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

Magdalen Majella Connolly
Emmanuel College, Cambridge

28th February 2018

This dissertation is submitted for the degree of Doctor of Philosophy
To Mak,
for his perseverance, patience and encouragement
and
in loving memory of my granny, Honoria Edmondson (née Fitzgerald),
Acknowledgements

Let me begin by thanking the funding bodies, which have, in the most practical of terms, made this PhD research project possible. I am honoured to have been a recipient of the Cambridge Home and European Scholarship Scheme (CHESS) and a Rothschild Hanadiv Europe field-work grant.

There are a great number of people to thank who have, in their various ways, contributed to the compilation of this thesis. First and foremost, I am indebted to Prof. Geoffrey Khan (FAMES), my supervisor, who with his warmth, humour and immense intelligence has guided me through this process with patience and generosity. I am particularly grateful to him for his help in the past seven weeks and for his careful and patient proof-reading of this thesis. I could not have wished for a better supervisor.

It was a great honour to be examined for the PhD by Prof. Benjamin Hary and Dr. Michael Rand. I greatly appreciate their insights, comments and criticisms, which have enriched this final version of the thesis.

I would also like to thank Dr. Aaron Horinkohl (FAMES) and Dr. Michael Rand (FAMES), who in their different ways have encouraged and supported me throughout the last three years. I am especially grateful to Dr. Aaron Horinkohl, who so kindly agreed to proof-read this thesis at the last minute. His meticulous proof-reading has been invaluable. I would also like to take this opportunity to express my appreciation for the wonderful Horinkohl family, Anna, Yoel, Yoni and Emily, who have welcomed so many students into their home with great warmth and generosity. I also owe a great debt of gratitude to Dr. Esther-Miriam Wagner (Woolf Institute) for taking me under her wing at the start of this process. Her work on written Judaeo-Arabic correspondence is a great inspiration for those of us who aspire to follow in her footsteps. I cannot thank Prof. Siam Bhayro (University of Exeter) enough for introducing me to the Cairo Genizah, and thus many years of learning. I am profoundly grateful to Prof. Heikki Palva who very kindly sent me his personal copy of a microfilm from the Firkovitch collection, containing manuscripts, which (at the time) I would otherwise have been unable to examine. His generosity is very much appreciated. I am indebted to Mahsa Naraghi and the IT office at Emmanuel College for lending me a computer for the past eight months so that I could write up this thesis.

To my parents, I thank you for bringing me up in such a way, and in such an environment that undertaking a PhD was not complete madness. To my many siblings, sisters- and brother-in-law, nieces and nephews; I love you all.

I will always be profoundly grateful to Alan and Sheila MacDermot, whose generosity made all of this possible.
It is difficult to express the extent of my deep and heartfelt gratitude and love for Mak. His support throughout the many challenges of the past few years has not only been crucial to the successful completion of this thesis, but also to huge personal growth.

Cambridge, 28th February 2018
# Table of Contents

**Acknowledgements** ............................................................................................................................. ii  
**Table of Contents** ......................................................................................................................................... iv  
1. Introduction ...................................................................................................................................................... 1  
   1.1. Diglossia and Variation in Arabic ............................................................................................................. 1  
   1.2. Methodology .............................................................................................................................................. 6  
   1.3. Corpora ...................................................................................................................................................... 7  
      (i) Fifteenth/sixteenth-century folk tales .................................................................................................... 7  
      (ii) Late fifteenth-century letters ............................................................................................................... 9  
      (iii) Eighteenth/nineteenth-century folk tales .......................................................................................... 10  
      (iv) Eighteenth/nineteenth-century letters ............................................................................................ 11  
   1.4. Aims of this study ..................................................................................................................................... 12  
   1.5. Thesis Structure ..................................................................................................................................... 12  
2. Orthography and Phonology .......................................................................................................................... 13  
   2.1. Consonants .............................................................................................................................................. 13  
      2.1.1. The diacritical dot ................................................................................................................................ 13  
      2.1.1.1. peh for fā’ ...................................................................................................................................... 14  
      2.1.1.2. dalet for dāl ................................................................................................................................. 17  
      2.1.1.3. kaf for ḫā’ and kāf’ ...................................................................................................................... 20  
      2.1.1.4. gimel for ḡayn ........................................................................................................................... 22  
      2.1.2. gimel for ḡīm .................................................................................................................................. 24  
      2.1.2.1. The origins of fronted ḡīm and its chronological development .................................................. 26  
      2.1.2.2. JA orthographic representations of ḡīm .................................................................................... 32  
      2.1.2.2.1. The diacritic ........................................................................................................................... 32  
      2.1.2.2.2. Assimilation and metathesis ................................................................................................... 38  
      2.1.3. Graphemic substitutions, taḥīm and tarqīq ...................................................................................... 41  
      2.1.3.1. Graphemic Substitutions ............................................................................................................. 43  
      2.1.3.1.1. gimel for sīn ............................................................................................................................ 43  
      2.1.3.1.2. ḍet/ṭet + dot for dād ............................................................................................................... 43  
      2.1.3.1.3. šadeh/ṣadeh + dot for ṣā’ .......................................................................................................... 44  
      2.1.3.1.4. tav for dāl ............................................................................................................................... 44  
      2.1.3.1.5. dalet for ṭā’ ............................................................................................................................ 44
2.1.3.1.6. sin/sin for sīn……………………………………………………………44
2.1.3.1.7. šadeh + dot for żā’………………………………………………………45
2.1.3.1.8. šadeh + dot for żā’………………………………………………………45
2.1.3.1.9. zayin for dāl ………………………………………………………………45
2.1.3.1.10. samekh for sīn……………………………………………………………45
2.1.3.1.11. šadeh + dot for żā’………………………………………………………46
2.1.3.1.12. zayin for dāl ………………………………………………………………46
2.1.3.1.13. zayin for dād ………………………………………………………………46
2.1.3.1.14. tav for dād…………………………………………………………………46

2.1.3.2. tafḫīm …………………………………………………………………………46
2.1.3.2.1. šādeh for sīn………………………………………………………………47
2.1.3.2.2. ṭet for tā’……………………………………………………………………47
2.1.3.2.3. šadeh for sīn………………………………………………………………47
2.1.3.2.4. ṭet for tā’……………………………………………………………………48
2.1.3.2.5. šadeh + dot for dāl…………………………………………………………48
2.1.3.2.6. šādeh for sīn………………………………………………………………49
2.1.3.2.7. ṭet for tav……………………………………………………………………49
2.1.3.2.8. šadeh + dot for dāl…………………………………………………………49

2.1.3.3. tarqīq……………………………………………………………………………50
2.1.3.3.1. samekh for ṣād ………………………………………………………………50
2.1.3.3.2. dalet for ḍād…………………………………………………………………50
2.1.3.3.3. samekh for ṣād ………………………………………………………………51
2.1.3.3.4. tav for ṭā’……………………………………………………………………51
2.1.3.3.5. dalet for ḍād…………………………………………………………………51
2.1.3.3.6. samekh for ṣād ………………………………………………………………51
2.1.3.3.7. zayin for żā’…………………………………………………………………52

2.1.3.4. Simultaneous tafḫīm and tarqīq……………………………………………52

2.1.4. Ṭā’ marbūṭa ………………………………………………………………………54
2.1.4.1. Non-construct state ṭā’ marbūṭa …………………………………………54
2.1.4.2. Ṭā’ marbūṭa in construct state …………………………………………56
2.1.4.2.1. heh’alef for ṭā’ marbūṭa in construct state…………………………56
2.1.4.2.2. heh + " for ṭā’ marbūṭa in construct state……………………………57
2.1.4.2.3. tav for ṭā’ marbūṭa in construct state………………………………58
2.5.1. Assimilation of /l/ .................................................................96
2.5.1.1. Definite article + coronal consonants ..................................96
2.5.1.2. w-/b- + definite article.......................................................97
2.5.1.3. fy + definite article..........................................................99
2.5.2. The definite article as an independent morpheme........................100
2.5.2.1. The definite article in these corpora-------------------------------100
2.5.2.2. Separation of the definite article: exploring a possible cause.....101
2.6. Summary ..........................................................................................103
3. Syntax ..................................................................................................106
3.1. Subordination.....................................................................................106
3.1.1. Complement clauses ....................................................................106
3.1.1.1. Syndetic ..............................................................................108
3.1.1.1.1. Non-Factual ....................................................................108
3.1.1.1.2. Factual ...........................................................................116
3.1.1.2. Asyndetic ...........................................................................127
3.1.1.2.1. Non-factual ....................................................................127
3.1.1.2.2. Factual ...........................................................................139
3.1.1.3. Conclusions...........................................................................141
3.1.2. Relative clauses ..........................................................................142
3.1.2.1. Syndetic Relative Clauses.......................................................143
3.1.2.1.1. Definite Nominal Antecedent ...........................................143
3.1.2.1.2. Pronominal Antecedents ..................................................150
3.1.2.1.3. Indefinite Nominal Antecedent ........................................151
3.1.2.2. Asyndetic Relative Clauses.......................................................154
3.1.2.2.1. Indefinite Nominal Antecedent ...........................................154
3.1.2.2.2. Definite Nominal Antecedent ............................................156
3.1.2.3. Free Relative Clauses............................................................158
3.1.2.3.1. Indefinite Free Relative Clauses ........................................158
3.1.2.3.2. Definite Free Relative Clauses............................................163
3.1.2.3.3. Quantifiers ......................................................................166
3.1.3. Adverbial clauses .........................................................................168
3.1.3.1. Temporal adverbial clauses....................................................169
3.1.3.1.1. ‘When’............................................................................170
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 publications1 in the 1960s, among which is found Ferguson’s (1959) article entitled ‘Diglossia’. In this paper, Ferguson applies the term diglossia2 to four case studies3 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).4 With regard to Arabic, Ferguson identifies the ‘high’ variety – ʾal-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,5 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

---

1 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).
2 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).
3 Besides Arabic, the other languages discussed in this paper are Greek, Swiss German and Haitian Creole.
4 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.
5 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).6

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)7 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

---

6 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).

7 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).8


Written JA10 is Arabic composed in Hebrew characters.11 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).12 This categorisation is based predominantly on

---

8 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).

9 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.

10 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).

11 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).

12 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\(^1\) to denote Arabic phonemes with their phonetic, as opposed to graphemic, cognates using the Hebrew alphabet (Blau and Hopkins 1984: 9–10).\(^2\) One of the most commonly cited features of early JA orthography is the representation of Arabic ḏād with the Hebrew grapheme dalet: the voiced retroflex stop /dˤ/ pronunciation of ḏād 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.\(^3\) The adjustment

---

\(^1\) 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).

\(^2\) 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.

\(^3\) 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 ḍād 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 – 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, ḍād 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.


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

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).

16 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).

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

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\(^{18}\) and one documentary genre\(^{19}\) 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’\(^{20}\) 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.\(^{21}\) 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.

---

\(^{18}\) 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 q\(\text{is\(\text{s}a\text{t \text{'al-\text{ğum\(\text{g}u\text{m}m\(\text{a}}\text{ The Story of the Skull'}\)\)}}\)

\(^{19}\) 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.

\(^{20}\) 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.

\(^{21}\) 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 š\(\text{ur\(\text{ü}h}\), 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. 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. The first two folk tales in this corpus comprise different

---

22 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 13125.24 (Khan 2006).

23 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: ʿḥikāyat ʿal-ḥarb bayn ʿal-ṭuyūr wa-ʿal-wuḥūš ‘The story of the war between the birds and the beasts’ (Evr.Arab.II 852 and Evr.Arab.II 1528).\textsuperscript{24} 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,\textsuperscript{25} 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.\textsuperscript{26} 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\textsuperscript{27} contains a tale from the famous ʾAlf 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.

\textsuperscript{24} 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).

\textsuperscript{25} 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

\textsuperscript{26} 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

\textsuperscript{27} 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
(ii) Late fifteenth-century letters

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. 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 Maġribian 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 ʿAbd ʿal-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

28 All of the letters mentioned in this section may be viewed online at the Friedberg Genizah Project website: https://fgp.genizah.org.
29 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).
Introduction

(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, ‘Townsman 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). 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 and BnF Hébreu 583, contain a text, which tells the story of an episode in the life of Abraham ʾibn ʿEzra (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 (dated to 1839) in contrast, is well-preserved. It contains, amongst other material, three Egyptian Judaeo-Arabic tales, the third of which is discussed here. In this tale, Abraham ʾibn ʿEzra, 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

30 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.
31 T-S Ar. 46.10 is available to view on the Friedberg Genizah Project website: https://fgp.genizah.org.
32 This tale was first published by Avishur (1992) with a transcription and Hebrew translation. A revised transcription, transcoding and English translation of the tale may be found in Connolly (2018).
33 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
34 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.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

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 ʿal-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 ġīm in written JA. The ensuing subsections are concerned with graphemic substitutions, and instances of tashīm and tarqīq. I then turn my attention to representations of ʾalif, tāʾ 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 ( scen) and šād ( ṣen); tav for tāʾ ( n) and tā’ ( ṣen); dalet for ḏāl ( ṣen) and ḏāl ( ṣen); gimel for ġīm ( n and ġayn ( n); kaf for ĥāʾ ( z/zh) and kāf ( z); and tet for tāʾ ( n) and zāʾ ( ṣen). 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 ġayn /ɣ/, ĥāʾ /χ/ and tāʾ /θ/ 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 ( ṣen) 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). 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 ġīm (cf. Blau 1981; Hary 1996a, 1997a: 209), which plays a consequential role in the interpretation of ġīm’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. This section of the thesis

---

35 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.
36 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.
37 The diacritic is generally afforded only a brief mention in studies of JA literary and documentary texts (cf.
Orthography and Phonology

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 ḏāl (§2.1.1.2), kaf for ḥā’ and kāf (§2.1.1.3), and gimel for ǧayn (§2.1.1.4) and ǧīm (§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 ǧīm and ǧayn – or – as in the case of peh for fā’ – a novel phenomenon.

2.1.1.1. peh for fā’

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 (כ < כ). 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.

38 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 maqāribi 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 nāsh 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).

39 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 (`) 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 *fāʿ* 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 *fāʿ* 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 *fāʿ* 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.\(^{40}\)

In the nineteenth-century folk tales BnF Hébreu 583 and Cairo JC 104, the appearance of *peh* for *fāʿ* 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 *fāʿ*.

The use of the diacritic above *peh* for *fāʿ* 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.

\(^{40}\) 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.
Orthography and Phonology

Table 1.1. peh for fā

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th>peh for fā</th>
<th>Diacritic</th>
<th>Without diacritic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>initial form</td>
<td>final form</td>
<td>sub-linear</td>
</tr>
<tr>
<td>15th c. folk tale</td>
<td>Fīrāk. Evr. Arab. II 852</td>
<td>169</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Fīrāk. Evr. Arab. II 1528</td>
<td>122/3</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Fīrāk. Evr. Arab.I 2996</td>
<td>254</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/12</td>
<td>18</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/39</td>
<td>53</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 13J26.7</td>
<td>9</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/18</td>
<td>16</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VII.C.16</td>
<td>56</td>
<td>?11</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>80</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>42</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>BnF Hébreu 583</td>
<td>102 (3)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>179 (15)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 13J25.24</td>
<td>73 (13)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L192</td>
<td>48 (4)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10J16.35</td>
<td>45 (2)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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., זָרַח ‘they knew you/they informed you’ (2009: 78). Unlike its Hebrew cognate,42 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 (ט) 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:  

41 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.

42 The Hebrew grapheme peh is one of the six bgdkft letters, which are plosive [p], but which are fricativised [f]
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

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

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

The writing of the grapheme in word-final position with its initial/medial form becomes more pronounced in later texts, both documentary and literary:

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

‘ֶקֶפֶקֶפ standing’ (BnF Hébreu 583, 44)

The final form of Arabic  fld ‘has a long, horizontal stroke, e.g., katif ‘shoulder’. The final form of the Hebrew equivalent, however, has a long vertical stroke, e.g., katef ‘shoulder’. It seems that the writing of peh for  fld 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  fld.

2.1.1.2. dalet for ḏāl

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

post-vocally.

43 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/.\textsuperscript{44}

In a phenomenon common to many vernacular forms of Arabic,\textsuperscript{45} the pronunciation of ḏāl shifted from an interdental fricative to a dental or alveolar plosive \( [ð] > [d] \), rendering it phonetically indistinguishable from ḏāl. 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 \textit{dalet for ḏāl} in table 2, it is clear that, as with \textit{peh for fā’}, the frequent inclusion of the supra-linear diacritic is a recent phenomenon in late JA texts. With only two minor exceptions,\textsuperscript{46} the diacritic is omitted in these folk tales and letters alike until the eighteenth/nineteenth century. Thereafter, a dot is found above \textit{dalet for ḏāl} with varying degrees of frequency in both genres. In the former, the diacritic is inserted above \textit{dalet for ḏāl} 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 \textit{dalet for ḏāl} is, as with \textit{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.

\textsuperscript{44} In relation to late JA letters, Wagner suggests that the inclusion of a diacritic above \textit{dalet for ḏāl} may serve to differentiate the grapheme from \textit{reys}, 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 \textit{dalet for ḏāl} occurs only in relation to words of CA origin appears a more fruitful line of enquiry (1992: 230).

\textsuperscript{45} This is a characteristic trait of Maġribi 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 \( /ḏ/ > /d/ \) is thought to be an old feature of Arabic dialects from Arabia (El-Gindi 1983: 432-435).

\textsuperscript{46} In the letter MS Heb.c.72/13 the following proper noun appears with a supra-linear diacritic above \textit{dalet for ḏāl}; \( ḫāḏa\) (1r. 19). A central diacritic is also used once in the folk tale Evr.Arab.II 852; \( ḫāḏa\) ‘he took’ (5.v. 15) (CA: ‘āḥaḏa). The latter example is found in a text with a high degree of Hebrew influence and may be regarded as a \textit{dagesh lene} (used to differentiate plosive from fricative forms in the Masoretic tradition). As such, it corroborates the reading of a plosive reflex of ḏāl in this fifteenth-century manuscript, common to vernacular forms of Arabic.
The addition of the diacritical dot is not, as it first seems, sporadic. In all the texts in which this phenomenon occurs, ʿdal for ʿdal is written with a supra-linear diacritic exclusively in words of CA origin, e.g., ʾeladdī (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 ʿdal for ʿdal in words of CA origin may lead one to assume that, as the fricative pronunciation of ʿdal 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 Hanna, in which the JA relative pronoun יִדֶּל ʾldy is vocalised as follows:

אֵלַדּ י ʾeladī/ʾeladdī (T-S Ar. 54.63, 1v.; CA: ʾallaḏī; MCA: ʾillī)

(example from Khan 2010: 213).

The Hebrew vocalisation present in this manuscript suggests a voiced alveolar stop [d] reflex for ʿdal 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 ḏāl (ذ).

2.1.1.3. kaf for ḥāʾ and kāf

The Arabic graphemes kāf and ḥāʾ are both represented in written JA of all periods with the Hebrew grapheme kaf. The Arabic grapheme ḥāʾ is often differentiated from the Arabic grapheme kāf by the use of a supra-linear diacritic in initial/medial form (כ). 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). 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 ḥāʾ may appear sufficient. However, in light of the above-mentioned interpretations of the use of the diacritic in relation to peh for fāʾ and dalet for ḏāl, 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 ḥāʾ similar to peh for fāʾ and dalet for ḏāl. With the exception of MS Heb.c.72/39, 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 ḥāʾ 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 ḥāʾ 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

---

47 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.

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

49 The distribution of kaf for ḥāʾ 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 ḥāʾ 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.

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th>kaf for ḥāʾ</th>
<th>Diacritic</th>
<th>Without diacritic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>initial form</td>
<td>final form</td>
<td>total</td>
</tr>
<tr>
<td>15th c. folk tale</td>
<td>Firk. Evr.Arab.II 852</td>
<td>84</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr.Arab.II 1528</td>
<td>57</td>
<td>4</td>
<td>61</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr.Arab.II 2966</td>
<td>84</td>
<td>2</td>
<td>86</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/13</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/39</td>
<td>53</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 13J26.7</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/18</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VII.C.16</td>
<td>19</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>46</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>BnF Hébreu 583</td>
<td>33</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>65</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 13J25.24</td>
<td>36</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L192</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10J16.35</td>
<td>28</td>
<td>0</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 1.3. kaf for ḥāʾ

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 ḥāʾ 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 ḥāʾ as resulting from the imitation of the graphical form of ḥāʾ is further substantiated by the representation of kāf. Whereas kaf for ḥāʾ 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 (ך), while fulfilling the practical function of distinguishing it from kaf for ḥāʾ.

omitted, e.g., T-S 13J26.7 and MS Heb.c.72/13).
2.1.1.4. *gimel* for *gāyn*

The inclusion of a diacritical dot above or below *gimel* for *gāyn* 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.

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

Table 1.4. *gimel* for *gāyn*

In the fifteenth/sixteenth-century folk tales under examination, *gimel* for *gāyn* 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 *gāyn* 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 *gāyn* 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 *gāyn* 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 \textit{gimel} for \textit{ḡayn} (T-S 10J16.35 and Rylands L192). However, in the contemporaneous letter T-S 13J25.24, a diacritic is found below \textit{gimel}, denoting \textit{ḡayn} in all instances.

The changes in the use and position of the diacritic in relation to \textit{gimel} for \textit{ḡayn} in these literary and documentary corpora correspond to the variation found in the use of the diacritic in the denotation of \textit{ḡīm} (cf. §2.1.2.2.1). As with \textit{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 \textit{peh} for \textit{fā’}, \textit{dalet} for \textit{ḏāl} and \textit{kaf} for \textit{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 \textit{peh} for \textit{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 \textit{dalet} for \textit{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 \textit{kaf} for \textit{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 diacritical dot above \textit{peh} for \textit{fā’} and \textit{dalet} for \textit{ḏāl}. While the writing of a dot above \textit{gimel} for \textit{ḡayn} precedes the inclusion of a dot above \textit{peh} for \textit{fā’}, there is evidence of a shift in the writing of the diacritical dot with \textit{gimel} for \textit{ḡayn} 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 \textit{peh} for \textit{fā’}, \textit{dalet} for \textit{ḏāl} and \textit{kaf} for \textit{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.\textsuperscript{50} 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 ħāʾ and gimel for ġayn, 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 ġīm

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

The present-day variation in phonetic realisations of the Arabic ġīm 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 ġīm is realised as a voiced velar stop [g]. In Upper Egypt, rural districts of the Levant, Northern Algeria and Yemen, ġīm has a voiced palato-alveolar affricate

\textsuperscript{50} 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).

