Boston: Elsevier, 506–08.
- (2004). 'The Interdeterminacy/Attestation Model of Metathesis'. *Language*, 80 (2), 203–37.
- Jastrow, M. (1926). *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature*, Peabody, MA: Hendrickson Publishers.
- Kaplony, A. (2008). 'What Are Those Few Dots For? Thoughts on the Orthography of the Qurra Papyri (709–710), the Khurasan Parchments (755–777) and the Inscription of the Jerusalem Dome of the Rock (692)'. *Arabica*, 55, 91–112.
- Kaye, A.S. (1972a). 'Arabic /žiim/: A Synchronic and Diachronic Study'. *Linguistics* 79, 31–72.
- (1972b). 'Remarks on Diglossia in Arabic: Well-Defined vs. Ill-Defined'. *Linguistics*, 81, 511–12.
- Kazimirski, A.D.B. (1860). *Dictionnaire Arabe-Français*. 2 vols. Paris: Maisonneuve. I, II.
- Khan, G. (1991). 'A Study of the Judaeo-Arabic of Late Geniza documents and Its Comparison with Classical Judaeo-Arabic'. *Sefunot*, 20, 223–34. (Hebrew)
- (1992). 'Notes on the Grammar of a Late Judaeo-Arabic Text'. *Jerusalem Studies in Arabic and Islam*, 15, 220–39.
- (1999). *A Grammar of Neo-Aramaic: The Dialect of the Jews of Arbel*. Leiden; Boston; Köln: Brill.
- (2002). *The Neo-Aramaic Dialect of Qaraqosh*. Leiden; Boston: Brill.
- (2004). *The Jewish Neo-Aramaic Dialect of Sulemaniyya and Ḥalabja*. Leiden; Boston: Brill
- (2006). 'A Judaeo-Arabic Commercial Letter from Early Nineteenth Century Egypt'. *Ginzei Qedem*, 2, 37–58.
- (2007), 'Judaeo-Arabic'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, II, 526–36.
- (2008). *The Neo-Aramaic Dialect of Barwar*, 3 vols. Leiden; Boston: Brill.
- (2009). *The Jewish Neo-Aramaic Dialect of Sanandaj*. Piscataway, NJ: Gorgias Press.
- (2010). 'Vocalised Judaeo-Arabic manuscripts in the Cairo Genizah'. In: S. Bhayro and B. Outhwaite, eds., *From a Sacred Source: Genizah Studies in Honour of Professor Stefan C. Reif*. Leiden: Brill, 201–17.
- (2011). 'Middle Arabic'. In: S. Weninger et al, eds., *The Semitic Languages: An International Handbook*. Berlin; Boston: De Gruyter Mouton, 817–35.

- (2013a). ‘A Judaeo-Arabic Document from Ottoman Egypt in the Rylands Genizah Collection’. In: R. Smithuis and P. S. Alexander, eds., *From Cairo to Manchester: Studies in the Rylands Genizah Fragments*. Oxford: Oxford University Press, 233–48.
- (2013b). ‘Tiberian Reading Tradition’. In: G. Khan et al, eds., *Encyclopedia of Hebrew Language and Linguistics*. Leiden: Brill.
- (2016a). ‘Judeo-Arabic’. In: L. Kahn and A. D. Rubin, eds., *Handbook of Jewish Languages*. Leiden: Brill, 22–63.
- (2016b). *The Neo-Aramaic Dialect of the Assyrian Christians of Urmi*. 4 vols. Leiden; Boston: Brill.
- Kortmann, B. 1997. *Adverbial Subordination: A Typology and History of Adverbial Subordinators Based on European Languages*. New York; Berlin: Mouton de Gruyter.
- Kraemer, J.L. (1991). ‘Spanish ladies from the Cairo Geniza’. *Mediterranean Historical Review*, 6 (2), 237–67.
- Krumbacher, K. (1903). *Das Problem der neugriechischen Schriftsprache*. Munich: Verlag der K.B. Akademie.
- Lane, E.W(1863) .. *Arabic-English Lexicon*. London: Williams and Norgate.
- Lebedev, V.V. 1965. ‘Skazka o zolotq gazele: obrazõik arabskogo fol'klora XVII veka’. *Semítskie Jazyki*, 2, 521–32.
- Lentin, J. (1997). *Recherches sur l’histoire de la langue arabe au Proche-Orient à l’époque moderne*. Thèse pour le Doctorat d’Etat ès-lettres. Université de la Sorbonne Nouvelle-Paris III. (Unpublished) (French)
- (2008). ‘Middle Arabic’. In: K. Versteegh et al. (eds), *Encyclopedia of Arabic Language and Linguistics*, Leiden: Brill, III, 215–24.
- and Grand’Henry. (2008). *Moyen arabe et variétés mixtes de l’arabe à travers l’histoire: Actes du Premier Colloque International (Louvain-la-Neuve, 10–14 mai 2004)*. Louvain-la-Neuve: Peeters-Université catholique de Louvain. (French)
- (2012). ‘Normes Orthographiques en Moyen Arabe: Sur la Notation du Vocalisme Bref’. In: L. Zack and A. Schippers, eds., *Middle Arabic and Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 209–34. (French)
- LeTourneau, M.S. (2009). ‘Subordination’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic*

- Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period*  
*Language and Linguistics*. Leiden: Brill, IV, 360–7.
- Martinet, A. (1959). ‘La Palatalisation ‘spontanée’ de g en arabe’. *BSL*, 54, 90–102.
- Marçais, W. (1930–31). ‘La diglossie arabe: La langue arabe dans l’Afrique du Nord etc’.  
*L’Enseignement Public*, 97, 401–09; 105, 20–39, 121–78.
- Meiseles, G. (1980). ‘Educated spoken Arabic and the Arabic language continuum’. *Archivum Linguisticum*, 11, 118–43.
- Mejdell, G. (2012). ‘Playing the Same Game? Notes on Comparing Spoken Contemporary Mixed Arabic and (Pre)Modern Written Middle Arabic’. In: L. Zack and A. Schippers, eds., *Middle Arabic and Mixed Arabic: Diachrony and Synchrony*. Leiden; Boston: Brill, 235–46.
- Motzkin, A.L. (1965). *The Arabic Correspondence of Judge Elijah and his Family: A Chapter in the Social History of Thirteenth Century Egypt*. Ph.D. Thesis. University of Pennsylvania. Michigan: Ann Arbor, University Microfilms.
- Nikolaeva, I. (2006). ‘Relative Clauses’. In: K. Brown, ed., *Encyclopedia of Language and Linguistics*, 2nd ed. Boston: Elsevier, 501–08.
- Noonan, M. (2006). ‘Complement Clauses’. In: K. Brown, ed., *Encyclopedia of Language and Linguistics*, 2nd ed. Boston: Elsevier, 694–7.
- (2007). ‘Complementation’. In: T. Shopen, ed., *Language Typology and Syntactic Description*. 2nd ed. Cambridge: Cambridge University Press, II, 150–52.
- Olson, M.L. (1981). *Barai Clause Junctures: Toward a Functional Theory of Interclausal Relations*. Ph.D. Thesis. The Australian National University. (Unpublished)
- Ørum, O. G. (2014). *Written and Spoken Judaeo-Arabic in 19th-Century Egypt. With an Edition, Translation and Grammatical Study of Qiṣṣat al-Jumjuma*. MA Thesis. University of Oslo. (Unpublished)
- (2017). *Uṣṣit il-Gumguma or “The Story of the Skull”: With Parallel Versions, Translation and Linguistic Analysis of Three 19th-Century Judaeo-Arabic Manuscripts from Egypt*. Leiden: Brill.
- Owens, J. (2006). *A Linguistic History of Arabic*. Oxford; New York: Oxford University Press.

- Palva, H. (2000). 'Linguistic Notes on a Dialectal 17th-18th Century Egyptian Arabic Narrative'. *Oriente Moderno*, 19 (80), 83–97.
- (2007). 'A 17th-18th Century Manuscript in Spoken Egyptian Arabic: Part One: Text and Translation'. *Le Muséon*, 120 (3–4), 395–433.
- (2008a). 'A 17th-18th Century Manuscript in Spoken Egyptian Arabic: Part Two: Linguistic Notes'. *Le Muséon*, 121 (1–2), 93–123.
- (2008b). 'Notes on the Language Form of some 14th–16th-Century Arabic Manuscripts Written in Hebrew Characters'. In: J. Lentin and J. Grand' Henry, eds., *Moyen arabe et variétés mixtes de l'arabe à travers l'histoire: Actes du Premier Colloque International (Louvain-la-Neuve, 10–14 mai 2004)*. Louvain-la-Neuve: Peeters-Université catholique de Louvain, 373–89.
- Parkinson, D. (1993). 'Knowing Standard Arabic: Testing Egyptian's MSA Abilities'. In: M. Eid and C. Holes, eds., *Perspectives on Arabic Linguistics V: Papers from the Fifth Annual Symposium on Arabic Linguistics*. Amsterdam; Philadelphia: John Benjamins Publishing Company.
- Popa, E. (2008). 'Non-finite and Verbless Clauses: Textual values'. *RRL*, 53 (3), 329–39.
- Quirk, R. et al (1985). *A Comprehensive Grammar of the English Language*. London: Longman.
- Rosenbaum, G.M. (2002). 'Spoken Jewish Arabic in Modern Egypt: Hebrew and Non-standard Components'. *Massorot*, 12, 117–48. (Hebrew)
- (2003). 'Another Egyptian Dialect: Spoken Jewish Arabic in Egypt in the Twentieth Century'. In: I. Ferrando and J.J. Sanchez Sandoval, eds., *AIDA 5<sup>th</sup> Conference Proceedings, Cadiz, September 2002*. Cadiz: Universidad de Cadiz, 545–60.
- (2006). 'The Arabic Dialect of Jews in Modern Egypt'. *Bulletin of the Israeli Academic Centre in Cairo*, 25, 35–46.
- (2008). 'Mixing Colloquial and Literary Arabic in Modern Egyptian Arabic Prose Through the Use of Free Indirect Style and Interior Monologue'. In: J. Lentin and J. Grand' Henry, eds., *Moyen arabe et variétés mixtes de l'arabe à travers l'histoire: Actes du Premier Colloque International (Louvain-la-Neuve, 10–14 mai 2004)*. Louvain-la-Neuve: Peeters-Université catholique de Louvain, 391–404.
- Ryding, K.C. (2005). *A Reference Grammar of Modern Standard Arabic*. Cambridge; New York: Cambridge University Press.
- Schippers, A. (2008). 'The Middle Arabic of Nissim Ibn Šāhīn (990–1062)'. In: J. Lentin and J. Grand' Henry, eds., *Moyen arabe et variétés mixtes de l'arabe à travers l'histoire: Actes du*

- Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period*  
*Premier Colloque International (Louvain-la-Neuve, 10–14 mai 2004)*. Louvain-la-Neuve: Peeters-  
 Université catholique de Louvain, 423–38.
- Schorreel, T. (2011). *An Edition and Translation of T-S Ar. 54.63 with a Grammatical Analysis of the Text*. MA Thesis. Universiteit Gent. (Unpublished)
- Sijpesteijn, P.M. (2008). ‘Paleography’. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, III, 513–24.
- Al-Tamimi, F. and Heselwood, B. (2011). ‘Nasoendoscopic, Videofluoroscopic and Acoustic Study of Plain and Emphatic Coronals in Jordanian Arabic’. *Instrumental Studies in Arabic Phonetics*, 163–92.
- Testen, D.D. (1998). *Parallels in Semitic Linguistics: The Development of Arabic la- and Related Semitic Particles*. Leiden; Boston; Köln: Brill.
- Thompson, S.A., Longacre, R.E. and Hwang, S.J.J. (2007). ‘Adverbial clauses’. In: T. Shopen, ed., *Language Typology and Syntactic Description*. 2nd ed. Cambridge: Cambridge University Press, II, 237–300.
- Van Koningsveld, P.S. (1978). ‘Arabica-Islam’. *Bibliotheca Orientalis*, 36 (1), 93–4.
- Versteegh, K. (2017). ‘Religion as a Linguistic Variable in Christian Greek, Latin, and Arabic’. In: N.S. Eggen and R.H. Issa, eds., *Philologists in the World: A Festschrift in Honour of Professor of Arabic Language and Culture, Gunvor Mejdell*. Oslo: Novus Forlag, 55–85.
- Wagner, E.M. (2010). *Linguistic Variety of Judaeo-Arabic in Letters from the Cairo Genizah*. Leiden: Brill.
- (2014). ‘Subordination in 15th- and 16th-Century Judeo-Arabic’. *Journal of Jewish Languages*, 2, 143–64.
- Watson, J.C.E. (1999). ‘Remarks and Replies: The Directionality of Emphasis Spread in Arabic’. *Linguistic Inquiry*, 30 (2), 289–300.
- (2002). *The Phonology and Morphology of Arabic*. Oxford: Oxford University Press.
- Wehr, H. (1979). *A Dictionary of Modern Written Arabic*. 4th ed. Translated by J. Milton Cowan. Wiesbaden: Harrassowitz.

- Woidich, M. (1996). 'Rural Dialect of Egyptian Arabic: An Overview'. *Egypte/Monde Arabe*, 27 (8), 325–54.
- and L. Zack. (2009). 'The g/ğ-Question in Egyptian Arabic Revisited', in E. Al-Wer and R. de Jong, eds., *Arabic Dialectology: In Honour of Clive Holes on the Occasion of his Sixtieth Birthday*. Leiden; Boston: Brill, 41–62.
- Zaborski, A. (2007). 'Jīm', In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, II, 494–96.
- Zack, L. (2009). 'Egyptian Arabic in the Seventeenth Century: a Study and Edition of Yusuf al-Mağribi's *Daf' al-iṣr 'an kalām ahl Miṣr*.' Utrecht: LOT. (LOT Dissertation Series; 199).
- Zemánek, P. (2006). 'Assimilation'. In: K. Versteegh et al, eds., *Encyclopedia of Arabic Language and Linguistics*. Leiden: Brill, I, 204–6.
- Oxford English Dictionary* [online]. Oxford: Oxford University Press. Available at: <http://www.oed.com/> [Accessed: 9th August 2017].