\textsuperscript{51} This section of the thesis has been adapted into article format and accepted for publication in the \textit{Journal of Semitic Studies} (Connolly 2019).

Such variation demands examination. Thus far, attempts to reconstruct ġīm’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 ġīm 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 ġīm 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 ġīm’s realisation in Egyptian Arabic, Blanc (1981) refers to three JA texts52 – as well as Muslim Middle Arabic sources53 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 ġīm as it appears in these texts. The most common representation of ġīm in extant JA manuscripts of all genres is with the Hebrew grapheme gimel, which also serves as the Arabic grapheme ġayn. A diacritic is often employed above or beneath gimel for ġīm to distinguish it from ġayn.54 The use of the diacritic in conjunction with this Hebrew grapheme when indicating ġīm,

---

52 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).
54 The Hebrew grapheme gimel is also often marked with a diacritic when representing ġayn. 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).
Orthography and Phonology

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).55

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 ġīm and (ii) evidence of assimilation or metathesis, and the substitution of gimel for ġīm with alternative Hebrew graphemes, such as šin or zayin. On these grounds, the prevailing consensus of ġīm’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 ġīm’s historical development (§2.1.2.1). I then turn my attention to the specifics of JA orthographic representations of ġīm 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 ġīm 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 ġīm 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 ġīm, 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.56

2.1.2.1. The origins of fronted ġīm and its chronological development

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

55 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 ġīm in their assessment of ġīm’s historical development.

56 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.
In a development that also occurs in Neo-Aramaic, this phoneme moved forward, forming a voiced palatalised stop [ɡʲ], 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: [d], [d], [dʒ], [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 [ɡ] reflex constitute a continuation of the Semitic /ɡ/, or is it a recent development, a ‘rückverschoben’ (Bergsträßer 1928: 157 cited in Blanc 1981: 189) or ‘back-shifting’ of the fronted ǧīm from a voiced palatalised stop [ɡʲ] (and its variants) to a voiced velar stop [ɡ] (Woidich & Zack 2009: 41-42; Zaborski 2007, II: 496)? This question cannot be satisfactorily addressed before an examination of the original shift of ǧīm from [ɡ] > [ɡʲ] has been undertaken.

The origin, chronology and extent of the spread of the fronted ǧīm 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 ǧīm in relation to the voicing of the phoneme qāf > [ɡ] 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 /ɡ/, 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 [k’] (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

---

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

58 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 Halabja /ɡ/ 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 /ɡ/ has also occurred in the Neo-Aramaic dialect of Qaraqosh (Khan 2002: 26), yet in the Jewish dialect of Arbel, the fronted variants of /ɡ/ are generally limited to loanwords; /ɡ/ is generally pronounced as a voiced velar stop [ɡ] (Khan 1999: 24–6).

59 The shift of qāf’ [q] > [G] > [ɡ] 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.

60 The voicing of the phoneme /q/ > [ɡ] is implied in Akkadian by the consistent lack of distinction drawn between the phonemes /q/ and /ɡ/, 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 [ɡ]’ (1969: 7; Hary 1996a: 155).
Orthography and Phonology

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 ġīm risked becoming phonetically indistinguishable from one another. Thus, ġīm 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 ġīm 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; 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 ġīm 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 ġīm rests on the assumption of the early development of gāl dialects; the voiced velar stop reflex of qāf predates the fronting of ġīm, which became necessary due to misunderstandings caused by homophonous forms. Once the palatalized and affricated reflexes of ġīm 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.62

In NENA dialects, the unvoiced pharyngeal fricative /ḥ/ 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, 61 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.
62 I am indebted to Prof. Geoffrey Khan for this idea and for his generosity in allowing me to write about it here.
Sanandaj and Amādyā – the unvoiced pharyngeal fricative /ḥ/ 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 /ḥ/ to be preserved, e.g. ṛaḥoqa ‘far’, ḥaziqa ‘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 Urmī and Barwar – in which the movement in place of articulation of /ḥ/ > [x] is ubiquitous (except in words of foreign origin), gimel is palatalised and occasionally affricated (Khan 2008: 30, 62; 2016b: 101-2).63 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 ġīm, providing insight into these phonetic shifts, which occurred in some Arabic dialects more than a millennium ago. Was the palatalisation of ġīm 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 ġīm, filling the void left by ġīm’s fronting.

In terms of chronology, Blanc proposes that the fronting of ġīm 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).64 In this grammar, we find descriptions of three different pronunciations of ġīm, which are interpreted by Blanc as: a voiced palatalised-velar stop [ğ], deemed the ‘correct’ pronunciation by Sībawayhi;65 a voiced velar stop [g]; and a voiced palato-alveolar fricative [ʒ] (1969: 12).66 This reading of Sībawayhi’s account of the acceptable pronunciation of ġīm is shared by Cantineau (1960: 58) and Schaade (1911: 73 cited in Watson 2002: 3) and Zaborski

63 This is not to suggest that the velarisation of /ḥ/ 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.
64 Sībawayhi’s al-Kitāb is generally considered to be the first and most comprehensive description of the CA language (Al-Ani 2008, III: 602).
65 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.
66 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.
67 Blanc plays with the possibility that the two reflexes of ġīm referred to by Sībawayhi may, in fact, be allophonic variants determined by their position within a word, rather than independent reflexes of ġīm (1969: 12, n. 8; 18).
Orthography and Phonology

(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 ([ɟ]). 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, Blanc concludes that there is no evidence for the plosive pronunciation of ġīm in MCA between the twelfth and seventeenth centuries (1981: 192). 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:

\[
g \rightarrow g / g' / ġ \rightarrow ġ \rightarrow ġ / g \rightarrow ġ \]

6th-7th cent. 8th-11th cent. 12th-17th cent. 17th-19th cent. 19th-20th [cent.]

(Hary 1996a: 153).

---

68 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).

69 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.

70 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’ = [ɡ]; 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 and east 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

---

71 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).

72 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 ġīm 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 ġīm’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 ġīm

As has already been established, the dominance of the fronted reflexes of ġīm 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 texts73 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 ġīm.74 In §2.1.2.2.2, substitutions of *gimel* for ġīm 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 ġīm; 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 ġīm 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 ġīm to facilitate its differentiation from ḡayn. The use of the diacritic

73 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 ǧīm, 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 ǧīm. 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 ǧīm in Egyptian spoken Arabic. It played a crucial role in establishing the now-prevailing consensus among JA scholars of ǧīm’s affricate pronunciation in Egypt in the twelfth–seventeenth centuries. The perceived trend for the increasing omission of the diacritic with gimel for ǧīm 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 ǧīm 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 ǧīm. The use of an unadorned Hebrew gimel – the reflex of which is a voiced velar stop [g]75 – to denote ǧīm 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 ǧīm during this period. If the phonetic reflex of ǧīm 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 ǧīm 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 ǧīm, which would explain their preference for gimel (Blau and Hopkins 1987: 130–1). In the choice of gimel for ǧīm 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 דָּשׁיֶשׁ dšyš ‘ground, coarse wheat’ (CA: ǧaššun) in one of the early business letters76 casts doubt on the view that there was a single voiced velar stop [g] reflex for ǧīm in

74 Numerals, reconstructions and Hebrew words have been excluded from the data.
75 In Hebrew (according to the Tiberian reading tradition) gimel has two pronunciations: when written with dageš (ג) 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)).
76 The early JA business letter referred to here is no. XIII, 5, 7, 9, 10, 18 in Blau and Hopkins, which
Orthography and Phonology

eighth/ninth-century Egypt. It suggests that the voiced alveolar stop [d] reflex for ǧīm 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 ǧīm: it attests to an earlier phonetic shift of [ʒ] > [d] (Blau and Hopkins 1987: 130-31). The denotation of ǧīm with gímel 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 ǧīm throughout this period and in the majority of genres is generally recorded as a gímel with a sub-linear dot (ג). This constitutes direct graphic imitation of the diacritic exhibited in the Arabic grapheme ǧīm (ج). However, the two eleventh-century documentary texts T-S 8.18 and MS Heb.d.47/62 do not conform to this trend: in both letters the gímel representing ǧīm is always unmarked. The two contemporaneous narratives T-S AS 161.32 (‘The Story of Baḥīra’) and T-S NS 298.55 (‘The History of Yešû’) display more variation in their representations of ǧīm. In the former text, 40 per cent of occurrences of gímel for ǧīm 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 gímel for ǧīm are written without a diacritic, while 10 per cent are marked with a supra-linear dot. The marking of gímel for ǧīm 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 and T-S 12.69 vary greatly in their use of the diacritic.

---

77 The CA form ǧaššiš has been completely supplanted by the colloquial form diššiš in contemporary Egyptian Arabic (Hinds and Badawi 1986: 289).
78 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.
80 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.
81 T-S NS 298.55: This JA manuscript contains the tale entitled ‘The History of Yešû’. It has been dated to c. 1000–1100. It comprises two folios of twenty-six and twenty-seven lines, respectively.
82 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).
83 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 *ğīm* is never marked. However, in the letter T-S 12.69, 62.5 per cent of occurrences of *gimel* for *ğīm* are marked with a supra-linear dot, while 37.5 per cent remain unmarked.\(^8^4\)

Turning to the late fifteenth-century letters, in 66.7 per cent of occurrences of *gimel* for *ğīm* 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 *ğīm* (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 *ğīm* 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 Maġribi 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 *damma* 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 *ğīm* or *ġayn*, a practice that is often noted as characteristic of late texts. The difference in the denotation of *ğīm* 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 *ğīm* 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 *ğīm*. 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 *ğīm* 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 *ğīm*, it contains several examples in which the Hebrew graphemes *šin* and *zayin* are used to represent *ğīm* in place of *gimel*. Yet, in Evr.Arab.II 1528 in which the *gimel* for *ğīm* 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

---

\(^8^4\) Unfortunately, I have been unable to locate Egyptian JA folk narratives that can be confidently dated to the

---

\(^{8^4}\) Farağ who was based in Alexandria. A transcription and English translation of this thirteenth-century letter may be found in Motzkin’s PhD thesis (1965).
The seventeenth/eighteenth-century folk tale AIU VII C.16 displays a fairly consistent marking of gimel for ġīm 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 ġīm 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 ġīm. However, the folk narrative BnF Hébreu 583 displays frequent, if not entirely consistent, marking of gimel for ġīm 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 ġīm is sometimes replaced by the Hebrew grapheme šin, indicating a fronted ġīm 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 ġīm, 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 ġīm, 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 dāl, 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.
### Table 1.5. *gimel* for ǧīm

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th><em>gimel</em> for ǧīm</th>
<th>Diacritic</th>
<th>Without diacritic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>sub-linear</td>
<td>supra-linear</td>
</tr>
<tr>
<td>9th c. letter</td>
<td>Vienna H33</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9th c. letter</td>
<td>Vienna H34</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9th c. folk tale</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th c. folk tale</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th c. letter</td>
<td>CUL T-S 8.18</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11th c. letter</td>
<td>Bodl. MS Heb.d.47/62</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11th c. folk tale</td>
<td>CUL T-S NS 298.55</td>
<td>20</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>11th c. folk tale</td>
<td>CUL T-S AS 161.32</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>13th c. letter</td>
<td>CUL T-S 12.69</td>
<td>16</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>13th c. letter</td>
<td>GW VIII</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13th c. folk tale</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13th c. folk tale</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15th c. folk tale</td>
<td>Firk. Evr.Arab.II 852</td>
<td>120</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr.Arab.II 1528</td>
<td>71</td>
<td>62</td>
<td>1</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr.Arab.I 2996</td>
<td>113</td>
<td>113</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/13</td>
<td>8</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/39</td>
<td>25</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 13126.7</td>
<td>9</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/18</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VILC.16</td>
<td>23</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>83</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>21</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>BnF Hébreu 583</td>
<td>41</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>195</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 13125.24</td>
<td>26</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L192</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10116.35</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### 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 ǧīm is sometimes replaced by the Hebrew grapheme šin, indicating a fronted
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 gi'm 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 fāʾ 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 gi’m 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 gi’m in Egypt between the ninth and nineteenth centuries.

2.1.2.2.2. Assimilation and metathesis

The second approach to the reconstruction of gi’m’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 gi’m is 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 gi’m.85 Blanc breaks down the process of assimilation as follows:

\[
[\text{wiḡh}] > [\text{wižh}] > [\text{wišh}] > [\text{wišš}] \quad (\text{Blanc 1981: 190})
\]

This phonetic development may be best described in two stages: (i) anticipatory devoicing from
/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/). As is evident from both Blanc’s diagram and the more detailed analysis offered here, the fronted pronunciation of ǧīm 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 ǧīm in Egyptian dialects, specifically by Blanc (1981: 189–90), Hary (1996a: 160) and Palva (2008a: 94–5) in support of the affricated pronunciation of ǧīm. 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 ǧīm, which is characteristic of contemporary Maġribian, 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 ǧīm found in some contemporary Egyptian dialects in the east, west and Upper Egypt are the result of migration from Libya, Tunisia and the Maġrib 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: wağhun; 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). 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 ǧīm.

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

---

86 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).

87 Hinds and Badawi attest to the fact that both wāgh pl. wugūh ‘face, faces’ (Hinds and Badawi 1986: 925); wūss pl. wūšūš (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 ‘old woman’ (Evr.Arab.II 1536, 2v.6) (CA: ‘אָזָעָזָעָתָן’) (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 ג [גֵיֵם] – either ג (j) [dʒ] or ג [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 ‘אָזָעָזָא’ 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 גֵיֵם is the VIIIth form of the verb גַּמְּת to gather, meet’ (CA: ‘יגַּתְמָא’). This verb form occurs, albeit rarely, in eleventh-century Egyptian letters from the Cairo Genizah collections, e.g., נשתמע ‘We meet’ (T-S 8J26.13, 19); אשתמעת ‘I met’ (Dropsie 399, 9); והשתמע ‘the meeting’ (T-S 13J17.11, 4) (examples from Wagner 2010: 35–6). It is also found in the fourteenth-century folk narrative mentioned above, e.g., פשתמעת ‘then I gathered’ (Evr.Arab.II 852, 12r.11) (examples from Palva 2008b: 387). The use of ñ in this context suggests that the intended reflex of גֵיֵם 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 זָגָה, yazūgu ‘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., זג ו ‘I marry off’ (Evr.Arab.II 1536, 2v.16; 6v.9); והזכז ‘and he married her’ (Evr.Arab.II 1536, 8v.14); and זג ו ‘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 גֵיֵם. There are other

---

88 According to Wagner’s diachronic analysis of JA letters from the Cairo Genizah collections, the representation of גֵיֵם with גימל 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).

89 Davies mentions a different example of the same phenomenon in a Middle Arabic text in which the גֵיֵם is replaced by a ñ 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 ġīm of the CA form zwğ was pronounced as it is in MCA ([ɡ]), 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.90

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

The evidence suggested by these variant representations of ġīm indicate the existence of fricative reflexes of ġīm, 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 [ɡ] reflex, as demonstrated by the use of kaf to denote ġīm in the folk narrative Evr.Arab.II 1528. In light of these various representations of ġīm, I tentatively suggest that the linguistic situation in Egypt with regard to the phonetic realisation of ġīm as represented in JA texts was more varied and complex than is implied in previous analyses of the issue.91

2.1.3. Graphemic substitutions, taḥīm and tarqūq

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

90 The phonological metathesis of the form zwğ > ġwz is also attested in Levantine Arabic (albeit less frequently than in MCA), in which ġīm is predominantly pronounced as a voiced palato-alveolar affricate [dʒ] or as a voiced palato-alveolar fricative [ʒ].

91 One possible reason for the variations in the representations of ġīm 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 muḥābḥama) 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 murāqqaq) refers to the opposing phenomenon in which ‘emphasis’ is lost.

In CA there are four primary emphatic phonemes: /ش, د, ت, ز/ (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 [/ʃ, ʥ, ティー, ʊ or زهر/] (Fischer 2002: 19, §31), pharyngealisation [/ʃˤ, 饬, ティー, ʊˤ or زهرˤ/] (Davies 1995: 465; Watson 2002: 43) or uvularisation (Zawaydeh and de Jong 2011: 257). In recent descriptions of MCA emphatic coronals, /ش, د, ت, ز/ 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, z/. 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 /ژ/ (CA: ژا‘ /ð/) has merged with the emphatic dental stop phoneme /د/ and is realised as [ð], and its earlier variant [زهر] 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 [ð], but like ژا‘, is also infrequently realised as a voiced dental-alveolar fricative [ژ] (ibid.).

The emphatic consonants are joined by three ‘secondary emphatics’ in most dialects: the sonorant /ر/ > [ɾ], the lateral /ل/ > [ɫ] (Davies 2009, IV: 637) and the unvoiced uvular stop /ق/ (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 /ر/ is in close proximity to pharyngealised consonants or to the open back vowels /أ/ and /أ:/, it is realised as [ɾ].

92 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 [ɾ] (e.g., [د, [ژ]}
When preceded by the open back unrounded vowels /o/ and /oː/ and the closed back vowel /u/, /l/ is realised as [H] (Al-Nassar 1993: 48–9 in Bakalla 2009, IV: 423).

In written Arabic the four phonemes /ṣ, ẓ, ṭ, ð/ correspond to the graphemes ṣād, ḍād, ṭāʾ and ẓāʾ, 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 šadeh, ḍād with šadeh (+ dot), ṭāʾ with ṭet and ẓāʾ with ṭet (+ dot). The plain counterparts of these emphatic phonemes /s, d, t, ð/ correspond to Arabic sīn, dāl, tāʾ 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. šadeh 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., שביג ‘a spy’ (CA: ḡāsūsun) (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/šin, 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., אלכדרא ‘the verdure’ (CA: ḫudratun) (2r. 2/ δ, s, t) indicating pharyngealisation or velarisation is used.
Orthography and Phonology

29), while the latter appears in Evr.Arab.I 2996, e.g., כָּלַד ‘green’ (CA: ḥudratun) (2v. 20); אלָלִי ‘the tomb’ (CA: dárīṭun) (8r. 2; 9r. 9). While the first instance may be indicative of either a devoicing of ẓād 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 ẓād.

2.1.3.1.3. šadeh/ṣadeh + dot for ẓā’
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 ẓād and ẓā’ are often said to have merged (Watson 2002: 15). In the following examples from fifteenth/sixteenth-century folk tales, we find much evidence to support the plosive realisation of /ẓ/ through its common denotation with the Hebrew grapheme šadeh (+ dot), which is more traditionally employed in JA to denote its orthographic cognate ẓād, e.g., אלָלִי ‘the elegant’ (CA: zarīfatun) (Evr.Arab.II 1528, 3v. 9); אַלְצָרְפָה ‘their bones’ (CA: ẓārīmun) (Evr.Arab.II 852, 4r. 3); תָנָצ ‘you will see’ (CA: tanẓuru) (Evr.Arab.II 852, 6v. 28); וַנָצָף ‘and he cleaned them’ (CA: naẓẓafa) (Evr.Arab.I 2996, 2v. 14); יָסַת ‘he wakes’ (CA: yastayqiẓu) (Evr.Arab.I 2996, 5v. 25, 13r. 4); מַגְז ‘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., אלָלִי ‘the hoopoes’ (CA: hadāhidun) (Evr.Arab.II 852, 8v. 15). This suggests the devoicing of the voiced dental-aleolar 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 ṭā’
 הַתָּל ‘(he) prepared (himself)’ (CA: mutaḡahhizun) (Evr.Arab.II 852, 6v. 20).

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

---

93 MCA also has a voiced pharyngealised alevolar fricative reflex of ẓā’ that is not uncommon (Watson 2002: 15).
94 {} 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/sin denoting Arabic sīn, e.g., ואשתכדם ‘and he employed’ (CA: istalhdama) (Evr.Arab.II 852, 2r. 4; 7v. 21); ובאש ‘and he kissed’ (CA: bāsa) (Evr.Arab.II 852, 2v. 13); ‘and the former’ (CA: sābiqun) (Evr.Arab.II 852, 3r. 6; 7r. 6); 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 ẓā’
Evidence for the merger of ẓā’ into ḍād is also evident, although to a lesser extent, in fifteenth-century letters, e.g., זהר ‘he appeared’ (CA: zahara) (MS Heb.c.72/39, 1r. 20).

Eighteenth/nineteenth-century folk tales

2.1.3.1.8. ṣadeh + dot for ẓā’
As with the fifteenth/sixteenth-century corpora, the most common graphemic substitution to occur is ṣadeh + dot for ẓā’, rather than its orthographic cognate šet (+ dot), e.g., תنز ‘you see’ (CA: tanẓuru) (AIU VII C.16, 1r. 6); צהר ‘my back’ (CA: zahir) (T-S Ar. 37.39, 3v. 7); נץ ‘my bones’ (uzāmun) (T-S Ar. 37.39, 3v. 4); חז ‘I saw’ (CA: nazartu) (T-S Ar. 37.39, 2v. 17; Cairo JC 104, 14r. 4); אץ ‘great’ (CA: ‘azīmatun) (Cairo JC 104, 14v. 12); אלנצ ‘the appearance’ (CA: ‘al-naẓaru) (Cairo JC 104, 4r. 14).

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

2.1.3.1.10. samekh for šin
אץ ‘a tree’ (CA: šagaratun) (T-S Ar. 37.39, 3v. 20).
Eighteenth/nineteenth-century letters

2.1.3.11. ṣadeh + dot for ẓā’

The substitution of ṣadeh + dot for ẓā’ in place of tet occurs in two of the three late-eighteenth/early nineteenth-century letters T-S 13J25.24 and T-S 10J16.35, e.g., וָנַצּ וּרְוֹ (CA: wa-naḥzurū) (T-S 13J25.24, 1v. 30); נְצִי פְּתָחֵה (CA: naẓīfatun) (T-S 13J25.24, 1v. col. 2, 32); and נְצָ החָ וּרְוֹ (CA: naẓara) (T-S 10J16.35, 1r. 11); נְצָ יְפָה (CA: naẓīfatun) (T-S 13J25.24, 1v. col. 3, 4).

2.1.3.12. zayin for ḏāl

As with the fifteenth-century folk tales, there are a few instances in one of the letters in which /ḏ/ is represented phonetically with Hebrew zayin rather than its orthographic cognate ḏāl, e.g., תזכְּר יַבְּרָ (CA: yaḏkuru) (T-S 10J16.35, 1r. margin 6); תזְכְּרְתָא (CA: taḏakkartu) (T-S 10J16.35, 1r. margin 11; 1r. 8); וָיְזְכָרְת (CA: taḏakkartum) (T-S 10J16.35, 1r. 6).

2.1.3.13. zayin for ḏād

The phonetic shift /ḏ/ > [zˤ] occurs occasionally in MCA (cf. Watson 2002: 15) and is in evidence here, e.g., מְזַבּוֹט (CA: maḍbūṭun) (T-S 10J16.35, 1r. 19).

2.1.3.14. tav for ḏād

In the following instance, tav is used to denote ḏād, which suggests simultaneous devoicing of the dental-alveolar stop and loss of emphasis; יַחְכָּע (CA: yaḍḥakūna) (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 ẓā’. This is indicative of the colloquial plosive realisation of ẓā’ and its phonetic merging with ḏād. 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. taḥkim
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

Fifteenth/sixteenth-century folk tales

2.1.3.2.1. slaught for sīn

The most common occurrence of tafḥīm found in the fifteenth/sixteenth-century folk tales is slaught denoting sīn. It is found in words which contain a primary emphatic such as ẓāʾ (notated with ẓet), indicating regressive spread, e.g., ʿasṭurun ‘a sultan’ (CA: sulṭān) (Evr.Arab.II 852, 5v. 17); ḥarasīyatun ‘the life-guard’ (CA: ḥarasīyatun) (Evr.Arab.II 852, 11r. 6). It also appears in words which contain secondary emphatics, such as ḥ, e.g., ṣafarun ‘my journey’ (CA: ṣafarun) (Evr.Arab.II 852, 5v. 15); ḥarasīyatun ‘the life-guard’ (CA: ḥarasīyatun) (Evr.Arab.II 852, 8v. 25); and /l, q/ or /l, r/, e.g., ṣalabdār ‘master of the booty’ (CA: salabdār) (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. ẓet for tāʾ

There is only one explicit occurrence of tafḥīm in the fifteenth-century letter corpus. It occurs in the Maġribian letter and involves the denotation of tāʾ with Hebrew ẓet, e.g., matğarun ‘business’ (CA: matğarun) (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 /ɑ/ 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/ > [s̴̴], indicated with Hebrew slaught for sīn, and /t/ > [t̴̴], expressed with ẓet for tāʾ/tāʾ marbūta but also in relation to /d/ > [d̴̴].

2.1.3.2.3. slaught for sīn

In the first two examples, there is evidence of the regressive spread of the pharyngealised feature from the pharyngealised coronal /ẓ/ to the coronal /s/, e.g., ḥarasīyatun/ḥarasīyatun ‘its middle’ (CA: ḥarasīyatun/ḥarasīyatun) (T-S Ar. 37.39, 2r. 19); ḥarasīyatun ‘its middle’ (CA: ḥarasīyatun/ḥarasīyatun) (Cairo JC 104, 12v. 13). The root s-l-t is rendered s-l-t frequently in both texts in a variety of nominal forms, e.g., sulṭān ‘my sultanate’ (CA:
Orthography and Phonology

$sūlṭānātun$ (T-S Ar. 37.39, 3r. 16); ‘a sultan’ (CA: $sulṭān$) (Cairo JC 104, 3v. 12); ‘a sultanate of...’ (CA: $sulṭānātun$) (Cairo JC 104, 4r. 10); ‘my sultanate’ (CA: $sulṭān$) (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 /ṭ/. However, it may also be attributed to the allophonic variation of the secondary emphatic /l/ > [$l̴̴$], 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 damma 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 ‘llh ‘God’ (CA: ‘allāhu), in which /l/ is realised as [$lˠːɑː$] in the majority of modern Arabic dialects (Watson 2002: 16), occurs after the nominal form $swb’h’n ‘praise’ (CA: $subḥān$) in the common Arabic set phrase $subḥān ‘God be praised’; $b̴̴$ (T-S Ar. 37.39, 3r. 14). The representation of Arabic sīn with Hebrew ṣādeh, indicates emphatic pronunciation, for which the only plausible explanation is the regressive spread of emphasis from the pharyngealised /ḷ/ in the following word. There is also evidence in these folk tales of tafḥīm caused by the secondary emphatic /r/ > [$r̴̴$], e.g., ‘it broke’ (CA: $kasara$) (T-S Ar. 37.39, 2v. 20); ‘and the sorcerers’ (CA: $saharatun; suḥḥārun$) (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; ‘and they silenced/gagged me’ (CA: ‘ahrasa) (T-S Ar. 37.39, 2r. 4).95

2.1.3.2. $tet$ for tā’

There is only one example in which tafḥīm occurs with regard to a phoneme other than /s/ > [$s̴̴$]. In this instance, /ṭ/ is denoted with $tet$; בִּאֵלָטָרָב $in the earth’ (CA: $turābun$) (Cairo JC 104, 8v. 13). Once more, regressive spread from the secondary emphatic /ṭ/ > [$r]$ 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., אָבָא $אמַר$ ‘I am able’ (CA: $qādirun$) (T-S Ar. 37.39, 2v. 13); אָבָא $אמַר$ ‘I am able’ (CA: ‘aqdiru) (T-S Ar. 37.39, 3r. 9); and אָבָא $אמַר$ ‘they worship false gods’ (CA: $ya’budāna$) (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 /ṭ/. 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

95 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 sin

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 sin is denoted with šadeh, e.g., ṣעָרַא (T-S 13J25.24, 1v. col. 1, 39; col. 3, 4; T-S 10J16.35, 1r. 27); ṣוֹעָרַא ‘with the prices’ (Rylands L192, 1r. 8). This is indicative of the regressive spread of emphasis from the pharyngealised allophone of /t/ > [ɾ].

As with one of the contemporaneous folk tales (T-S Ar. 37.39), there is evidence of taḥmān potentially caused by the secondary emphatic /q/ in one of the eighteenth/nineteenth-century letters, e.g., יָקֵצֵמוֹ (CA: qasama) (T-S 13J25.24, 1v. 29); יָקֵצֵם (CA: yaqsamu (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 taḥmān 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/ > [s] is progressive.

2.1.3.2.7. ṭet for tav

In the letter T-S 13J25.24, two instances of /t/ > [t] are found. In both cases, the allophonic variant of the secondary emphatic /t/ > [t] 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., ṭאָרַא ‘more’ (CA: ’akṣarun) (T-S 13J25.24, 1v. col. 1, 7) and ṭאָרַא ‘he cooperates (with us)’ (CA: yaṣṭariku) (T-S 13J25.24, 1v. col. 1, 11).

2.1.3.2.8. šadeh + 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 /s̴̴/ in one instance and the secondary emphatic [ɾ] in the other two, e.g., זַכְּרֵי ‘and we intended’ (CA: qaṣadnā) (T-S 13J25.24, 1v. col. 2, 15); בָּרִיד ‘severe’ (lit. cold) (CA: bāridun) (Rylands L192, 1r. 35); פִּילָה בֵּנֵל ‘in the commercial town’ (CA: bandarun) (T-S 13J25.24, 1v. col. 2, 38).

Summary

In these corpora, taḥīm 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 /ɾ, 1, q/. In particular, the pharyngealised reflex of /r/, [ɾ] when preceded by either a long /aː/ 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. sāmekh 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 Mağribian letter MS Heb.c.72/18. In both instances sāmekh replaces ṣadeh in the representation of Arabic ṣād, resulting in the allophone /s̴̴/ > [s]; אָלָאסואת ‘sounds’ (CA: ʾaṣwāt) (Evr.Arab.II 1528, 3v. 34); נָסְרָנִי ‘a Christian’ (CA: naṣrānī) (MS Heb.c.72/18, 1r. 10).

2.1.3.3.2. dalet for ḏād

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., תָּאָסָר ‘obedient’ (CA: ḥādiʿun, pl. ḥudʿānun) (Evr.Arab.II 852, 3v. 24); נָסָד ‘the lion’ (CA: dirgāmun) (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.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period


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 ṣād

Ṣād’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 ṣ-d-r > s-d-r ‘chest’ (CA: šadrūn), which appears very frequently, e.g., דֶרֶא אָחָרָה אֵלַיִם ‘a red breast and white breast’; (CA: šadrūn) (T-S Ar. 37.39, 1v. 10); דֶרֶא ‘his chest’ (CA: šadrūn) (T-S Ar. 37.39, 1v. 13, 19); דֶרֶא דֶרֶא ‘its breast’ (CA: šadrūn) (T-S Ar. 37.39, 2r. 18); דֶרֶא דֶרֶא ‘her chest’ (CA: šadrūn) (Cairo JC 104, 12v. 12); דֶרֶא ‘a red breast and a white breast’ (CA: šadrūn) (Cairo JC 104, 6v. 10); דֶרֶא ‘his breast’ (CA: šadrūn) (Cairo JC 104, 6v. 13, 7r. 14); דֶרֶא ‘cheap’ (CA: raḫīṣun) (AIU VII C.16, 1v. 22); דֶרֶא ‘you became’ (CA: sāra; šartum) (T-S Ar. 37.39, 2v. 3).

2.1.3.3.4. tav for ṭā’

The ṭā’ of the root t-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 tet, suggesting that its pharyngealised element has been retained, e.g., תבָּקָא וְתָבָּקָא ‘layer on layer’ (CA: ṭabaqatun) (T-S Ar. 37.39, 2r. 9).

2.1.3.3.5. dalet for ḍād

The occurrence of dalet for ḍād 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., דֶיָוקָא ‘in poverty’ (CA: ḏayqatun) (AIU VII C.16, 1r. 10); דֶיָוקָא ‘and weakness’ (CA: diqun) (Cairo JC 104, 4v. 12).

Eighteenth/nineteenth-century letters

2.1.3.3.6. samekh for ṣād
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 șād, which is denoted with Hebrew samekh. This manifestation of tarqīq occurs only in the letter T-S 13J25.24, e.g., ܒܘܨܠܘܢ  with (the) arrival of...  (CA:  wuṣūlun) (T-S 13J25.24, 1v. 4); ܚܣܫܠܐ  ‘he obtained’ (CA:  ḥaṣṣala) (T-S 13J25.24, 1v. 8); ܒܣܘܠܘܛܢ ‘in our settlement/compromise’ (CA:  sulhun) (T-S 13J25.24, 1v. 14); ܒܪܒܪܐ ‘exchange rate’ (CA:  bûṣatun) (T-S 13J25.24, 1v. 23); ܐܠTERN  ‘its arrival’ (CA:  wuṣūlun) T-S 13J25.24, 1v. col. 2, 2; ܒܘܨܠܘܢ  for your associates’ (CA:  ṣahhun) (T-S 13J25.24, 1v. col. 2, 2); ܒܘܨܠܘܢ  and you should deliver...’ (CA:  ṭaḥallaṣa) (T-S 13J25.24, 1v. col. 2, 29); ܝܘܨܠܘܢ  ‘it will/should arrive (with) you’ (CA:  yasilu-kum) (T-S 13J25.24, 1v. col. 2, 40; col. 3, 12); ܒܘܨܠܘܢ  ‘net (profit/weight)’ (CA:  șāfin) (T-S 13J25.24, 1v. col. 2, 29).

2.1.3.3.7. zayin for ū‘ă

Zayin denotes the emphatic coronal ū‘ă in two instances in these late letters; ܝܘܙܗܪ ‘it emerged’ (CA: ẓahara) (Rylands L192, 1r. 29) (see §2.2.3.3 for a discussion of vowel shift /a/ > /u/) and ܐܙܝܡܛܘܢ ‘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 ḏād 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 ḏād does not seem to occur at all.96

2.1.3.4. Simultaneous taḥīm and tarqīq

96 Khan (1992: 231) and Wagner (2010: 34) cite only one (and the same) example in which ḏād is denoted with tav, e.g., ܒܨ逻ܐ ‘you are laughing’ (CA:  ḏaḥika, taḥahu) (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 tafḥīm 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’ marbūta in the construct state is denoted with ḫet, while the original tā’ of the root t-r-f is written with tav, e.g., ‘in the twinkling of an eye’ (CA: bi-ṭarfat ʿaynin) (Evr.Arab.II 852, 4v. 15-16).

**Eighteenth/nineteenth-century folk tales**

In among the many instances in which the root s-l-f 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., ‘my sultanate’ (CA: salṭanatun) (Cairo JC 104, 15v. 10). This may suggest that the spread of pharyngealisation, which causes /s/ to be realised as [s̴̴], 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-s-l is denoted with a sīn; ‘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 /ǔ/ 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., ‘and we intended’ (CA: wa-gaṣadnā) (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 *waṣat* ‘middle’ instead of Classical *wasaṭ* 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., ‘the lioness’ (CA: ‘*al-labwatu*’) (Evr.Arab.II 852, 7v. 24); ‘the father of abundance’ (CA: ‘*abū ‘al-farwa’*) (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., ‘the dappled garment’ (CA: ‘*al-hullatu*’) (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 supra-linear dots in imitation of its Arabic graphical form, e.g., ‘(My) kindly greetings’ (CA: ‘*al-karīmatu*’) (MS Heb.c.72/13, 1r. 2); ‘to the known direction (i.e. address)’ (CA: ‘*al-ḡihatu ‘al-ma’lūmatu*’) (MS Heb.c.72/13, 1r. 8); ‘the incoming calico’ (CA: ‘*al-baṣfatu ‘l-mutaḥaṣṣilatu*’) (MS Heb.c.72/13, 1r. 8); ‘a thing’ (CA: *hāḡatun*; MCA: *ḥūga*) (MS Heb.c.72/13, 1r. 20); ‘the suppl(ies)’ (CA: ‘*al-ḏahīratu*’) (MS Heb.c.72/39, 1r. 8, 12, 17, 18, 1r. margin 2, 1v. 3); ‘the (foreign) sir’ (CA: ‘*al-ḥawāḡatu*’) (MS Heb.c.72/39, 1r. 12, 1v. 2, 8); ‘in reality’ (CA: ‘*l-wāḡi’atu*’) (MS Heb.c.72/39, 1r. 14); ‘and (good) health’ (CA: ‘*āfīyatun*’) (T-S 13J26.7, 1r. 9); ‘yesterday’ (CA: ‘*al-bāriḥatu*’) (MS Heb.c.72/18, 1r. 4).97

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

98 In this example, we come across the unusual form ‘אלא רבייה’ 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-‘iskandariyya) (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’ marbūta in two of these late folk tales, e.g., as a ‘part’ (CA: marratun) (T-S Ar.37.39, 3r. 13, 3v. 5); as a ‘tree’ (T-S Ar.37.39, 2r. 20); as a ‘life’ (CA: hayāṭun) (T-S Ar.37.39, 3v. 6); as ‘sack’ (T-S Ar.37.39, 1r. 18); as ‘dura’ (T-S Ar.37.39, 3v. 13); as ‘marbūṭa’ (T-S Ar.37.39, 2v. 2); as ‘a layer’ (CA: tabaqatun) (T-S Ar.37.39, 2v. 10, 11, 12, 13, 14; Cairo JC 104, 12r. 11, 12, 13, 12v. 3, 3, 5, 6); as ‘sack’ (BnF Hébreu 583, 140r. 9, 17, 19, 140v. 5); as ‘a bribe’ (CA: rašwatun) (Cairo JC 104, 8v. 6); as ‘sack’ (CA: šagaaratun) (T-S Ar.37.39, 3r. 6; Cairo JC 104, 13r. 13); as ‘a layer’ (CA: tabaqatun) (T-S Ar.37.39, 2v. 10, 11, 12, 13, 14; Cairo JC 104, 12r. 11, 12, 13, 12v. 3, 3, 5, 6); as ‘ēidathā (CA: lāḏiqiya) (T-S Ar.37.39, 1v. 10); as ‘the appeal’ (BnF Hébreu 583, 140r. 9, 17, 19, 140v. 5); as ‘the knife’ (BnF Hébreu 583, 140r. 9, 17, 19, 140v. 5); as ‘the road’ (T-S Ar. 46.10, 1v. 3; BnF Hébreu 583, 140r. 15); as ‘the wilderness’ (T-S Ar. 46.10, 1v. 18; BnF Hébreu 583, 140v. 2, 3); as ‘sack’ (BnF Hébreu 583, 141r. 3, 4, 5, 6); as ‘the church’ (BnF Hébreu 583, 141r. 7, 8-9); as ‘the large’ (BnF Hébreu 583, 141r. 9); as ‘the following year’ (BnF Hébreu 583, 139v. 20, 23, 140r. 1, 3, 141r. 18; Cairo JC 104, 4r. 12, 14v. 5, 15v. 4); as ‘the appeal’ (BnF Hébreu 583, 140v. 10). Otherwise, non-construct state tā’ marbūta is denoted with an unadorned heh, e.g., as ‘revenge’ (T-S Ar.37.39, 1v. 10); as ‘sorcerers’ (CA: saharatun; suḥḥārun) (T-S Ar.37.39, 2v. 11); as ‘the good’ (T-S Ar.37.39, 1v. 3, 3v. 19); as ‘four’ (T-S Ar.37.39, 3v. 13); as ‘a layer’ (T-S Ar.37.39, 2v. 10); as ‘for one’ (T-S Ar.37.39, 2v. 2); as ‘a year’ (CA: sanatun) (T-S Ar.37.39, 3r. 22, 3v. 13); as ‘the following year’ (BnF Hébreu 583, 139v. 20, 23, 140r. 1, 3, 141r. 18; Cairo JC 104, 4r. 12, 14v. 5, 15v. 4); as ‘the appeal’ (BnF Hébreu 583, 140v. 10). It is rare for tā’ marbūta to be denoted with ‘alef in later letters, e.g., as ‘seven layers’ (CA: qit’atun) (T-S 10J16.35, 1r. 16, margin 8). Far more widespread is the standard denotation of tā’ marbūta with heh, e.g., as ‘the maize’ (CA: ghuratun; MCA: dura) (T-S 10J16.35, 1r. 26; T-S 13J25.24, 1r. col. 1, 37; Rylands L192, 1r. 28-29); as ‘for another instance’ (CA: nowbatun) (T-S 10J16.35, 1r. 14); as ‘and the next’ (CA: ‘al-tānī/tāniyatun) (T-S 10J16.35, 1r. 18); as ‘seven layers’ (CA: šaḥaqatun; ‘the silver’ (CA: fiḍdatun) (T-S 10J16.35, 1r. 30).

99 The plural form of this noun used throughout is ‘tabaqatun, e.g., ‘seven layers’ (Cairo JC 104, 12r. 10). This suggests that the singular form ‘tabaqatun (with tā’ marbūta), rather than ‘tabaqun (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., בזזירה֗אלהנד ‘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 ġīm); והב֗שַׁת ‘and the young of the chicken’ (Evr.Arab.II 1528, 4r. 16);和地区֗אלפַרְכ ‘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., ‘בمبיעה֗אלמ֗ומַבַּינ֗אלדין ‘in the bill of sale of the 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; ‘a group of uncircumcised (people)’ (CA: ġamā’atu) (T-S 10J16.35, 1r. margin 1); ‘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; ‘a group of our friends’ (col. 1, 22).

2.1.4.2. 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., ‘” 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. (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., ‘the city of the birds’ (Evr.Arab.II 852, 7r. 2; Evr.Arab.II 1528, 3r. 14-15); ‘in the reception hall’ (Evr.Arab.II 852, 7v. 22); ‘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., ‘on account of his last journey’ (MS Heb.c.72/39, 1r. 5-6); ‘on behalf of my lord, Zayn al-Dīn and on behalf of the servant (abb.)...’ (MS 57
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 \( /ɑ/ > /ɪ/ \). 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., *אשת֗מלך* ‘the king’s wife’.

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., *לכדמת֗אלמלך* ‘for the service of the king’ (Evr.Arab.II 852, 3v. 25); *בכתרת֗אלציאח* ‘with the multitude of screaming’ (Evr.Arab.II 852, 4r. 2-3); *בכזה֗בטשי* ‘with the strength of my brutes’ (Evr.Arab.II 1528, 2v. 36-37); *צרכת֗אלג צ ב* ‘the scream of anger’ (Evr.Arab.II 852, 11r. 10); *כלעת֗אלוקאר* ‘the robe of dignity’ (CA: *ḥil’atu ‘al-waqārī*) (Evr.Arab.II 852, 1v. 21); *בחאגת֗אלמלך* ‘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*; *באמרת֗דולתה* ‘with the princes of his state’ (CA: *bi-‘umarā’i dawlatihi*) (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 \( /ɑː/ > /ɑ/ \) evident in this particular plural nominal form; CA: *‘umarā’* > MCA: *‘umara*, resulting in a

---

100 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)j") (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., ‘with great longing’ (MS Heb.c.72/13, 1r. 2); ‘on behalf of his partner, Mansūr’ (MS Heb.c.72/39, 1r. 4-5); ‘with the confrontation of the servant’ (MS Heb.c.72/39, 1v. 7); ‘on account of the load/burden’ (MS Heb.c.72/13, 1r. 4-5); ‘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; ‘the last evening’ (lit. reads ‘the evening of the latter’) (CA: ‘išā’) (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 /ɑː/ to /ɑ/ in the nominal form (MCA: ‘iša), 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., ‘four hours’ (T-S Ar. 46.10, 1v. 11);101 ‘the edge of the wilderness’ (T-S Ar. 46.10, 1v. 16); ‘four hundred and seventy (years)’ (T-S Ar. 37.39, 1r. 11-12); ‘the agony of death’ (T-S Ar. 37.39, 1v. 2); ‘the image of the angel of death’ (T-S Ar. 37.39, 1v. 7-8); ‘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., ‘in an agency of merchants’ (T-S 10J16.35, 1r. margin 5); ‘a portion of coffee’ (T-S 10J16.35, 1r. margin 15); ‘a hundred thousand’ (T-S 13J25.24, 1v. col. 1, 18); ‘a little silk’ (T-S 13J25.24, 1v. col. 1, 20); ‘due to the lack of selling’ (Rylands L.192, 1r. margin 3).

101 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., ‘four hours’ (T-S Ar. 46.10, 1v. 11); ‘the agony of death’ (T-S Ar. 37.39, 1v. 2); ‘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: בֵּיתִיָּם ‘in ten days’ (col. 2, 2); עַשְׁרֵתָּה ‘ten sacks’ (col. 1, 32). This is an established phenomenon in MCA relating (generally) to the substantives ’āyyām ‘days’ and ’ušhur ‘months’, in which ‘the construct state after numerals 3 – 10 is *tayyām* and *tušhur*’ (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 /ā/ and the consonant /y/, the grapheme *yā’* is also used alongside *‘alif tawīla* (i.e., ‘) to denote the long vowel /aː/ 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* (ש for /aː/). 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* 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 (\(\mathfrak{z}/\alpha:/\)) 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 (\(\mathfrak{z}/\alpha:/\)) 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., 

‘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);

‘it happened’ (CA: ġarā) (Evr.Arab.II 852, 5v. 18); ‘Then, what happened...’ (Evr.Arab.I 2996, 10v. 14-15, 14r. 9); ‘and stronger’ (CA: ‘aqwā) (Evr.Arab.II 852, 5v. 23);

‘until’ (CA: hattā) (Evr.Arab.II 852, 9r. 13; Evr.Arab.I 2996, 5r. 5, 6v. 15, 7r. 9, 11v. 23, 12v. 18); ‘and he came’ (CA: ‘atā) (Evr.Arab.I 2996, 2r. 6, 3r. 2); ‘when’ (CA: matā) (Evr.Arab.I 2996, 10v. 14); ‘and almighty’ (CA: tu‘ālā) (Evr.Arab.I 2996, 12r. 6); ‘to, toward’ (CA: ‘ilā) (passim); ‘on, upon’ (CA: ‘alā) (passim).

Late fifteenth-century letters

‘Alif maqṣūra is primarily denoted with yod in fifteenth-century letters, e.g., ‘yā‘ ‘to, toward’ (T-S 13J26.7, 1r. 2, 13, MS Heb.c.72/39, 1r. 2); ‘yā‘ ‘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); ‘yā‘ ‘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 (\(\mathfrak{z}/\alpha:/\)) is adorned with a supralinear dash, most probably in order to differentiate it from yod for the long vowel /ī/, e.g., ‘yā‘ ‘to, toward’ (MS Heb.c.72/39, 1r. 15); ‘yā‘ ‘until’ (MS Heb.c.72/39, 1v. 5).

Eighteenth/nineteenth-century folk tales

‘Alif maqṣūra (\(\mathfrak{z}/\alpha:/\)) 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 (\(\mathfrak{z}/\alpha:/\)) in the earliest texts in this eighteenth/nineteenth-century folk tale corpus, e.g., ‘yā‘ ‘to, toward’ (T-S Ar. 46.10, 1v. 31); ‘yā‘ ‘he wept’ (CA: bakā‘; MCA: baka) (T-S Ar. 37.39, 3v. 3).
Orthography and Phonology

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; אלי ‘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 (א), 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., לא֗יחצ א innumerable (CA: lā yuḥsā) (Evr.Arab.II 852, 5v. 22; Evr.Arab.II 1528, 2v. 10); אל֗א₪ ‘to’ (CA: ’ilā; MCA: ’ila) (Evr.Arab.II 1528, 2v. 1); יַיִאַ ‘what happened to me’ (CA: ǧarā; MCA: gara) (Evr.Arab.II 1528, 2v. 5); אֹלַיְיַק ‘but he is not mighty’ (CA: yaqwā; MCA: yiqwa) (Evr.Arab.II 1528, 2v. 11); זַעַל ‘and he rises’ (CA: ’alā, ya’ilā; MCA: ’iliki, yi’la) (Evr.Arab.II 1528, 3v. 3; Evr.Arab.II 852, 7v. 21); וַאֵלָּא and he summoned’ (CA: nādā; MCA: ) (Evr.Arab.II 1528, 3v. 22); אלַשַּא ‘he called’ (CA: da’ā; MCA: da’a) (Evr.Arab.I 2996, 14v. 19).

The use of ’alef in the final example from these folk tales may be interpreted in one of two ways; either as a plene fatḥa /a/, or as ’alef representing ’alif maqṣūra; אם בַקָאַ 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., בקְא ‘he was’ (CA: baqā; MCA: ba’a, (baqa)) (MS Heb.c.72/39, 1v. 14, MS Heb.c.72/18, 1r. 9); אַמָּשַא ‘He walked from’ (CA: ’amšā) (T-S 13J26.7, 1r. 14); יֵאָש ‘he is equal’ (CA: yaswā; MCA: yiswa) (MS Heb.c.72/18, 1r. 12, 13); בַּל ‘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

102 This is a IV form verb used with a form I meaning.
The most common representation of ʿalif maqṣūra (א) in the later folk tales is with the Hebrew grapheme ʿalef, e.g., אלי ‘on, upon’ (CA: ‘alā; MCA: ‘ala) (passim); אלי ‘to, toward’ (CA: ‘ilā; MCA: ‘ila) (passim); אף ‘until, even’ (CA: ḥattā; MCA: ḥatta) (T-S Ar. 37.39, 3v. 9; Cairo JC 104, 3r. 14, 15r. 10); אלי ‘so that...’ (T-S Ar. 37.39, 2r. 17, 3r. 13, 3v. 15; Cairo JC 104, 15v. 7); אלי ‘it happened’ (CA: ʿgarā; MCA: gara) (T-S Ar. 46.10, 1v. 28, 31; BnF Hébreu 583, 140v. 13, 16); אלי ‘and he wept’ (CA: bakā; MCA: baja) (T-S Ar. 37.39, 2v. 7).

Eighteenth/nineteenth-century letters

ʿAlif maqṣūra is often represented in late letters with ʿalef, e.g., אלי ‘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); אלי ‘until’ (T-S 10J16.35, 1r. margin 7, 8).

2.1.5.1.3. heh for ʿalif maqṣūra

Fifteenth/sixteenth-century folk tales

There are no occurrences of heh for ʿalif maqṣūra in this corpus.

Late fifteenth-century letters

In one rare occurrence, heh is used to represent ʿalif maqṣūra in the fifteenth-century letter MS Heb.c.72/18, e.g., אלי ‘Almighty’ (CA: tuʿālā; MCA: tuʿāla) (1r. 3).

Eighteenth/nineteenth-century folk tales

The representation of ʿalif 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., והל ה ‘he wept’ (CA: bakā; MCA: baja) (T-S Ar. 37.39, 3v. 4); והל ‘and Almighty’ (Cairo JC 104, 2v. 12, 4v. 10, 11r. 6); והל ‘(the) Almighty’ (Cairo JC 104, 11v. 6, 12v. 7, 14r. 7, 15v. 5); והל ‘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); והל ‘to, toward’ (CA: ‘ilā; MCA: ‘ila) (Cairo JC 104, 10r. 8, 13r. 13, 13v. 10, 14v. 6); והל ‘another’ (CA: ‘uḥra; MCA: ‘uḥra) (Cairo JC 104, 10r. 7); והל ‘until’ (CA: ḥatta; MCA: ḥatta) (Cairo JC 104, 13v. 12); והל ‘you (will) be granted...’ (CA: tuʿtā) (T-S Ar. 46.10, 1v. 34); והל ‘let him strive’ (CA: saʿā, yasʿā; MCA: saʿa, yasʿa) (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., ‘it remains’ (CA: yabqā; MCA: yibqa) (T-S 13J25.24, 1v. col. 1, 13); ‘he was not pleased’ (CA: lam yarḍa, mā rādiya; MCA: mā rīdi, rīḍa) (T-S 13J25.24, 1v. col. 1, 14); ‘to, toward’ (T-S 13J25.24, 1v. col. 1: 14, 28, 34, col. 2: 4, 24, 39, col. 3: 1); ‘on, upon’ (T-S 10J16.35, lr. 25, margin 3, 3, 12); ‘it happened to us’ (CA: ġarā; MCA: gara) (T-S 13J25.24, 1v. col. 2, 9); ‘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 (א) is represented with the Hebrew grapheme heh, e.g., ‘and he summoned’ (Evr.Arab.II 852, 8r. 7); ‘our salvation’ (CA: ḥalāṣu-nā; MCA: ḥalās-na) (Evr.Arab.II 852, 3v. 17); ‘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); ונספתא עליה מאשלום ‘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: *hāḍā*). *Heh* is also used here to denote ‘alif tawīla, e.g., ‘this news’ (Evr.Arab.II 852, 3r. 12, 3v. 16, 4r. 1); ‘with this letter’ (Evr.Arab.II 852, 6r. 4); ‘this answer’ (Evr.Arab.II 852, 7v. 19); and ‘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., ‘this news’ (Evr.Arab.II 1528, 1v. 13, 17); ‘this place’ (Evr.Arab.II 1528, 1v. 14-15); ‘this nation’ (Evr.Arab.II 1528, 1v. 38); ‘with this letter’ (Evr.Arab.II 1528, 2v. 22).

Late fifteenth-century letters

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

While the other letters in the corpus continue the classical JA representation of ‘alif tawīla with Hebrew ‘alef, in one text the final ‘alif tawīla of the m.sg. demonstrative pronoun is written with *heh*, e.g., ‘this letter’ (MS Heb.c.72/39, 1v. 5); ‘this work’ (MS Heb.c.72/39, 1v. 5); ‘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., ‘the world’ (T-S Ar. 46.10, 1r. 34; Cairo JC 104, 9r. 2, 4, 6, 8, 11r. 10, 15r. 7, 14); ‘thus’ (CA: ka-dā; MCA: *kida* (קִדָּה)) (T-S Ar. 37.39, 3r. 13); ‘what’ (CA: mā; MCA: mā, ma) (T-S Ar. 37.39, 3r. 5; Cairo JC 104, 11v. 8); ‘and when’ (CA: *idā; MCA: *iza*) (Cairo JC 104, 3r. 12); ‘and as for...’ (CA: ’ammā; MCA: ’amma); (Cairo JC 104, 5r. 6); ‘and what’ (CA: māḏā; MCA: mā, ma; *’ih*) (Cairo JC 104, 7r. 2); ‘this (m.sg.)’ (CA: hāḍā; MCA: da-ḥā) (Cairo JC 104, 8v. 11, 10r. 2, 13v. 13, 14r. 3, 15r. 5); ‘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); הד ‘this’ (T-S 10J16.35, 1r. margin 2); הה ‘still’ (T-S 10J16.35, 1r. margin 6); וה ‘when’ (T-S 10J16.35, 1r. margin 6); הנה ‘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., זלנה ‘our friend’ (T-S 10J16.35, 1r. 4, 7, 23, margin 1); רנה ‘our master’ (T-S 10J16.35, 1r. 22); לה ‘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); בנה ‘in our place’ (T-S 10J16.35, 1r. margin 1); תננה ‘we sold’ (T-S 10J16.35, 1r. margin 2); רנה ‘we were’ (T-S 10J16.35, 1r. margin 3; T-S 13J25.24, 1v. col. 1, 40); מסאתנה ‘with us’ (T-S 10J16.35, 1r. margin 6; T-S 13J25.24, 1v. col. 1, 27); הבנה ‘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., האליאנסו פ墮ה ‘we dispatched them’ (Rylands L192, 1r. 8); וגה ‘and he came’ (Rylands L192, 1r. 10, 21, 30, 34, margin 3); עם ‘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., וא ‘and he came’ (T-S 13J25.24, 1v. col. 1, 41); וConcurrency ‘we met’ (T-S 10J16.35, 1r. 8); וConcurrency ‘belonging to us’ (T-S 10J16.35, 1r. margin 5); וConcurrency ‘we were’ (T-S 10J16.35, 1r. margin 6); וא ‘诜 that us (word)’ (T-S 13J25.24, 1v. col. 2, 4, 41); וConcurrency ‘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 L.192. 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 (\(^*1\)). In JA, hamza is seemingly unrepresented.\(^{103}\) As such, 'alif tawīla and 'alif mamdūda are both often denoted with Hebrew 'alef, thus becoming indistinguishable from one another (Blau 1981: 74, 125), e.g., 'אֶלֶיָּשׁו 'and the plea' (CA: 'al-du'a'; MCA: du'a) (Evr.Arab.II 852, 2r. 10; Evr.Arab.I 2996, 12v. 24); נָאָלִקְס 'the outer garment' (CA: 'al-qabā'); מַּה '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); דָּשָּׁ ה 'He wills' (CA: šā'; MCA: šā') (Evr.Arab.II 852, 3v. 21; Evr.Arab.II 1528, 1v. 23); מִמְּאָר 'the princes' (CA: 'umārā'; MCA: 'umara) (Evr.Arab.II 1528, 1v. 15, 3v. 21); פָּאָלְוָמַה '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., אֲלָלָפָא ר '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., יְאָמְרֵה '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., אֲלָלָפָא פ 'free (time)' (CA: 'al-faḍā') (MS Heb.c.72/13, 1r. 2); נָאָלִקְס '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., פָּאָלְוָמַה

\(^{103}\) 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); ‘and he wept (many) tears’ (T-S Ar. 37.39, 2v. 7); ‘and the poor’ (CA: *fuqarā*) (BnF Hébreu 583, 140r. 5); and he wept (many) tears (T-S Ar. 37.39, 1r. 2, 3v. 21); ‘in the heaven(s)’ (CA: *samā*) (T-S Ar. 37.39, 1v. 8, 3r. 7); and the poor (CA: *fuqarā*) (T-S Ar. 37.39, 1r. 2, 3v. 21); ‘the poor’ (CA: *fuqarā*) (T-S Ar. 37.39, 1v. 8, 3r. 7); ‘for the helpers/followers’ (CA: *nuṣarā*) (T-S Ar. 37.39, 2v. 10); ‘bloods’ (CA: *dimā*) (T-S Ar. 37.39, 2v. 17); ‘and the strange’ (CA: *guرابā*) (T-S Ar. 37.39, 3r. 20); ‘punishment’ (CA: *ğazā*) (T-S Ar. 37.39, 2v. 4).

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

**Eighteenth/nineteenth-century letters**

Words which in CA contain *ʾalif mamdūda* seldom occur in the late letter corpus. Those that do use both *ʾalef* and *heh*, e.g., ‘nor buying’ (CA: *širāʾ*) (Rylands L192, 1r. 11); ‘and buying’ (Rylands L192, 1r. margin 3); ‘God willing!’ (CA: *in šāʾa ʾallāh*) (Rylands L192, 1r. 11, 31, margin 4; T-S 10J16.35, 1r. 24).

**Summary**

With the exception of eighteenth/nineteenth-century letters, *ʾalif mamdūda* is most commonly represented in texts of all periods by Hebrew *ʾalef*. However, there is one instance in the folk tale Evr.Arab.II 852 in which *heh* denotes *ʾalif 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. *ʾalif qaṣīra*dagger *ʾalif*

**Fifteenth/sixteenth-century folk tales**

The representation of dagger *ʾalif* 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., *ḥa[(a)* *this* (Evr.Arab.II 852, 3r. 12, 3v. 16, 16, 17, 4r. 1, 9, 6r. 4, 10, 7v. 18, 19, 8r. 6); *ḥa[(a)* *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); *ḥa[(a)* *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 without hamza, e.g., *ʿafā*/*ʿafān* ‘gift, present’; *šaqā*/*šaqān* ‘misery’.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

of dagger ‘alif occurs alongside the traditional defective spelling, e.g., כּדָא אל ‘this’ (Evr.Arab.II 1528, 1v. 13, 14, 14, 17); רָשִּׁם ‘but’ (Evr.Arab.II 1528, 1v. 37);⊖דָא ‘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., כּדָא אל ‘that’ (MS Heb.c.72/39, 1r. 5, 5, 20); כּדָא אל ‘that’ (MS Heb.c.72/13, 1r. 11, 14, 17, 20); כּדָא אל ‘but’ (T-S 13J26.7, 1r. 14); כּדָא אל ‘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., כּדָא אל ‘this’ (MS Heb.c.72/39, 1r. 15); כּדָא אל ‘that’ (MS Heb.c.72/39, 1r. 7, margin 2, 1v. 12, 17); כּדָא אל ‘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., כּדָא אל ‘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, 19v. 10, 11v. 6, 12r. 3, 13r. 13, 13v. 8, 13, 14v. 8, 8, 11, 15r. 10, 15v. 3, 4, 6); כּדָא אל ‘that’ (T-S Ar. 37.39, 1v. 5, 2v. 3, 5, 3r. 6); כּדָא אל ‘but’ (T-S Ar. 46.10, 1v. 26; T-S Ar. 37.39, 2r. 18); כּדָא אל ‘this’ (T-S Ar. 37.39, 1v. 4; BnF Hébreu 583, 140r. 8); כּדָא אל ‘in/with this’ (T-S Ar. 37.39, 3r. 16); כּדָא אל ‘this’ (BnF Hébreu 583, 140r. 9, 10, 17); כּדָא אל ‘this’ (m.sg.) (Cairo JC 104, 2v. 14, 7r. 2, 8v. 11, 10r. 2, 11v. 13, 13, 13, 15r. 5); כּדָא אל ‘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., כּדָא אל ‘this’ (T-S Ar. 37.39, 3v. 7); כּדָא אל ‘three’ (CA: תַּלָּי) (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., כּדָא אל ‘this’ (Rylands L192, 1r. 6; T-S 10J16.35, 1r. margin 3, 7); כּדָא אל ‘and likewise’ (Rylands L192, 1r. 9); כּדָא אל ‘but’ (Rylands L192, 1r. 17) (Khan 2013a: 244); כּדָא אל ‘but’ (T-S 10J16.35, 1r. 29, margin 10; T-S 13J25.24, 1v.col. 1, 7, 23).

Summary
Orthography and Phonology

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., كتابا ‘they wrote’; and يكتوبوا yaktaba ‘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; كراغ ‘they left’ (CA: ḥarağū) (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 /ɑː/ is generally shortened to /ɑ/. In so doing, the distinctions maintained in CA between vowel lengths through the use of tā’ marbūta to denote final /ɑ/ on the one hand, and ‘alif maqṣura and ‘alif ṭawīla to indicate /ɑː/ 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’ marbūta, ‘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 /ɑ/) appears to be favoured, e.g., ‘אש_none ‘he renounced (God)’ (CA: ‘aṣā, ya’sī; 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 /ɑ:/ 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 /ɑ:/ has been
shortened to /ɑ/ and is, therefore, phonetically indistinguishable from tā’ marbūṭa /ɑ/.

2.1.6. Double spelling of vav, yod and ‘alef

The double spelling of yod and vav to denote consonantal /yl/ or /wl/ or geminated /yy/ and /ww/ is considered a key feature of late JA (Hary 1996b: 732; 1997b: 38; Wagner 2010: 37). It 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 tawīla carrying hamza, e.g., ‘alif ṭawīla ‘and I read’ (CA: qara’atu) (Evr.Arab.II 852, 7v. 20); dagger ‘alif, e.g., ‘alif madda ‘but’ (CA: lākin; lākinna) (Evr.Arab.II 852, 4r. 7); ‘alif tawīla carrying hamza and a following short vowel, e.g., ‘alif tawīla ‘he came’ (CA: ‘atā) (Evr.Arab.II 852, 4r. 12); and ‘alif tawīla with madda, e.g., ‘alif tawīla ‘the traces’ (CA: ‘atārun) (Evr.Arab.II 852, 4v. 17); and ‘alif tawīla with madda, e.g., ‘alif tawīla ‘traces’ (Evr.Arab.II 852, 5v. 15); ‘alif tawīla ‘the agonies’ (CA: ‘ālāmun) (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 /wl/ and /yl/, 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., ‘for your enemy’ (CA: ‘adīwwu-ka; MCA: ‘adīww-ak) (Evr.Arab.II 852, 5v. 23); ṭawīla ‘first’ (CA: ‘awwalam; MCA: ‘awwil) (Evr.Arab.II 852, 9v. 19); ‘and a peacock’ (CA: ṭawāsūn) (Evr.Arab.II 852, 11v. 6); and ‘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., ‘head’ (CA: ru‘ūsun; MCA: rūs) (Evr.Arab.II 1528, 2v.9); ‘the misfortune’ (CA: sū; MCA: sū, saww) (Evr.Arab.II, 1528 4r. 15).
Late fifteenth-century letters


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., 우עם ‘I set off by ship/boat’ (CA: ‘awwama; MCA: ‘awwim) (T-S 13J26.7, 1r. 10).

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; אלסוו ‘evil’ (CA: sū’un; MCA: sū’, saww) (Cairo JC 104, 4v. 12); האוזים ‘their ears’ (CA: ‘ughnun/udunun, pl. ‘ądānun; MCA: widn, pl. widān) (Cairo JC 104, 13r. 8). 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., הוואל ‘and my master’ (CA: mawlāya; MCA: mawlāya) (Cairo JC 104, 10v. 8); והואו ‘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 בואלן, ‘the (insurance) policy’ CA: bawālisun/bawāliṣun (Rylands L192, 1r. 12);ubah, ‘he’ (CA: hawwa) (T-S 10J16.35, 1r. margin 1, 2, 9; T-S 13J25.24, 1v. col. 2, 26); שוית, ‘a little (of)’ (MCA: šuwayya, šiwayya) (T-S 13J25.24, 1v. col. 1, 20, 40); שאריו, ‘strong; very’ (CA: qawī; MCA: ‘awī, qawī) (T-S 13J25.24, 1v. col. 1, 26); מ.classes, ‘dependent (on)’ (CA: mutawaqqif; MCA: mitwa’īf/mitwaqqif) (T-S 13J25.24, 1v. col. 1, 26); נאזר, ‘a letter; reply’ (CA: ġawābun) (T-S 13J25.24, 1v. col. 1, 37, col. 2, 6, 6); אסאנה, ‘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., אונווין, ‘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., צבייה ‘and (the) youths (of)...’ (CA: ṣibya, ṣabya) (Evr.Arab.II 852, 9r. 10); ידיע ‘and his support (lit. ‘hand’)’ (CA: yadun; MCA: yadd) (Evr.Arab.II 1528, 3r. 14); נתייה ‘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., tarbiyatun ‘and the instruction of kings’ (CA: Evr.Arab.II 852, 7v. 15-16); ‘Arabic; Arab (f.) (CA: ‘arabīyatun) (Evr.Arab.II 852, 8v. 19);104 ‘you prepare’ (CA: yuhīyyā’) (Evr.Arab.II 852, 6v. 22); אלימלוך ‘the houses’ (CA: diyārun) (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., מواجب ‘and an army’ (CA: ḡayšun) (Evr.Arab.II 852, 2v. 16, 18); אלדייאר ‘the Judge (epithet of God)’ (CA: ‘al-dayyānu) (Evr.Arab.II 852, 1r. 2); ואים ‘and his days’ (CA: ‘ayyāmun) (Evr.Arab.II 852, 5v. 26); for you do not change’ (CA: taḡayyara) (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., רהב ‘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., עליים ‘the wolves’ (CA: gī‘āb; MCA: diyāb) (Evr.Arab.II 852, 11r. 7); אלימלוכ ‘the kites’ (CA: bid’ā, pl. bid‘ān; MCA:
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

ğiḍḍāya, pl. giḍḍāyāt (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., ʿay ‘a thing, something’ (CA: ʾayv; CA: ʾīv) (MS Heb.c.72/39, 1r. margin 2, 1v. 14); ʿaydīr ‘and so on’ (CA: ʿayra-hu; MCA: ʿēr-u) (MS Heb.c.72/18, 1r. 5, 12). It also appears to denote geminated /yy/ and the long vowel /ī/, e.g., ʿayīn ‘it pleases him’ (CA: yuṭayību-hu) (MS Heb.c.72/39, 1v. 15); ṣā ʿaydrī ‘for my lord’ (CA: sayyīdun; MCA: ṣīd, sayyd) (MS Heb.c.72/13, 1r. 20); ʿay ʿaynī ‘matter’ (CA: qaḍīyatun; MCA: qaḍīyya) (MS Heb.c.72/39, 1v. 11). Double yod also occurs where in CA one would expect the dual ending /ayn/; e.g., ṣaḥraynī ‘two months’ (CA: ṣāḥraynī) (MS Heb.c.72/18, 1r. 4). In the final instance found in this corpus, the use of double yod remains ambiguous; ʿaydīr ‘in favour of, for the benefit of’ (CA: fāʿʿidatun; 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 /ī/ 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., ʿal dīnīn ‘(the) world’ (CA: ʿal-dūnīyā) (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); ʿal ḥayyāt ‘the highest’ (CA: ʿulyyā; MCA: ʿulyyā) (T-S Ar. 37.39, 1v. 18); ʿal ḥayyāt ‘the highest’ (Cairo JC 104, 7v. 11); ʿal ḥayyāt ‘the loftiest angels’ (Cairo JC 104, 7v. 8); ʿal ḥayyāt ‘the highest’ (Cairo JC 104, 6v. 10); ʿal ḥayyāt ‘to the extent (of); up to’ (CA: ʿāyyatun) (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 /ī/ vowel (Wagner 2010: 37). Thus, the first of the double yod may be intended to indicate /ī/, while the second yod denotes /y/, e.g., ʿal ḥayyāt ‘(the) area (of)’ (CA: nāḥiyatun) (T-S Ar. 46.10, 1v. 16; BnF Hébreu 583, 140v. 2); ʿal ḥayyāt ‘treachery’ (CA: ḥiyānatun) (T-S Ar. 37.39, 3r. 18); ʿal ḥayyāt ‘and screaming’ (CA: siyāhun) (BnF Hébreu 583, 140r. 5).

A dervish order of Mawla Jalal ʿal-dīn Rūmī, a thirteenth-century Persian mystic.
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., יָּוָּא מֵיִיד הנֵיִיד ‘dead (f.)’ (CA: mayyitun) (T-S Ar. 37.39, 1r. 11); יָּוָּא מֵיִיד מַעְרָא אֶלְהוֹא ‘and they escorted me’ (CA: šayya’a, šāya’a; MCA: šayya’a) (T-S Ar. 37.39, 1r. 15); לאוֹם ‘they are changed’ (CA: taqayyara; MCA: ‘itgayyar) (T-S Ar. 37.39, 2r. 15; Cairo JC 104, 11r. 4); לאוֹם ‘the good’ (CA: tayyibun; MCA: tayyib) (Cairo JC 104, 6r. 7, 15v. 14); אָלָוָּא ‘around me’ (CA: ḥawālayya) (T-S Ar. 37.39, 1r. 17); ואָלָוָּא ‘and my master’ (MCA: mawlawayya) (T-S Ar. 37.39, 2r. 8); אָלָוָּא ‘the good (f.)’ (CA: ḡayyidun; MCA: gayyid) (Cairo JC 104, 16r. 3); אָלָוָּא ‘serpents’ (CA: ḥayyātun) (T-S Ar. 37.39, 2v. 1, 2, 3v. 11); אָלָוָּא ‘O!’ (CA: ’ayyuhā) (Cairo JC 104, 12r. 9, 12v. 8, 15r. 3); אָלָוָּא ‘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 /i/ or /e/. It is unclear from these examples which pronunciation was intended, e.g., תָּאָוָּא מֵיִיד מַעְרָא אָלָוָּא ‘the two students’ (CA: ’itnāni; MCA: ’itnēn) (T-S Ar. 46.10, 1v. 27); תָּאָוָּא אָלָוָּא ‘to (the) two’ (T-S Ar. 46.10, 1r. 37); תָּאָוָּא ‘something’ (CA: šayyun; MCA: šē) (T-S Ar. 37.39, 1r. 18, 1v. 3); תָּאָוָּא ‘the devil’ (CA: šayṭānun; 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., אָלָוָּא איֵא ‘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 /yl/ has been lost by the use of double yod remains ambiguous, e.g., ארבעים וחמישה ‘four hundred and seventy’ (CA: mī’atun, mā’atun; MCA: miyya) (T-S Ar. 37.39, 1r. 11-12); אָלָוָּא איֵא ‘he came towards me’ (CA: gā’a; MCA: gā, gih) (T-S Ar. 37.39, 1v. 5); אָלָוָּא איֵא ‘he came towards me’ (Cairo JC 104, 6v. 2);105 מלאיִי ‘coming’ (CA: maği’un; MCA: migiyy) (BnF Hébreu 583, 140r. 11); מלאיִי ‘full, filled’ (CA: mal’ānum; MCA: malyān) (Cairo JC 104, 6v. 8, 15r. 12; T-S Ar. 37.39, 3v. 10); מלאיִי ‘full’ (Cairo JC 104, 11v. 7; T-S Ar. 37.39, 2r. 23, 2v. 1); מלאיִי ‘full, filled’ (T-S Ar. 37.39, 1v. 9); מלאיִי ‘recitation’ (CA: qirā’ atun) (T-S Ar. 46.10, 1v. 12; BnF Hébreu 583, 140r. 4, 23); מלאיִי ‘for (those who are) afraid’ (CA: li-hā’ifina; MCA: ħāyif) (T-S Ar. 37.39, 2r. 16; Cairo JC 104, 11r. 5).

---

105 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., ‘they revived me’ (CA: 'afāqa, yuqīqa) (T-S Ar. 37.39, 1r. 15); ‘the deed’ (CA: fi‘lun, pl. ‘afā ilun; MCA: fi‘l) (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., ‘to your hand(s)’ (CA: yadun; MCA: yad) (T-S 13J25.24, 1v.col. 2, 2); ‘they use/work’ (CA: ‘amila, ya’malu; MCA: ‘amal, ya’mil) (T-S 13J25.24, 1v.col. 2, 26); ‘a riyāl’ (T-S 13J25.24, 1v.col. 2, 2, 39, 44); ‘to the extent (of); up to’ (CA: ġāyatun) (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 /ī/ in plene, while the second yod is used to indicate /y/, e.g., ‘Latakia’ (CA: ‘al-lāḏiqīya) (T-S 10J16.35, 1r. 25); ‘merit’ (CA: mazīyatun; MCA: maziyya) (T-S 13J25.24, 1v.col. 2, 28); ‘remaining’ (CA: baqīyatun, bāqin; MCA: bāqi, ba‘iyya/baqiyya) (Rylands L192, 1r. margin 3). In the colloquial pronunciation of the following example, /ī/ is dropped and only /y/ is pronounced; ‘the hundred’ (CA: ‘al-gānīyat; 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., ‘good (f.)’ (CA: tayyibun; MCA: tayyib) (T-S 13J25.24, 1v.col. 2, 37); ‘we are passing’ (CA: fā ‘itun; MCA: fāyit) (Rylands L192, 1r. margin 2); ‘and a traitor’ (CA: ḥā‘mun; MCA: ḥāyin) (T-S 10J16.35, 1r. margin 2); ‘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. 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 /yl/ 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. /ɑ/

Fifteenth/sixteenth-century folk tales

The writing of the short vowel fatḥa 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.,لاك ‘for you’ (CA: la-ka) (Evr.Arab.II 852, 9v. 20); andالكلب ‘the dog’ (‘al-kalbu) (Evr.Arab.II 852, 11r. 13); والجندي ‘the warrior’ (CA: باطل) (Evr.Arab.II 852, 3r. 2); وال栢 ‘the glory’ (CA: فرحون) (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 fatḥa in the 3.m.sg. independent pronoun huwwa, e.g.,هو ‘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,

106 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 /ɑ/ 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 /ɑ/ 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 /ɑ/ occurs sporadically, e.g., 'he found' (CA: wağada) (T-S Ar. 46.10, 1v. 23); 'he found' (CA: wağada) (T-S Ar. 46.10, 1v. 27); ‘they prayed’ (CA: şallā) (T-S Ar. 46.10, 1v. 30); ‘you gave alms...’ (CA: şadaqa; taşadaqa 'alā) (T-S Ar. 37.39, 1r. 2); ‘and they dragged me’ (MCA: šaḥṭat) (T-S Ar. 37.39, 2r. 15); ‘he condemns’ (CA: dīna, yadīna) (T-S Ar. 37.39, 2v. 2); ‘in place of’ (CA: ‘iwaḍa) (T-S Ar. 46.10, 1v. 15; Cairo JC 104, 6r. 2); ‘and five’ (T-S Ar. 37.39, 2v. 12); ‘five’ (Cairo JC 104, 5v. 13, 13); ‘time’ (CA: waqtun) (T-S Ar. 37.39, 1v. 1, 2v. 5).

In one instance, the use of 'alef to denote the short vowel /ɑ/ 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., ירשא 'they will know’ (T-S Ar. 46.10, 1r. 29).

The plene writing of independent pronouns’ final short vowel /ɑ/ takes two forms in these eighteenth/nineteenth-century folk tales. In the earlier eighteenth-century folk tales, the final /ɑ/ is denoted with both 'alef and heh, e.g., 'আে 'he' (AIU VII.C.16, 1v. 1, 14); 'আে ‘she’ (AIU VII.C.16, 1r. 3, 1v. 6); 'আ ‘he' (T-S Ar. 46.10, 1v. 4, 26); ‘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 /ɑ/ is represented exclusively with 'alef, e.g., 'আ ‘he’ (BnF Hébreu 583, 140r. 16, 140v. 11, 14, 141r. 1; Cairo JC 104, 2v. 6, 7r. 5, 15r. 6); 'আ ‘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 /ɑ/ 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., מעא ‘with you’ (BnF Hébreu 583, 140r. 17);ךּמעא ‘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 /ɑ/ does occur in the eighteenth/nineteenth-century letters examined here, e.g., קאוי ‘very’ (CA: qawīy) (Rylands L192, 1r. margin 1; T-S 13J25.24, 1v.col. 1, 26), קאוויCRYA ‘and the country’ (CA: wa’al-baladu) (Rylands L192, 1r. 11); קאוב ‘closed’ (CA: tayya) (Rylands L192, 1r. 6), קאוים ‘instead of’ (CA: badala) (Rylands L192, 1r. 24). Plene short /ɑ/ is also used to represent long /ā/ in keeping with the MCA writing and pronunciation of the preposition ma’a when followed by a pronominal suffix, e.g., מעא ‘with you (m.pl.)’ (T-S 13J25.24, 1v.col. 1, 16); מעא ‘with you (m.pl.)’ (T-S 10J16.35, 1r. margin 10); מעא ‘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 /ɑ/ 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 /ɑ/ 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 /ɑ/ > /ɑː/ 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 /ɑ/ also reveals adherence to MCA vocalisation of verbs from CA *ya’rifā* > 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 /ɑ/, as it is of the Hebrew loanword *ḥā*.

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., ‘for you’ (f.sg.) (CA: *la-ki*; MCA: *li-ki, li-ki*) (7v. 25, 11r. 5); ‘that you’ (CA: ‘anna-ki; MCA: ‘inn-ik) (10v. 25, 12r. 1); ‘on you’ (CA: ‘alay-ki; MCA: ‘alā-ki) (11r. 2); ‘throughout your day’ (CA: *ṭūl nahār-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; *sir* ‘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., מ 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); מ in, from you (CA: *min-ka*; MCA: *min-ak*) (T-S Ar. 37.39, 2r. 9); מ to the... (CA: *li-l...*) (T-S Ar. 46.10, 1v. 7, 13, 17, 31); מ on account of... (CA: *gihattu...*; MCA: *giha*) (BnF Hébreu 583, 140r. 9); מ one (CA: *wāhidun*; MCA: *wāhil*) (T-S Ar. 46.10, 1r. 27, 1v. 3, 20); מ standing (CA: *wāqifun*; MCA: *wā’if (wāqif)*) (T-S Ar. 46.10, 1v. 23, 29); מ that (CA: *galika*; MCA: *dā, da*) (T-S Ar. 37.39, 1r. 3); מ that (T-S Ar. 37.39, 1v. 5, 2v. 5, 3, 5, 3r. 6); מ and the physicians (CA: *’atibbā*; MCA: *’atibba*) (Cairo JC 104, 5v. 9). In the following example the *yod* indicates the genitive marker /i/; מ heard (heard) of our situation (CA: *ḥāli-nā*; MCA: *hal-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., מ 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., מ he greeted them (CA: *sallama*; MCA: *sallim*) (T-S Ar. 46.10, 1v. 28); מ he introduced (himself) (CA: *qaddama*; MCA: *qaddim*) (T-S Ar. 46.10, 1v. 29); מ he descended (CA: *nazala*; MCA: *nizil*) (T-S Ar. 37.39, 1r. 4); מ he proceeded (CA: *tala’a; MCA: *tli*; *tala*) (T-S Ar. 46.10, 1r. 32, 1v. 19); מ they were astonished (CA: *ta’ağgaba*; MCA: *’it’aggib*) (T-S Ar. 46.10, 1v. 20); מ in order to wash myself (MCA: *’it’gassil*) (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/ēt*, e.g., מ ‘I was untied from (the) punishment’ (CA: *infakkatu*; MCA: *infakkēt*) (T-S Ar. 37.39, 3v. 14); מ ‘it (f.sg.) was’ (CA: *kānat*; MCA: *kānit*) (T-S Ar. 37.39, 2v. 9); מ ‘it (3.f.sg.) was finished’ (CA: *farağat*; MCA:
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 /ɑ/. Many of these instances simply indicate the presence of the short vowel /i/ which occurs in CA, or MCA, e.g., ‘a lack of’ (CA: *qillit*) (Rylands L192, 1r. 10, margin 3); and that which is beneficial’ (CA: *wa-* ’al-*maṣāliḥ*); ‘the one who demands’ (CA: *at-*fālib) (Rylands L192, 1r. 10); ‘on account of’ (CA: *bi-*mūgib) (Rylands L192, 1r. 22); ‘and complete’ (CA: *wa-*kāmil) (T-S 10J16.35, 1r. margin 5); ‘appropriate’ (CA: *munāsibun*) (T-S 13J25.24, 1v. col. 1, 7); ‘on account of...’ (CA: ġihatu) (T-S 13J25.24, 1v. col. 1, 9); ‘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; ‘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., ‘and we took them’ (CA: *‘aḥāḏnā-*hum; MCA: *‘aḥadn(i)-hum*) (T-S 10J16.35, 1r. margin 12); ‘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 in 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 -iḥ/-iḥ to the shift from fa’ala > fi’iḥ 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 Maġribi 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 damma, particularly in the 2.m.pl. pronoun suffix -kum, e.g., ‘from you’ (MS Heb.c.72/18, 1r. 2); ‘bread’ (CA: hubzun) (MS Heb.c.72/18, 1r. 5, 6); ‘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., הנס ‘wisdom, judgement’ (CA: hukm) (T-S Ar. 37.39, 2r. 22; T-S Ar. 46.10, 1v. 16; BnF Hébreu 583, 140v. 1); 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); all of it (m.sg.)’ (CA: kullu-hu; MCA: kull-u) (T-S Ar. 37.39, 1v. 11, 3r. 23, 3v. 7); all of it (f.sg.) (T-S Ar. 37.39, 3v. 2); קחרזא ‘sacrifice’ (CA: qurbānum) (T-S Ar. 46.10, 1r. 28, 29); they demand’ (CA: yaṭlubūna; MCA: yuṭlubū) (T-S Ar. 46.10, 1r. 31; Cairo JC 104, 3r. 8); ‘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 /i/ 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., אמא ‘and his name...’ (Cairo JC 104, 3r. 12); אמא ‘and his’ (T-S Ar. 37.39, 2r. 19); רונית ‘and his head’ (T-S Ar. 37.39, 1v. 8); רונית ‘and his head’ (T-S Ar. 37.39, 1v. 12); ‘his body’ (CA: badanu-hu) (T-S Ar. 37.39, 1v. 9); ‘his portion (CA: šatnu-hu) (T-S Ar. 37.39, 1v. 11); ‘his chest’ (CA: šadru-hu) (T-S Ar. 37.39, 1v.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

In a limited number of cases, the CA influenced JA 3.m.sg. pronoun suffix -hw is supplanted by vav (-u/-u), indicating the colloquial pronunciation of the 3.m.sg. pronoun suffix, -u, e.g., ‘his age’ (BnF Hébreu 583, 140r. 3); ‘his house’ (BnF Hébreu 583, 140r. 18); ‘Seize him!’ (T-S Ar. 37.39, 1v. 3, 2r. 11, 20); ‘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. -kum) consistently in these eighteenth-nineteenth-century folk tales, e.g., ‘with you (m.pl.)’ (T-S Ar. 46.10, 1v. 5); ‘with you (m.pl.)’ (BnF Hébreu 583, 140r. 17); ‘for/to them’ (T-S Ar. 37.39, 3r. 3; BnF Hébreu 583, 141r. 17; Cairo JC 104, 13r. 11); ‘he will save you!’ (T-S Ar. 37.39, 2v. 16); ‘I believe you!’ (Cairo JC 104, 10r. 5); ‘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 /i/, /u/, 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., ‘and they’ (CA: hum) (T-S Ar. 37.39, 2v. 4); ‘he sent them’ (CA: 'arsala-hum) (T-S Ar. 46.10, 1v. 27); ‘upon them’ (CA: 'alay-him; MCA: ‘ali-hum) (T-S Ar. 46.10, 1v. 28; BnF Hébreu 583, 140r. 9, 140v. 4, 13, 141r. 11); ‘with them’ (CA: bi-him; MCA: bi-hum) (T-S Ar. 37.39, 3v. 2); ‘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); ‘So, I said to them’ (T-S Ar. 37.39, 3r. 9); ‘their left’ (T-S Ar. 37.39, 1v. 20); ‘their fingers’ (T-S Ar. 37.39, 2v. 1); ‘from them’ (T-S Ar. 37.39, 2v. 2; Cairo JC 104, 4r. 5, 7); ‘and above them’ (T-S Ar. 37.39, 2v. 20).

13, 19); ‘his beard/chin’ (CA: daganu-hu) (T-S Ar. 37.39, 1v. 13, 18); ‘his right’ (CA: yaminu-hu) (T-S Ar. 37.39, 1v. 12, 16); ‘his left’ (CA: yisāra-hu) (T-S Ar. 37.39, 1v. 12); ‘in front of him’ (T-S Ar. 37.39, 1v. 13); ‘for/to him’ (CA: la-hu) (T-S Ar. 46.10, 1v. 25, 29); ‘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); ‘with him’ (CA: bi-hi; MCA: bihi) (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; מִלְיָדָה ֶ-וֹ (CA: ḥudi-hu; MCA: ḥudi 'and-ik) (T-S Ar. 37.39, 2r. 2).
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 עומרו’ (CA: ‘al-umru) (Rylands L192, 1r. 9); ‘and as for the doubts’ (CA: ‘al-shākīku) (Rylands L192, 1r. 10); ‘the purse’ (CA: ‘al-surratu) (Rylands L192, 1r. 24); ‘maize’ (CA: duratu; MCA: dura) (Rylands L192, 1r. 29; T-S 10J16.35, 1r. 26; T-S 13J25.24, 1v.col. 1, 37); ‘other’ (CA: ‘uhrā; MCA: ‘uhrā) (T-S 10J16.35, 1r. 14); ‘and we will take’ (CA: na’ḥuḥu; MCA: nāḥud) (T-S 10J16.35, 1r. 23, 25, margin 13); ‘his age’ (CA: ‘umrun; MCA: ‘umr) (T-S 10J16.35, 1r. margin 2); ‘the shop’ (CA: dukkānum) (T-S 10J16.35, 1r. 22);107 ‘shop’ (T-S 13J25.24, 1v. col. 1, 13); ‘each, every, all’ (T-S 13J25.24, 1v. col. 1: 33, 36, 39); ‘all of it’ (T-S 13J25.24, 1v. col.3: 39); ‘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., ‘upon you’ (T-S 13J25.24, 1v. col. 1, 3, 42); ‘we inform you’ (T-S 13J25.24, 1v. col. 1, 4; T-S 13J25.24, 1v. col. 1, 35, 40); ‘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); ‘from you’ (T-S 13J25.24, 1v. col. 1, 13); ‘we wrote to’ (T-S 13J25.24, 1v. col. 1, 4, 5, 8); ‘for your respect’ (T-S 13J25.24, 1v. col. 1, 16); ‘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/, /i/ or /ai/, does not occur at all in these letters. This is in accordance with MCA norms, e.g., ‘their income’ (T-S 10J16.35, 1r. 6); ‘belonging to them’ (T-S 10J16.35, 1r. 10); ‘you disposed of them’ (T-S 10J16.35, 1r. 13); ‘and you should send them’ (T-S 10J16.35, 1r. margin 9, 15); ‘we wrote to them’ (T-S 10J16.35, 1r. margin 11); ‘and as for the doubts’ (T-S 10J16.35, 1r. margin 12); ‘above them’ (T-S 10J16.35, 1r. margin 14); ‘from them’ (T-S 13J25.24, 1v. col. 1, 10); ‘he took them’ (T-S 13J25.24, 1v. col. 1, 21); ‘we wrote to them’ (T-S 13J25.24, 1v. col. 1, 22, 37); ‘with them’ (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., ‘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 /u/, e.g., ‘to him’ (CA: ‘umru-hu; 107 The addition of a supralinear dot above this kaf for kāf appears to have been a mistake on the part of the writer.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

MCA: ‘umr-u) (T-S 10J16.35, 1r. margin 2); ‘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 Maġribi 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 /i/, /ēy/, /a:/ and (in the eighteenth/nineteenth-century letters) /ū/, e.g., שָׁאָל ‘and what?’ (CA: ‘ayy; (archaic); ECA: ‘ēd; MCA: ‘ēh) (T-S Ar. 37.39, 2r. 7); שָׁמָמָק ‘layers’ (CA: ṭabaqātun) (T-S Ar. 37.39, 2v. 9); אַל-תורָב ‘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 pronominal 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 pronominal 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., /i/ > /i/), and this phonetic phenomenon is reflected in the orthography of the text, e.g., מֶלֶךְ ‘their festival’ (CA: ‘idu-hum; MCA: ‘id-hum) (T-S Ar. 46.10, 1r. 27); וּבְיֵר ‘other than it’ (CA: ġayra-hu; MCA: ġēr-u) (T-S Ar. 37.39, 2r. 22); ובֶר ‘other than you’ (T-S Ar. 37.39, 3r. 18); כְּרֵם ‘and his head’ (CA: ra’su-hu; MCA: rās-u) (T-S Ar. 37.39, 1v. 8); כְּמָח ‘his head’ (CA: yasār-hu; MCA: šimāl-u) (T-S Ar. 37.39, 1v. 17); כְּמָח ‘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; בֵּן הָאָדָמ ‘for the benefit of’ (CA: fāʿidatun; 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 /aː/ is a common feature of eighteenth/nineteenth-century letters, e.g., ‘its price’ (CA: ‘asʿār-hā; MCA: ’asʿār-ha) (Rylands L192, 1r. 18); ‘at the main gates’ (CA: bawābātun; MCA: bawābāt) (Rylands L192, 1r. 24); ‘your letters’ (CA: makātībun) (T-S 10J16.35, 1r. 5); ‘letters’ (T-S 10J16.35, 1r. margin 6); ‘we sold them’ (CA: bāʾanā-hum; MCA: bāʾna-hum) (T-S 10J16.35, 1r. 10, 17); ‘we sold’ (CA: bāʾnā; MCA: bāʾna) (T-S 10J16.35, 1r. margin 2). Most of these can be interpreted as reflecting the shortening of originally long /aː/ in colloquial speech.

Omission of the /aː/ of the 1.c.pl. suffix ending occurs in late letters, e.g., (CA: katabnā-hum; MCA: katabna-hum) (T-S 10J16.35, 1r. margin 11); (CA: ’aḥadnā-hum; MCA: ’aḥadna-hum) (T-S 10J16.35, 1r. margin 12); ‘we have put it’ (CA: wādaʾnā-hā; MCA: wadaʾna-ha) (Rylands L192, 1r. 6); ‘and we told you’ (CA: ’arifnā-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 /aː/ > /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; ‘success’ (CA: naḡāḥun; MCA: naḡāḥ) (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 /ɑ/ > /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 /ɑ/ found in both CA and MCA, e.g., ואתווגיהו 'and they set off towards...' (CA: tawagghaha; MCA: 'twaggah) (T-S Ar. 46.10, 1v. 2, 14). In the second example, the second /ɑ/ 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., מליךּ֗אל֗מות '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 /ɑ/ 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., ליהום '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 'inl-'in, e.g., ןא 'that' (CA: 'an; 'anna; MCA: 'inn) (T-S Ar. 46.10, 1r. 30); סערי '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 /ɑ/ > /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’atū) (T-S Ar. 46.10, 1v. 11); סכרית 'the) agony of...' (CA: sakratu) (T-S Ar. 37.39, 1v. 2); טבקית 'level of...' (CA: tabaqatu) (T-S Ar. 37.39, 2r. 4). The same phenomenon is found before the dual ending, e.g., כעכיתיין 'two cakes’ (CA: ka’katun) (T-S Ar. 46.10, 1v. 14).

Eighteenth/nineteenth-century letters

An instance of the vowel shift /ɑ/ > /i/ is found in the following example; מובארי ‘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
Orthography and Phonology

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

2.2.3.2. /i/ > /ɑ/
Fifteenth-sixteenth-century folk tales
There are no obvious signs of the vowel shift /i/ > /ɑ/ in this corpus.

Late fifteenth-century letters
There are no obvious signs of the vowel shift /i/ > /ɑ/ 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 /ɑ/ vowel appears where one would expect /i/; שבטים ‘procession’ (CA: mawkitun; MCA: mawkib) (1v. 33).

Eighteenth/nineteenth-century letters
There are no obvious signs of the vowel shift /i/ > /ɑ/ in this corpus.

2.2.3.3. /ɑ/ > /u/
Fifteenth/sixteenth-century folk tales
There are no obvious signs of the vowel shift /ɑ/ > /u/ in this corpus.

Late fifteenth-century letters
There are no obvious signs of the vowel shift /ɑ/ > /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; ‘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; ‘and the sorcerers’ (CA: *ṣaharatun*; *suḥḥārun*) (T-S Ar. 37.39, 2v. 11); ‘‘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-d-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., ‘he visited’ (Rylands L192, 1r. 21, 30, 34); ‘he was present’ (CA: *ḥaḍara*; MCA: *ḥaḍar*) (Rylands L192, 1r. 30, 34; T-S 10J16.35, 1r. 24, margin 12); ‘I was present’ (T-S 10J16.35, 1r. margin 6); ‘you were not present’ (T-S 10J16.35, 1r. margin 11); ‘it emerged’ (CA: *ẓahara*; MCA: *ẓahar*) (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., נזרופ עליהום ‘my bones’ (CA: ‘iẓām-ī; MCA: ‘iḏām) (T-S Ar. 37.39, 2r. 4); רצות ‘his approval’ (CA: riḍā; MCA: rīda) (T-S Ar. 37.39, 2v. 15); קשחת ‘story (of)’ (CA: qiṣṣatun; MCA: qiṣṣa) (Cairo JC 104, 3r. 1, 3v. 1, 4r. 1, 4v. 1, 5v. 1, 6v. 1, 6r. 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); נוחנו נצרופ עליהום we will support them (CA: yaṣrifu; MCA: y'iṣrif) (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; ביצא ‘merchandise’ (CA: biḍā‘atun; MCA: biḍā‘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., נווה ‘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 /ɑ/ > /i/, /ɑ/ > /u/, and /ɪ/ > /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 ǧ-h-z rendered as z-h-ǧ in the fifth form active participle; ǧמָעַת ‘(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 ǧ-h-z; 108גָזֶז ’(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 /ǧ/ in z-w-ğ > g-w-z. However, unlike z-w-ğ > g-w-z, the metathesised form z-h-ǧ is not recorded in contemporary vernacular Arabic. The CA order of ǧ-h-z is retained in MCA (e.g., mitgahhiz). Whether or not this phenomenon has anything to do with the realisation of ġīm as a plosive, is unclear. The metathesis of ǧ-h-z > z-h-ǧ 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 ġīm represented with kaf, while in the latter, šin and zayin are sporadically used to denote ġīm (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-ǧ and its well-established metathesised form ǧ-w-z, e.g., גזセット ‘a pair’ (MS Heb.c.72/18, 1r. 7); גז תחתך ‘your wife’ (T-S 13J26.7, 1r. 21); and גז תחתך ‘and his wife’ (T-S 13J26.7, 1r. 24). The first of these examples comes from a letter composed by a Maġribi

108 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 /ǧ/ and /z/, which is attested elsewhere in this particular text.
Orthography and Phonology

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 ǧīm and dāl in this text.

2.4.1. /ğ/ > [ʒ/z]

An example frequently mentioned in analyses of ǧīm is the VIIIth form of the verb ǧm‘ in which the ǧīm is represented by the Hebrew grapheme šin, ʿstm‘ ‘to gather, meet’ (CA: ʾiġtama‘a). This verb form is found in the fourteenth/fifteenth-century folk narrative Evr.Arab.II 852, e.g., והשתמש ʿSTM‘ ‘and he gathered’ (Evr.Arab.II 852, 8r.9);anstמשחן 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 ǧīm 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 ǧīm is further corroborated by the following example found in the same text, in which the ǧīm in ǧazīra ‘island’ is denoted with a zayin: בזזירה (Evr.Arab.II 852, 1v. 20), thus suggesting a proximity both in manner and place of articulation to both phonemes /z/ and /ğ/ 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:  ודבכלל ‘ashamed/humbled’ (CA: *mutaḏallalun*) (Evr.Arab.II 852, 8r. 3); וָלַדְגָּקִיו ‘the message’ (CA: *al-taḏākiru*) (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., וַתַּכְתָּב ‘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 /l/, e.g., וַתִּתְפָּה ‘you paid’ (CA: *tadfa‘ūna/*tadfa‘ū*) (T-S 13J25.24, 1v. 35); וַתִּתְפָּהא ‘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, the lām of the definite article – *al-* ‘the’ – assimilates to following coronal consonants (Zemánek 2006, I: 204), e.g.,  אִלֵּר גַּל al-raḡulu

109 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).

110 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 bɔɪ] (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
Orthography and Phonology

[ʔarːadʒulu] ‘the man’. These consonants were referred to by the Arab grammarians as ‘al-ḥurūf’ al-šamsiyā\textsuperscript{111} ‘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. ی ‘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 י ‘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., אראכץ ‘the Merciful One’ (CA: ‘al-raḥīm) (I, 1; II, 1; XIII, 1); אדווה ‘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., אלפחדה ‘the magic’ (CA: al-siḥr) (T-S NS. 298.55, 1r. 6, c. eleventh century CE); אלכינאת the heavens (T-S Ar. 8.3, 14r.) (CA: al-samawāt) (example from Khan 2010: 202) (cf. Hary 1996b: 730; Khan 2017: 202). 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)\textsuperscript{112}

2.5.1. Assimilation of /l/

2.5.1.1. Definite article + coronal consonants

Hary refers to two examples from the seventeenth-century text Darhec No’am in which the lamed of the definite article is omitted when preceding a coronal consonant, e.g., ארכים ‘the small’ (CA: ‘al-suqarā’); אנשים ‘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;

\textsuperscript{111} The transliteration used here and elsewhere represents the written CA spelling, rather than the phonetic realisation. Phonetic transcriptions are marked by [ ].

\textsuperscript{112} Wagner also records two instances in eleventh-century letters (from Egypt and the Mağrib, respectively) in which the definite article is written as an independent entity (2010: 66, §4.7.1)
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

Fifteenth-century folk tales
‘and the falcons’ (Evr.Arab. II 1528, 2r. 39); ‘the giraffe’ (Evr.Arab. II 852, 1v. 20); and ‘the sultan’ (Evr.Arab. I 2996, 1v. 9).

Late fifteenth-century letters
‘the longing/desire’ (MS Heb.c.72/13, 1r. 2); ‘the witnesses’ (MS Heb.c.72/39, 1v. 4); ‘the perfect greeting’ (T-S 13J26.7); and ‘the bread and wine’ (MS Heb.c.72/18, 1r. 6).

Eighteenth- and nineteenth-century folk tales
‘the chicken’ (AIU VII.C.16, 1v. 22); ‘the year’ (T-S Ar. 46.10, 1r. 29, 30); ‘the devil’ (T-S Ar. 37.39, 1r. 3); ‘the knife’ (BnF Hébreu 583, 141r. 10, 11); ‘the person’ (Cairo JC 104, 14v. 8, 3v. 5).

Eighteenth/nineteenth-century letters
‘the order’ (Rylands L192, 1r. 10); ‘the reason’ (T-S 13J25.24, 1v. col. 1, 13); and ‘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., ‘and the village’ (XII, 9) (CA: wa-‘al-qarya); ‘with the wheat’ (XIII, 11) (bi-‘al-qamh).113 As Wagner points out in her analysis of letters from across the centuries, this phenomenon may have resulted from analogy with the spelling

113 Blau and Hopkins compare this feature to the writing of the preposition fi, which retains its independent form in these early JA papyri. They attribute this distinction in the writing of the bound morphemes b- and w- the independent preposition fi to the influence of Hebrew spelling. While there are similar constructions in Hebrew using vav and bet, there is not an analogous form for fi 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 patah and the following letter is marked with a dages, e.g., ‘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., vahad:avah ‘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 ِ- definite article (2010: 65), which in all forms of written Arabic appears as - لل, ‘to/for the...’, thus omitting the ‘ال’ of the definite article. It may also be indicative of the pronunciation of - or bi- definite article, in which the /a/ vowel is elided, e.g., [walqarja ]; [bilmqmh].

**Fifteenth/sixteenth-century folk tales**

The omission of ‘ال’ is uncommon in the fifteenth-century corpora, occurring only in the folk tale Evr. Arab. II 852 after the bound conjunction و- ‘and’ and the bound preposition ب- ‘in, with’, e.g., (Evr. Arab. II 852, 1r. 3-4); (Evr. Arab. II 852, 1r. 10); ‘with the response’ (Evr. Arab. II 852, 6r. 5). However, there are also many instances in the same text in which ‘ال’ is retained after a bound morpheme, e.g., ‘and the subayṭar’114 (Evr. Arab. II 852, 9r. 2); ‘and the black’ (Evr. Arab. II 852, 3r. 11).

**Late fifteenth-century letters**

In fifteenth-century letters, the ‘ال’ and lamed of the definite article both remain after the preposition ب-, e.g., (MS Heb. c.72/13, 1r. 6); ‘with the help’ (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 ‘ال’ of the definite article is absent after the bound preposition ب- ‘in, with’; (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 ‘ال’ is retained, e.g., ‘with the sword’ (T-S Ar. 37.39, 1v. 7).

**Eighteenth/nineteenth-century letters**

The elision of the ‘ال’ 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 ‘ال’ absent, but it is replaced by yod, perhaps intended to indicate the short vowel kasra /i/, reflecting the phonetic pronunciation of the bound morpheme ب- + definite article (which in many dialects, including MCA, is realised as ‘ل- [ʔil] ‘the’), e.g., ‘(at) the value

elision in spoken Arabic.

114 Subayṭar: ‘a name of a bird’ (Kazimirski 1860: I, 1044).
of 150 with/in the old prices’ (Rylands L192, 1r. 8); ‘with the old price’ (Rylands L192, 1r. 9); ‘safely’ (T-S 13J25.24, 1v. col. 2, 40); ‘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., ‘in the clouds’ (Evr.Arab. II 1528, 3v. 20); ‘on the couch’ (Evr.Arab. II 852, 7v. 22); and ‘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., ‘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., ‘and every(one) who is in the district...’ (T-S 13J26.7, 1r. 26); ‘in the answer’ (MS Heb.c.72/39, 1v. 10); and ‘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., ‘in the countryside’ (AIU VII.C.16, 1v. 12, 21); ‘in the synagogue’ (BnF Hébreu 583, 140v. 15); ‘in the town’ (BnF Hébreu 583, 140v. 5, 22); ‘in the world’ (Cairo JC 104, 9r. 6); ‘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., ﺳ ﻲ ﻦ ﺘ ﺤ ﺔ ﺪ ﺖ ‘in the heaven(s)’ (T-S Ar. 37.39, 1v. 8); ﺳ ﻲ ﻦ ﺘ ﺨ ﺪ ﺪ ‘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., ﺳ ﻲ ﻦ ﺘ ﺧ ‘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., ﺳ ﻲ ﻦ ﺘ ﺪ ﺖ ‘in the revenue’ (Rylands L192, 1r. 14); ﺳ ﻲ ﻦ ﺘ ﺔ ﺪ ﺖ ‘at the doors’ (Rylands L192, 1r. 24); ﺳ ﻲ ﻦ ﺧ ﺪ ﺬ ‘in the account’ (T-S 13J25.24, 1v. col. 3, 13); ﺳ ﻲ ﻦ ﺧ ﺬ ﺪ ﺬ ‘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., fi-’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., ﺳ ﻲ ﻦ ﺘ ﺧ ﺬ ‘in the (insurance) policy’ (Rylands L192, 1r. 12); ﺳ ﻲ ﻦ ﺧ ‘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., ﺳ ﻲ ﻦ ﺧ ﺪ ﺬ ‘and the former’ (Evr.-Arab. II 1528, 1v. 5); ﺳ ﻲ ﻦ ﺧ ﻲ ﺬ ‘the fox’ (Evr.-Arab. II 852, 1v. 15); ﺳ ﻲ ﻦ ﺥ ﻲ ﺬ ‘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., ‘אַלַכָּבָּי ‘the letter’ (MS Heb.c.72/13, 1r. 13); ‘אַלְכָּבָנ ‘the reply’ (MS Heb.c.72/39, 1v. 10); ‘אַלִכָּבָּנ ‘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., ‘אַלְכָּבָּנ ‘and the people’ (MS Heb.c.72/18, 1r. 6); ‘אַלְכָּבָּנ ‘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., ‘אַלְכָּבָּנ ‘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., ‘אַלְכָּבָנ ‘the boy’ (T-S Ar. 46.10, 1r. 35); ‘אַלְכָּבָנ ‘the darkness’ (T-S Ar. 37.39, 2r. 19); ‘אַלְכָּבָנ ‘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., ‘אַלְכָּבָנ ‘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., ‘אַלְכָּבָנ ‘during the night’ (Cairo JC 104, 4r. 9); ‘אַלְכָּבָנ ‘in the name’ (Cairo JC 104, 4r. 6); ‘אַלְכָּבָנ ‘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., ‘אַלְכָּבָנ ‘the buying and selling’ (Rylands L192, 1r. margin 3); ‘אַלְכָּבָנ ‘the people’ (T-S 13J25.24, 1v. col. 1, 25); ‘אַלְכָּבָנ ‘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 Moše b. Yehūdah115 in Alexandria. Amongst these letters, which predominantly appear to be written from Cairo and the Mağrib, there is

Orthography and Phonology

at least one other letter that was composed in Sicily or Spain (MS Heb.c.72/23). In these letters, the definite article is consistently and clearly written as an independent entity, e.g., אֵלִ֔וּ קַרְאוּת ‘the book (of the) Torah’ (MS Heb.c.72/23, 1r. 15); דָּאָרִ֔י רוֹצִי ‘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 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 día ‘the day’. In Judaeo-Spanish texts written in the fourteenth/fifteenth and sixteenth centuries (and later), el is transcribed יָל; its independent form in Spanish is retained in Judaeo-Spanish, e.g., el citado ‘the aforementioned’ (Spanish: el citado) (Penn CAJS Halper 408, 1r. 3. c. 1400–1499); el día ‘the day’ (Spanish: el día) (Penn CAJS Halper 409, 1r. 6. c. 1400–1700); el gentile ‘the gentile’ (Yoreh Deah 53, 25, Salonica 1595); and el pandero ‘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); el cuidado ‘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

116 The contemporaneous texs 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., ולא צייר ‘the sages’ (MS Heb.c.72/2, 1v. 12); ולא אומץ אלא אומץ ‘the final perfection’ (MS Heb.c.72/2, 1v. 8); and ולא אומץ אלא אומץ ‘and in the Torah’ (MS Heb.c.72/24, 1v. 9).

117 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).

118 These manuscripts may be found on the Friedberg Genizah Project website under the classmarks listed here.
Linguistic variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

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 ḏāl, kaf for ḥā’ and kāf and gimel for ġayn 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 ḏāl, kaf for ḥā’ and kāf and gimel for ġayn). 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 ġim was questioned. Through a brief examination of some former analyses of historical phonetic reflexes of ġim in which the origins of the fronted ġim 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 ġim 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 ġim; and to search for more unambiguous indications of the phonetic reflexes of ġim 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 ġim – 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 ġim in pre-Modern Egyptian dialects. Oft-cited examples of assimilation, metathesis and graphemic substitutions used in support of an affricate pronunciation of ġim 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 ġim. 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 Maġribian, Tunisian and
Libyan and urban Syro-Palestinian pronunciations of ǧīm. Furthermore, new evidence discovered in the fifteenth/sixteenth-century folk narrative Evr.Arab.II 1528, in which ǧīm is represented by kāf, implies that the voiced velar stop [g] reflex of ǧīm 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 ẓā’. This is indicative of the colloquial plosive realisation of ẓā’ and its phonetic merging with dād. 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 ġīm. Evidence was found for both plosive and fronted allophones of ġīm.

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

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. 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. 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 assertions; ‘an ‘al-maṣdariyya – so called because in instances in which the subject of the main and complement clauses are coreferential, ‘an may be replaced with a maṣdar (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-maṣdariyya 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-maṣdariyya 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

---

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

120 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).

121 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).

122 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).
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 ‘inn are represented by the single complementiser ‘inn,123 which is always followed by a substantive, e.g., ‘alā-qi (qalā-qi) ‘inn ‘il-maktab ma’fūl (maqfūl) ‘They told me that the office was closed’; wafī’t (wafiqt) ‘alā ‘inni ḥ-aruḥ ‘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 ha- (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).

---

123 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) ומשאר אלוה את יכתב

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

(2) ומשאר אלוה את

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

(3) פאמרת אל/tcpוא/ את ישרתי לך שיאו וПетербург להא נ�인

‘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)


‘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’il, 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 qasada ‘to intend’ is usually followed either by li- or ʿilā 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):

\[(5)ّافقالآرزيدانتملكلمعأكل\]

‘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)

\[(6)ّوكصدإمانيملكألبعد\]

‘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:

\[(7)ّفichaإمانإابقيأاحزن\]

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

\[(8)ّ הייהאתהייהאתאןירגעמאפאאתאתחיאאלאמאאת\]

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

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

‘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’s,124 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).

‘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:

‘To which Rabbi Abraham ibn ʿEzra 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

124 The particle b’s 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 nakānu ‘we will be’ – or merely to add emphasis:

(14) קהל לוהטו את בנו אמא מתאש

‘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) וקהל רואות היד乙烯 ומקניא אלא פי אלמא את פיך ומקניא אתו לוהטו: [אל] למיבה אתו תמי ותכל יום ואתו ונתהא

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) ואל תמל את נתייתו תרפתוך מאה אל כפלד: [אל] לן תמל את קאש

‘...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) ותאש אלא ירוח ולש רבע

‘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) והַנִּיחַ פְּתִיתַּלְךָ לְהַכַּתָּב לֵהָלְכַּתָּב יָדָכוֹ לְהַפְּתִיתַּלְךָ בְּרֹדְנָיְיָרֶפְּלִיתַּלְךָ יָדָכֶם לְהַמְּצַרִיתַּלְךָ לְמַעְרִיתַּלְךָ בְּרֹדְנָיְיָרֶפְּלִיתַּלְךָ יָדָכֶם.

“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

125 Khan reads this as והַנִּיחַ פְּתִיתַּלְךָ ‘and he requested us to write...’, but the original appears to me to read והַנִּיחַ פְּתִיתַּלְךָ ‘and he came to us and he wrote...’ (2006: 42, line 57).

126 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:

‘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-hiğāz.’ (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:

‘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 āl 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:

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

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

‘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) והוא埃尔 קדם אמארה עלפאולק מות ענ גול אנומר מאאוור פ מני מål לאמור ולא וולמה מנה

‘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) ל学前教育 עלפאולק מות ענ גול אנומר מאאוור פ מני מål מני

‘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 'ḏn (CA: 'aḏina) ‘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) וcartל אגאל מבירי והראתי אסמאל מון פלך והמאטן און חאל עשה רואנה התחינ התחל딴 והמאטני

‘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) פל нельзя יכולת גבבי אודוט

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

(28)олько יכולת גבבי ללהוט

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

127 ‘saḥānu wa-taʾālā ‘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) והזלא לפא אל מתפוה ולן ביברמח מי מרבאת ליו מפשו כמא גאל אלא תורח כמסיך

‘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‘š found in the Maġribi 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 'nI/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 Maġribi 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)ّ
נעלמוּך֗באן
יגי֗ענדך֗ואחד֗אל֗נצראני֗קטלאני֗אסמו֗מיסר֗ברנארד
‘I (am writing to) tell you that a Christian, a Catalan called mīsr (i.e. ‘mister’) 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

128 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) ...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) ‘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) ‘...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 *‘rfa* (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) ‘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, syntetically. 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 אלולמה עליהום אלסלם את ממעה פ שלי组装 כא מאפ פר אלפלת ב يقدمבר

‘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) באכ בן פ יבלב בן בלד בן ערלים

‘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) וראונא לא נפנניчкиו נא לא אדריאו חלמה

‘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) ווזן הנכת למום פרמא פ נא לא יד יד שודמא נשלב אחוט כל מה אבד

‘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

129 The term ‘uncircumcised’ (sg. ערלים) is a Jewish term used to refer to non-Jews, generally Christians (Jastrow 1926: 1119).
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 וחיה מחבר פ מפרוש יא חזר ארצה מדברים פ נ א כן ומייסמקים

‘...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) הַזַּלְכִּים לֹא לְמַסְיָה וְגַנְיָה בָּחוּרִיתוֹ Executes, Εύρος אָרוֹן צַעַרְכֹּם (45)

‘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) וּכְדָהּ חַיָּתּוֹ אֶלָּה שָׁאָלָה אֲמוֹתָה אֵלֶּה הַרְשֵׁי בְּדוֹלָהּ בְּדוֹלָהּ והַלֹּא הוּא הַלֹּא מֶהָשָּׂא (46)

‘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) וְהָדוּ אֱלַפֵּם לָא שָׁלֵךְ אֵלֶּה חֵדְיָה וְכֶר

‘... 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) פָּקַאָל אֱלַשְׁאָב אֶעָלָה אוֹסְיָה אֵלֶּה אֱלַפֵּם וְיַחַר דַּהְוָט אֶרָב

‘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) קָאָל אֱלַשְׁאָב אָסְפָה אוֹסְיָה אוֹסְיָה אֵלֶּה אֱלַפֵּם וְיַחַר דַּהְוָט אֶרָב

‘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:

‘‘Know O, my lord, that my father was the king of this city...’’ (Evr.Arab.I 2996, 4v. 23-24)

‘‘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:

‘And he knew that he was a sincere advisor to his state and his era.’ (Evr.Arab.II 1528, 2v. 16)

‘And he knew that he was a success for his state and his days...’ (Evr.Arab.II 852, 5v. 26)

‘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:

‘‘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:

‘So, the fisherman told him that he had four children; two sons and two daughters.’ (Evr.Arab.I 2996, 14v. 24-25)
Syntax

(57) ﴿ Polyester (58) ﴿

‘Then, he told him about what 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)

‘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 + I.c.sg. pronoun suffix:

(59) ﴿

‘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) ﴿

‘Let it be known to šayḥ ‘Abd al-Lāṭīf (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) ﴿

‘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) ﴿

‘We inform you that after we were separated from you (all), we went very far away on the route...’

(63) ﴿

‘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) ואמאד חמיד אלחמקט מערעך אלמקדה אִני אִלְמְדָךְ לַל אִלְמָדַא פַּו רוַּךְ יִדוַּוְיִא

‘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) והעלם יא אינא אל הבאן רעך יא אליהם יא יאرحא יא ראב ונאא מ sns

‘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) והעלם יא אינא אל הבאן רעך יא יאר הלאא סבakan יא ראב ונאא מ sns

‘You should know, O man, that hell has seven layers, one on top of (the) other.’ (Cairo JC 104, 12r. 9-11)

(67) והעלם יא אינא אל הבאן דקך יא הניה יול יארצה יא ראב ונאא מ sns

‘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) והעלם יא אינא אל הבאן דקך יא הניה יול יארצה יא ראב ונאא מ sns

‘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:
‘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) פ י֗כ מנו֗ אנוּ סַאֵל

‘They guessed that he was a beggar.’ (BnF Hébreu 583, 140v. 9)

(71) ווא֗אפ תכר֗ ענני קוןׇצולטאן֗פ י֗בלאד֗אלשאם

‘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) וושאפ֗אן אחנה֗נחסיסו֗פיה

‘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) ורצהַ֗ף ב.When נוהתה נידמה

‘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 ‘rrf 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) ונרפנסבמאַף מער אלו בוכ במחראמה עפר יספכ

124
'And we tell you that the price of coffee beans to date is the price of 105...' (T-S 10J16.35, 1r. 19-22)

'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)

...'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)

'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)

'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).

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-hamdu 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:

ואל חמדו לאל กรה פל ואל אמדות החמר

‘...then praise be to God that we are in a traders’ union!’ (T-S 10J16.35, 1r. margin 4).

---

130 An abbreviation of 'its date'.
131 Khan (2013a): צלולה
132 The original manuscript reads 'and he informed you...', which Khan interprets as a mistake for '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) וַלֵּאמֶרְךָ כִּם נְצַעֲדֵנִי הוּא מַסָּבכָה
‘...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:

\[ \text{“Are you not afraid (that) the circle will turn back on you?” (Evr.Arab.II 852, 6v. 15-16).} \]

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.\(^{134}\) Hary records similar asyndetic complement clauses with the predicate 'r'd (CA: 'arāda; MCA: rād, 'arād) ‘to want’ found in JA historical narratives and šūrūh, 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:

\[ \text{“And he said to him, ‘I want you – (within) the hour – to bring us four fish like the four first (fish you caught) and you should hasten their arrival.’” (Evr.Arab.I 2996, 2r. 1-4) } \]

\(^{133}\) The equivalent passage in the fifteenth/sixteenth-century folk tale Evr.Arab.II 1528 reads:

\[ \text{“Are you not afraid that the circle will turn back on you?” (Evr.Arab.II 1528, 2v. 35-36). The preposition mn (CA: min) ‘of’ is used invariably after the verb ḥāf in MCA, and as such, may function as a complementiser without the addition of 'inn. The preposition + 'inn + complement clause may be deleted in part or in whole after a verb that governs a preposition (cf. Abdel-Massih, Abdel-Malek and Badawi 2009: 150–1).} \]

\(^{134}\) 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 yaqtulūn-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) וַלּוֹ זָאָלָהּ אָלָחֲמָא בָּסִף אָלָנְכָּה אָלָא אָנָא נְתַנָּה רִישֹּה הָגֵעַלְּ חֵלָה

‘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) וַלּוֹ זָאָלָהּ אָלָנְכָּה רִישֹּה אֲלָנְכָּה רִישֹּה בּוֹצָתָה 135 אֲלָנְכָּה אֱלְקָדְעָרָה אֱלְקָדְעָרָה אֱלְקָדְעָרָה אֱלְקָדְעָרָה אֱלְקָדְעָרָה

‘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 ’an. The predicate and predication are separated in this example by a direct address to the recipient of the letter:

(88) ואקצד פֶלֶךְ תלֶנהי לַבָּא איְרֶה אֶלְכָּפָר

‘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) ואֲלָנְכָּה נַשְׁפָּא מִנֶּה אֶלְכָּפָרָה מִנֶּה אֲלָנְכָּה מִנֶּה אֲלָנְכָּה

‘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).

135 Evr.Arab.II 852 reads ‘...with the sound of vengeance’, whereas the corresponding passage in Evr.Arab.II 1528 is ‘the sword of vengeance.’
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:

‘...(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., ḥāyih) of the colloquial verb ḥāy ‘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:

‘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:

‘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:

‘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) פִּכְלַלְוָהוּמָאָא תֶּאֶלֶּכְּוּ

‘They asked them, ‘What do you want to eat?’’ (BnF Hébreu 583, 141r. 7)

(96) קָאַלְוָהוּ יָאָא פִּיְּדֵיָהוּ נִנְהֵוָהוּ לָאָאָלָא הָדָוָהוָהוּ

‘...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) לאָרָבָאְלִי הָעָוָד הָאָאָלָא יָאָאָוּי יָאָאָוּי יָאָוָּהוּ יָאָוָּהוּ קָרְבָּנָא לָלָא

‘(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) וֹלָלָסָדָרְוָהוּ יָפְיַ רשְוָמְוָח

‘...but they were not able to revive me from my fainting fit.’ (T-S Ar. 37.39, 1r. 14-15)

(99) וֹלָלָסָדָרְוָהוּ יָפְיַ רשְוָמְוָח

‘...but they were not able to save me from death.’ (T-S Ar. 37.39, 1v. 4-5)

(100) וֹלָלָסָדָרְוָהוּ יָפְיַ רשְוָמְוָח

‘...but they were not able to revive me from my fainting fit.’ (Cairo JC 104, 5v. 4-5)

(101) לָלָסָדָרְוָהוּ נֶפְלַלְוָהוּ מָאָאָלָא כַּלְוָאָלָא מָמְאָרְו

‘...we will no longer claim one (of your people), each year.’ (BnF Hébreu 583, 141r. 17-18)

(102) יִפְּכָלְוָהוּ יָאָרְוָהוּ אָלָא יָרָבָהוּ נַּדְוְהוּ תַּפְּאָרְבָּנְוָהוּ פִּיְּמָאָלָא

‘The Rabbi replied, ‘You should no longer address me with regard to this matter...’’ (BnF Hébreu 583, 140r. 19-20)

(103) וֹלָלָסָדָרְוָהוּ נֶפְלַלְוָהוּ מָאָאָלָא

‘But remorse is no longer any use to them after the lack (of it).’ (T-S Ar. 37.29, 3r. 2-3)

(104) וֹלָלָסָדָרְוָהוּ נֶפְלַלְוָהוּ מָאָאָלָא
‘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:

\[
\text{(105) מַשֵּׁתֵי הַכֹּהֶן לֶבֶּן אָראֶבֶּיתֶּ מַטְנַאֶה}
\]

‘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:

\[
\text{(106) כָּשָׁר אֲלֶלֶה שֶׁמֶנִּי [זַזָּד] לָי נֶדֶר חַתֶּה אֻקָּפָר אָבוֹכיּ לְאָלוֹבִי}
\]

‘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)

\[
\text{(107) כָּשָׁר אֲלֶלֶה חַתֶּה "נֶדֶר לָי נֶדֶר חַתֶּה אֻקָּפָר אָבוֹכיּ לְאָלוֹבִי לָא לְאָלוֹבִי}
\]

‘(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.\(^{136}\) This may have been included for additional emphasis:

\[
\text{(108) רַחֲמֵא לַמַּה פֵּלַו מֵעֵין זָאֶה יָד כִּי יָבַדְתֶּה מֵאֵשָׁה בֵּעֵית בִּשְׁאֹם אֲלוֹלַד חַדָּה לַמַּה}
\]

‘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).

---

\(^{136}\) 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) מַן פַּעַלְכֶּם תַּבְקֵה תַּלְקֵת־בָּאָלֵכֶם לְנוֹבָה־אָוָלֵכֶה

Please begin to turn your attention to another occasion...’ (T-S 10J16.35, 1r. 13-15)

(110) אַגֵּלֵת מַאֵל פַּדַּע וַיְבָאִיתוֹל יְהוָה לְמַעַרְיָה וַלָּבֶּהֶה יְבֵדֵדֵהֶה יֵשֵּׁה מַעָּו

‘... 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) וְעַטְנָהוּ 50 אָלֵף פָּלָח וַיֹּשֶׁבוּהּ אַל פָּלָח

‘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) אַחֲנָהָוּ רֶאְחִין לוּבֵיָו בְּסֶעָר

‘(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) לֹא לָאָזִים נַבְּכֵהֶו מֵנַדְּרוֹפֶו

‘...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) בָּאֵל יַמְּכִינֶו נַרְסֶלוּ בֵּסֶבֶבֶו בֵּינֶתְּנוּ אָחָנֶו

‘... with the help of God, it is possible that we will send goods between us (i.e., to one another).’ (T-S

137 In MCA, filūs faḍḍa translates as ‘coins’ (Hinds and Badawi 1986: 668).
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)لا فلكلنمتكمروالله لايمتكونمشكللاوكفرتيلكةوقعنتنلهوكللهفلهونش
‘...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)وانتكلنللهميرسللوالروسونئتعبدونوالروسون
‘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 rḍy (CA: radiya; MCA: riḍi, rida) ‘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)لا ينكملنفلدهوكلنكلسةيدييفلينкл
‘...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)لا ينكملنفلدهوكلنكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيدييفلينكلسةيديив
‘...
‘...but he would only leave with our reconciliation, and it was putting us in a difficult situation and it hurt our feelings, 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)

‘... 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):

‘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)

‘...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)

‘...to (sayyid) 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:

‘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

138 MCA: ḥad ‘ala ḥatr-u ‘he felt offended, his feelings were hurt’; kasar bi-ḥāṭir ‘to hurt the feelings of s.o.’ (Hinds and Badawi 1986: 256).
In examples (124–127), the CTP expresses the phasal sense of continuation (or more specifically resumption) of an action or event, 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) וַיֶּרֶם קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּב

‘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) וַיֶּרֶמֶנֶו קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּמֶה

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) וַיֶּרֶם קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּמֶה

‘Then they recommenced hitting me once more.’ (Cairo JC 104, 10r. 6-7)

(127) וַיֶּרֶם קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּמֶה

‘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) וַיֶּרֶם קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּמֶה

‘And he again fainted for a second time.’ (T-S Ar. 37.39, 3v. 4-5)

(129) וַיֶּרֶם קָאוֹמִי וַיֶּהְדָּה אֶלֶּה מָלֵא מַמְחֵר וְתָלָּמֶה

‘And he again fainted for a second time.’ (Cairo JC 104, 14v. 12-13).

Eighteenth/nineteenth-century letters

139 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.
Syntax

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:

‘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)

‘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 *yimkn* (CA: *yumkin*; MCA: *yimkin*) ‘to be possible’ precedes a definite verbal noun in an expression of unrealised action:

‘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:

‘So, we are resolved – God willing – to wage war (against) them.’ (Evr.Arab.II 1528, 1v. 23)

‘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:
‘I saw armies of the birds, all together; they hope to encounter you...’ (Evr.Arab.II 852, 5v. 18-19)

‘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:

‘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:

‘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: tanm) ‘to complete; to continue’ functions as an auxiliary verb to express continuation. It is followed by an indefinite form III verbal noun:

‘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:

‘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) ו рассказал אנニ אתחטיך יי קולה בלעפה

‘And he began to say, ‘Indeed I bring you, O sultan, the news...’” (Evr.Arab.II 852, 5v. 17-18)

And he suddenly started to say, ‘O, king, verily the troops of the birds have already marched forth...’”

(142) ו האנטלקיקול איהא אלמלך אא אלמלאбелא אלטיורא קא חרבת

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)ّ
ومهما لم يني في هذا الأمر، كان قدى ما في عليك ينفي دم بناهاء

‘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) אַחֲנָהּ רָאִיתָי נִבְנֵי בֵּסֶרֶן וּנְעַףְפָּה בֵּנֵוְנַה בֵּסֶרֶן דָּה.

‘(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) וַאֲנָא קוֹלוֹת לְהָיִית אֶסֵּד אָמֶרָה לְמָשֶּה.

‘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 טונדנה אצניאו אל חירפ פור אلالו אול חאדלה

‘...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) וントנופכום ומן קרבענו ⁰² ונו ¹ ונו ² ואצרפנא פיהום ⁰⁵ ביל אצניאו אל חנדיה

‘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 fi/ 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.140

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-raqulu ‘allaḏi qad ḍarabanī ‘the man who hit me’ (example from Fischer 2002: 219, §428). Indefinite relative clauses are asyndetic in CA, e.g., rağulun qad ḍarabanī ‘a man (who) struck me’ (example from Fischer 2002: 219, §428). With regard to CA free relative clauses, man ‘who’ and mâ ‘that which, what’ are used to denote indefinite animate and inanimate entities, respectively, while ‘allaḏi ‘the one who’ represents a definite entity.

140 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).141 ‘illi also appears in place of the free relative pronouns mā and man (MCA: mīn) in some free relative clause constructions, e.g., ‘illi jāt 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 had ag-gurnān bitā‘-i ygīb-u ‘Whoever took my paper, give it back!’ (example adapted from Hinds and Badawi 1986: 33).


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,142 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 אַלדֵי ‘l’dy follows a definite substantive before a restrictive or non-restrictive relative clause:

(1) וַאֲכַלָּא יֵאֲמָר כִּי הַדְּתָא אַלְדָּי הוּא הַדְּתָא אַלְדָּי כֹּפֶר
‘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)

141 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).
142 In the structure of this section, I follow the example and layout of Khan (2016b).
...And who (lit. what) is this enemy who has risen up against me? (Evr.Arab.II 1528, 1v. 17-18)

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)

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)

...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)

‘And I rose from the cushions on which I sleep’ (Evr.Arab.I 2996, 6r. 13)

‘Praise be to God who is from above us!’ (Evr.Arab.I 2996, 13r. 10-11)

‘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)

Then, the Sultan summoned the fisherman, who was the cause of the release of the youth...’ (Evr.Arab.I 2996, 14v. 19-23)

...so, he brought you to my place, which was one of the wishes.’ (Evr.Arab.II 2996, 8v. 18)

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)

Then after that, he commanded the warrior, who was steadfast throughout the wars, (to be) the one...

143 I have interpreted ṭamara here as ṭamara, tumira ‘to be/become high, rise’ and also ‘to descend’ (Lane 1863: 1931).
prince.’ (Evr.Arab.II 852, 3r. 1-3)

‘The sergeants, who were of the ravens, shrieked in the highest voices.’ (Evr.Arab.II 1528, 3v. 32-34)

‘And the youth, who was enchanted, married the other (daughter).’ (Evr.Arab.I 2996, 15r. 1-2)

‘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.,

‘And she entered from the place where she had left’ (Evr.Arab.I 2996, 1v. 5-6)

‘Then, she entered this palace and she hid in the site that you are standing in (now).’ (Evr.Arab.I 2996, 5r. 10-11)

‘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, ‘al-dīr ‘al-dīr 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.,

‘This is the whore who only sleeps outside each night.’ (Evr.Arab.I 2996, 5v. 23-24)

‘...and if that (was) the cause of his disapperance (during) the year during which he was absent.’

144 <> are used here to indicate sections in examples, which have been reconstructed using Evr.Arab II 852.
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) נעלמןך באן אל ספרים אֱלֶדֶר וַהֲבָאָמָךְ, אֶלְדוֹן שֶׁאֶרֶץ אַלֶּהָ מְאָסַרְתִּים לְפִי אָלֶּדֶר מְאָסַרְתָּם מְאָסַרְתֵּי מְעָלַיְהוּ [MS Heb.c.72/18, 1r. 2-3]

(22)婀ָנָא אֲנָא עַדְּכָה אֲנָא אֲנָא מְאָסַרְתִּים אֱלֶדֶר וַהֲבָאָמָךְ אֶלְדוֹן שֶׁאֶרֶץ אַלֶּהָ מְאָסַרְתִּים מְאָסַרְתָּם מְאָסַרְתֵּי מְעָלַיְהוּ [MS Heb.c.72/18, 1r. 16-17]

(23)婀ָנָא אֲנָא עַדְּכָה אֲנָא אֲנָא מְאָסַרְתִּים אֱלֶדֶר וַהֲבָאָמָךְ אֶלְדוֹן שֶׁאֶרֶץ אַלֶּהָ מְאָסַרְתִּים מְאָסַרְתִּים מְעָלַיְהוּ [MS Heb.c.72/39, 1r. 8-9]

(24)婀ָנָא אֲנָא עַדְּכָה אֲנָא אֲנָא מְאָסַרְתִּים אֱלֶדֶר וַהֲבָאָמָךְ אֶלְדוֹן שֶׁאֶרֶץ אַלֶּהָ מְאָסַרְתִּים מְאָסַרְתִּים מְעָלַיְהוּ [MS Heb.c.72/39, 1r. 3]

(25)婀ָנָא אֲנָא עַדְּכָה אֲנָא אֲנָא מְאָסַרְתִּים אֱלֶדֶר וַהֲבָאָמָךְ אֶלְדוֹן שֶׁאֶרֶץ אַלֶּהָ מְאָסַרְתִּים מְאָסַרְתִּים מְעָלַיְהוּ [MS Heb.c.72/18, 1r. 6-7]

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:
‘And as for the countryside, there is nothing to see there except dogs, which run (around).’ (AIU VII C.16, 1r. 6-7)

‘And the third (level) is for the sojourners, who changed of their own volition.’ (Cairo JC 104, 11r. 4-5)

‘...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)

‘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)

‘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)

‘And the face which is on his left, he seizes the souls of the world’s nations.’ (Cairo JC 104, 7r. 8-9)

‘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)

‘...and he made me drink (from) the cup of death, which was made from colocynth.’ (Cairo JC 104, 6v. 3-4)

‘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)

‘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)

148

And the R. Abra(ham) 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)

I choked hard and the force of the choking terrified the people who were in front of him.’ (Cairo JC 104, 8r. 5-7)

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:

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)

When the man heard all of these things, which the skull voiced, he fainted...’ (T-S Ar. 37.39, 3v. 1-2)

And he called up to the large idols which they make the sacrifice(s) to.’ (BnF Hébreu 583, 141r. 9)

Then, they called me to account for all my deeds which I had done in this world.’ (Cairo JC 104, 9r. 6-8)

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:
Linguistic Variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

Then the Rabbi turned (and) found the two students, whom he had sent to R. Abraham.' (T-S Ar. 46.10, 1v. 27-28)

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:

And God willing, our letters will have reached you, (including) the letter which contains the insurance policy.’ (Rylands L192, 1r. 11-12)

‘We (also) received from him the money which was with him.’ (T-S 13J25.24, 1v. col.3, 7-8)

‘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)

‘And the situation now is that the two pieces which we sold, the useless one belonging to them arrived (at the rate of) 31 ṭarl (?). And the other two, which are of excellent (quality), are left over...’ (T-S 10J16.35, 1r. 9-13)

‘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 'ldy and the relative clause. It is perhaps significant that all of the following constructions occur in direct discourse:

(53) מַאָהָדָהּ אֲלַדְּיָהָוָאָרָא (פָּאָסָר) אֲלָבְרָאָתָהּ 유ַלְיָה

‘What (i.e., who) is this who warns you yourself of the maliciousness of it?’ (Evr.Arab.II 852, 6r. 10-11)

(54) וָהָאֲדָהָוָאָרָא מַאָהָדָהּ אֲלָיָתָה יָעְלָה יָדָהָה

‘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) פָּהֲדָהָאֲדָיָה יָטָנָה נַוָּאָיָה לִיָּוֵלָיָאָמָי

‘This is the one who has prevented my answer to you and my words.’ (Evr.Arab.I 2996, 11r. 5)

(56) וָאֲנָתָאֲדָיָה פָּמִילָת מַאָהָדָהּ פָּיְלָעָלָא

‘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’il*; CA: *ḏālika*), is used anaphorically to refer to ‘the books’ mentioned in the previous clause:

(57) נַעְלָמָא אֲלָי לִסְרָיָא אֲלָדְּיָה נַעְתָּךְ אֲאָא מַאָא לִיָּוֵלָיָא יָעְתָּךְ יָאָרָא מַאָהָדָהּ פָּיְלָעָלָא [ﬠָרָא מַאָהָדָהּ פָּיְלָעָלָא] מָנָסָרָא

‘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) WALL Slateiti Tawol

‘And all that they ask, they will obtain.’ (T-S Ar. 46.10, 1r. 31)

(59) WALL Slateiti Tawol

‘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,145 found in written JA in a variety of instances and forms,146 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) WALL 3/35 נפשך מסך (נמצא) אלכתיה עלי והדרך באמר לא לך התצל [ …. ]

‘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)

145 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).

146 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) וחבר֗דּ֗יחצ רו֗לךּ֗פי֗אול֗מרכב֗

‘...and subsequently they will arrive with you on (the) first ship that enters 'al-haliğ.’

(61) והכו֗כמא֗יקאל֗פיה֗אלקאיל֗ואדי֗
(62) וחבר֗דּ֗יחצ רו֗לךּ֗פי֗אול֗מרכב֗

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: ‘insānum) ‘a man’:

(63) דאלך֗אל֗נסינס֗אנסף֗אנסאן֗פי֗סכנדרייה֗

‘That Christian asked what man in Alexandria is his equal to support him in trade, and so forth.’

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) ויא֗וילךּ֗מן֗ד אלךּ֗éliום֗אלד י֗תנהתךּ֗פ יה֗ויום֗

‘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).

147 ‘Al-haliğ 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) והם אמרו Shelby what סלמה אלננסא מ建て זאח

‘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) והזל שטננה בכל שטננה מכל עשה בו גניוแล סלמה 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) והסלבנה ויסלמנה באלי אשתראה אנל רושד א.! נורק זואבל

‘...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 כ sede מותא יולי שי אנל תרשל תלם

‘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 ‘ḥd (CA: ‘aḥadan), 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) והם אמרו שנחשפם מcznie היחידה אל חיויא וא פרעת אלה בנה נזזו לקאמה במקאמה ועל המיםledo א! ראי הפר פר

‘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).

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) אלמלך תסר באת

‘I will bring the kings news, which you will delight in.’ (Evr.Arab.II 1528, 2r. 3-5)

(71) אדאל הלאי אלג זלאן

‘Then, he found a valley, which was called ‘the valley of the gazelles.’ (Evr.Arab.II 1528, 2r. 11-12)

(72) ויהי הנה קאל אלגפא ירונד[ה] תירדה בבעלכון

‘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)
‘They saw a wide steppe, which they had not seen during (their journey).’ (Evr.Arab.I 2996, 4r. 12-13)

‘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)

‘Then, she spoke to the gate, O my lord, in words that I did not understand!’ (Evr.Arab.I 2996, 7r. 12-13)

‘And he spoke in words which were like the words of the servant.’ (Evr.Arab.I 2996, 10v. 17-18)

‘And there was a fire in my heart that would not be extinguished!’ (Evr.Arab.I 2996, 10r. 13)

‘And they are creatures which are innumerable.’ (Evr.Arab.II 1528, 2v. 10)

‘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:

‘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)

‘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)

תאורייך פי באב וחיילות şey ידועת מי אל פואמה או אפקאל

‘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 לול חרקין דוטע תני עש

‘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 tḥk (CA: ḍaḥaka) ‘to laugh’:

(84)

ולק חרקה ומתי אל יכ אל יאל פולק אל לטבע תאו אל זהעל בטעות

‘...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 unambiguous148 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 אלמלא וא思索י בパターン שכיוון אפרים ואימי

‘Then the king said, I give you my hearing, my sight and my mind, (which) are present and clear.’

148 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; אללאבאט אלמחרהק לק תפסת הרקפת: (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.
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:

‘They intended to float on the interest which they took, (O) God, (O) God!’ (MS Heb.c.72/39, 1v. 9-10)

‘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:

‘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:

‘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 are introduced with the pronouns *man* ‘who’, *mā* ‘what’, or *’allaḏi* ‘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 *’allaḏi* (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 אֲנָנָה (CA: *mān*) ‘that which, what’ is used exclusively to represent indefinite inanimate entities in the fifteenth/sixteenth-century corpus (cf. examples 90–97), while *mmm* (CA: *minman*) ‘from whom’ denotes an animate entity (example 98):

(90) **פרחת֗בֶּאת֗רָנִין֗אלכטרא''֗ואלמא**

‘They delighted in what they saw of the greenery and the water.’ (Evr.Arab.II 1528, 2r. 29)

(91) **פַּלְפַלִּים֗בֶּאת֗רָנִין֗אלכטרא''֗ואלמא**

‘When the fox saw what astonished him and scared him, he remained considering all its circumstances.’ (Evr.Arab.II 1528, 2r. 32-34)

---

149 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)

'Then he prepared what he would need.' (Evr.Arab.I 2996, 13v. 17-18)

'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)

'Then, the sultan and the vizier trembled and anticipated (/waited for) what was to come...' (Evr.Arab.I 2996, 2v. 17-18)

'And he appointed him to whatever he wanted and wished.' (Evr.Arab.II 852, 1v. 13-14)

'She said, ‘with your permission, I will release him from that which he is in.’’ (Evr.Arab.I 2996, 11r. 6)

'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:

'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) תמשמונת נוער הוא מאכל וקרושיה אוהר תוקי הלアーוט בל חלת הליא נכתה כל
‘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) אבפרע להמערףأهل פלדפלי [אלאור מום
‘...the interest excluding what was in the store.’ (MS Heb.c.72/39, 1r. 20-22)

(102) כל לן ידב
‘And everyone who is faithful’ (MS Heb.c.72/13, 1r. 22)

(103) יאללהים Eylül אלמלכדוע תחת פלדפלי הרעה
God, God! (Send) the answer quickly (with one of the) associates who will visit soon.’ (MS Heb.c.72/39, 1v. 10-11)

(104) כל לן פלבחמה כלל פלדפלי אלחרמא
‘...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) ומשתכלות את מולדת פלדיהודים
‘And whatever you demand, it is available, immediately!’ (AIU VII.C.16, 1v. 13-15)

(106) ומשתכלות פלדאכלישה
‘Whatever takes your fancy, take (it) and seize (it)!’ (AIU VII.C.16, 1r. 12-13)

(107) וMeshהלם אא ['. שלא קלאר למד אר
‘And he said to them, ‘Tell me what happened!’’ (BnF Hébreu 583, 140v. 13)

(108) ומשתכלות עלמ פלדשלב בקאתה פלאפשמה אל נמי בדע אל דור
‘(They) regret what they did, but the remorse is no longer any use to them after the lack (of it).’ (T-S
Linguistic Variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

Ar. 37.39, 3r. 2-3)

(109)

‘O, (you) who did not thank God, the Almighty for what he had given to you!’ (Cairo JC 104, 14r. 6-7)

(110)

‘The students told the m(aster) Rabbi (about) what had happened.’ (T-S Ar. 46.10, 1v. 30-31)

(111)

‘Say to them, ‘Whatever my companion wishes!’” (BnF Hébreu 583, 140v. 20)

(112)

‘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 ‘yyš (MCA: ‘ēš) used in place of the free relative pronoun ‘m’:

(113)

‘I will tell you what my hammām is!’ (AIU VII.C.16, 1v. 1-2)

(114)

‘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)

‘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) ﯽָמָּס עָמוּד וּדָמָּי יָשָׁב יָבָיָקָא אַל מַלְצָא́:

‘And whoever live(s) there is always complaining about the narrowness of the place.’ (AIU VII.C.16, 1r. 9-10)

(117) וְכָל מֶנְדָּלָו פֶּרֶץ יַרְבֹּרָל יְלָי׃

‘And every(one) who enters Cairo and leaves (it) is hurryin...’ (AIU VII.C.16, 1v. 13-14)

(118) וּוֹקֵם אֶמֶשָּׁא יְוַנְמִי נָעְצָתָא אַלְּמָן פֶּרֶץ הַרְיְבָּא וּרְיֵי יָדָהָא דֶּלֶּחְוָא אַלְּמָן בְּיָדוּתָא דֶּלֶּחְוָא גְּדוּלָא יְמָן אַלְּמָן לְכָפָרָא אַלְּמָן לַא בֵּרָה.

‘...‘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) בְּכָמָנָא אָל יָוֵדַי יָטְמָלַי גָּוְאָלָא אָל יוֹדַי לְאָנָלָא מָאָה יָדָהָא מַחְאָלָא יִלְּיַיְלַי קרַבָּתָא אָל פֶּמָא [אָל] אָ[לייָה]

‘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) בְּכָמָנָא אָל יָוֵדַי יָטְמָלַי גָּוְאָלָא אָל יוֹדַי לְאָנָלָא מָאָה יָדָהָא מַחְאָלָא יִלְּיַיְלַי קרַבָּתָא אָל פֶּמָא אָל אָיְיָה

‘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) יוֹרֵךְ הָלָהָא אַנָא פֶּרֶץ יַנְצָא רָב

‘And they say, ‘This is a punishment (for) whoever renounces his Lord!’’ (T-S Ar. 37.39, 2v. 4)


‘...‘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.’”\textsuperscript{163}(T-S Ar. 37.39, 3r. 16-22)

\textit{Eighteenth/nineteenth-century letters}

Overall, the free relative pronoun \textit{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. \S 31.2.3.3). The relative pronoun \textit{’ldy} supersedes \textit{m’} in almost all instances of indefinite free relative clauses. It is most probably used in place of the MCA relative pronoun \textit{’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 \textit{m’} or \textit{’ldy} is rare in the contemporaneous letters in this corpus:

\begin{enumerate}
\item 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)
\item ‘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)
\item ‘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!’\textsuperscript{150} (T-S 13J25.24, 1v. col.3, 2-4)
\item ‘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).
\end{enumerate}

\subsection*{3.1.2.3.2. Definite Free Relative Clauses}

\textit{Fifteenth/sixteenth-century folk tales}

Definite free relative clauses without a specified antecedent are rare in the fifteenth/sixteenth-century

\footnote{In this, I follow Khan’s interpretation of \textit{ואל הָחָץ} as \textit{’al-hāţza} (2006: 49, n. 19).}
folk tales corpus:

‘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:

‘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:

‘And the one who wears a clean and laundered shirt only wants/needs two thousand needles!’ (AIU VII.C.16, 1v. 2-3).

‘...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)

‘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)
'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)

'The) sixth level is for those who worship idols and crosses.' (T-S Ar. 37.39, 2v. 12-13)

'And (the) sixth level is for those who worship idols.' (Cairo JC 104, 12v. 4-5)

'(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)

'Those who are entrusted to them say, ‘You were believers who became faithless....’' (Cairo JC 104, 13r. 8-10)

'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:

'To the second one who came, for the one who renounced God and (who) does not do His will.' (T-S Ar. 37.39, 2v. 13-15)

'... but that which is in the commercial town is bad merchandise.’ (T-S 13J25.24, 1v. col.2, 37-38)

‘And so, we received from him an account of what he had bought from Raśīd and we sent (it) to you and we recorded it in our (records).’ (T-S 13J25.24, 1v. col.3, 5-6)

‘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: ğami‘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. In this construction $m'$ is preceded by the colloquial compound $'ayś/'ēs$, 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:

\[
\text{(142) cbd lfp htm ath ma āfrt lfd a yh.}
\]

‘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: mitl mā) ‘just as’:

\[
\text{(143) äwrites ma tshtr j dl rfr ma āshtrir}
\]

‘And whatever you wish for, O countryman, I buy!’ (AIU VII.C.16, 1r. 14-15)

\[
\text{(144) hthlu al arnr ālshfn ml mth rfr mth mk āshtr}
\]

‘...but you should be aware, O human, of everything that was burning my skin.’ (Cairo JC 104, 15r. 7-11)

151 Wagner records a number of instances of the construction ‘$yš m'$ found in thirteenth-century letters (2010: 225).
Linguistic Variation in Egyptian Judaeo-Arabic folk tales and letters from the Ottoman period

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)

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)

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)

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):

‘...so that I could answer you all that you asked of me.’ (Cairo JC 104, 15v. 7-8)

‘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)

‘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)

‘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)

‘...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)

‘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;\textsuperscript{152} 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

\textsuperscript{152} 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).153

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).

153 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 ġīm-lm’ (CA: fa-lammā) ‘when, after’ in the fifteenth/sixteenth-century folk tales examined here. The subordinator ġīm-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:154

‘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)

‘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)

‘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)

‘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)

‘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)

‘When he had finished his speech, the King said to him, ‘Go! O successful fox!’’ (Evr.Arab.II 852, 4v. 14-16)

regarded, not as distinct categories, but as subcategories of ‘Prepositions’ (Kortmann 1997: 25–6).

154 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.

155 metathesised form whose original root is ġīm, 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) וָמָא֗ אֵלֹהֵם֗ אַל־לִּכְהֶבֶּל֗ אֵלֹהֵם֗ אַל־לָּכְרֵבֶּל֗ אֶל־וּלָּכְרֵבֶּל

‘And the owl and the crow only agreed when they brought the destruction.’ (Evr.Arab.II 1528, 1v. 21-22)

(9) חִין֗ יָכֹֽם֗ פַּיָּוֵרָהֵת֗ מַעָּה

‘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 $אַדָא$ ‘$d'$ (CA: $iḏā$), 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) וּכְאָנָֽתְּּוּ֚תָּנְּוֹעָֽהֶנָּוָּהֶנְּוּעֶנָּוָּהֶנְּוּעֶנָּוָּהֶנְּוּעֶנָּוָּה

‘…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: $fa$-), e.g.,

(11) מְלַמְּאָנְּוּ הַצָּלִיטָאָרְי הַבָּאָהְיָאָה הָאָלִלְדָרְי הַפָּאָהְיָאָהְיָאָה מְלַמְּאָהְיָאָה הַמָּאָהְיָאָה הָאָלִלְדָרְי מְלַמְּאָהְיָאָה מְלַמְּאָהְיָאָה מְלַמְּאָהְיָאָה מְלַמְּאָה

‘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) המְלַמְּאָה הַצָּלִיטָאָרְי הַבָּאָהְיָאָה הָאָלִלְדָרְי הַפָּאָהְיָאָה הָאָלִלְדָרְי הַמָּאָה הָאָלִלְדָרְי מְלַמְּאָה הַמָּאָה הָאָלִלְדָרְי מְלַמְּאָה הַמָּאָה הָאָלִלְדָרְי

‘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...’

92).
However, in the contemporaneous letter T-S 13J26.7, ‘when’ is conveyed with the substantive-derived subordinator ḥyn in construction with the preposition mn (CA: min) rather than the subordinator (f-)lm’:

‘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-:

‘When he woke from his fainting fit, that man cried many tears.’ (T-S Ar. 37.39, 3r. 3-4)

‘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)

‘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)

‘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) [הוזה להפ טב והפ פל מי יארב מיא] אול פ

‘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) [לא ינוי וזורל הנב פ יראיע עלב הנוב שוק יבכר] מותרות

‘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) מית קת וקמ בטל🙁 אוליר הפל תונעמן הפל פלאם מוא רור און אוג בלב פלא אולעלאפ

‘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) מית קת וקמ בטל换了 אוליר פלא '<?' 'חסמק מית מחיין פלא חסמק הפל בלב פלא בלב פלא אולעלאפ

‘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)):
Syntax

‘When the uncircumcised saw that, their hearts stopped, and their eyes were covered.’ (BnF Hébreu 583, 68-69)

‘When they come in the procession to take you, say to them that I will be with you.’ (BnF Hébreu 583, 48-49)

‘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)

‘When I want, I will go.’ (BnF Hébreu 583, 25)

‘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: hīnā):

‘...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)

‘So, when you receive it, pay it and send us the receipt for it.’ (T-S 13J25.24, col. 2, 4)

‘And so, when the assignment reaches you safely do not be hasty with it...’ (T-S 13J25.24, col. 2, 40-41)

‘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).
### Table 2.1. Temporal adverbial subordinators: ‘when’

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th>Subordinator</th>
<th>Frequency</th>
<th>Formal complexity</th>
<th>Syntactic function</th>
</tr>
</thead>
<tbody>
<tr>
<td>15th c. folk tale</td>
<td>Firk. Evr.Arab.II 852</td>
<td>כלשהוא/למה</td>
<td>10</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr.Arab.II 1528</td>
<td>כלשהוא/למה</td>
<td>7</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/13</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/39</td>
<td>כלשהוא/למה</td>
<td>2</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 13J26.7</td>
<td>ונך עד</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/18</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VII.C.16</td>
<td>אשה</td>
<td>1</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>אשה</td>
<td>5</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>ונתן/נתן/נתן</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>IbnF Hébreu 583</td>
<td>ונך</td>
<td>1</td>
<td>simple</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>כלשהוא/למה</td>
<td>7</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 13J25.24</td>
<td>ודנ</td>
<td>4</td>
<td>simple</td>
<td>non-AS</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L.192</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10J16.35</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**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: $hi\!\!n\!\!a$) and $wqt$ (CA: $waqt\!\!\!\!a$). 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:

\[
\text{וסר אליל ותלמואำ אַלּ אַשְַרְאָהּ}^\text{(31)}
\]

‘And he walked night and day until he reached the dwellings (of the birds).’ (Evr.Arab.II 1528, 2r. 10-11)
‘And he continued [thus] with joy... until he arrived at the city of the birds.’ (Evr.Arab.II 1528, 3r. 13-15)

‘...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 \( \text{ḥt}' \) (CA: \( \text{ḥattā} \)) (36–39). While ‘ly ’n continues to only precede verbs in the suffix conjugation, \( \text{ḥt}' \) is used in conjunction with prefix and suffix verbal forms in Evr.Arab.I 2996:

(34) ויסיר לו נמצאת אלין אךёр עד אלייארא

‘And he walked night and day until he reached the dwellings (of the birds).’ (Evr.Arab.II 852, 4v. 18)

(35) וımız אללאאיר

‘Then, they (dual) walked until they came to the palace.’ (Evr.Arab.I 2996, 12v. 1-2)

(36) ויהי ולא אלאאיר קפב אולדרין אלפמאר אולשארן יריח אולנסלב המחה ומןстраива חתי גול כoha מפונחת

‘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) פקמה יא סריית המנתה חתי דרגה מן אלפערה

‘I rose, O my lord, and followed her until she left the palace...’ (Evr.Arab.I 2996, 7r. 8-9)

(38) וכרנה המנתה חתי מנתנה אליין בנן אלכימנא

‘And she left. I followed her until she reached the place between the hills...’ (Evr.Arab.I 2996, 6v. 14-15)

(39) ולא האכל ולא נשיב חתי תאריא עונה

‘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

\( \text{ḥattā} \) ‘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 הֶר’ is followed by a verb in the prefix conjugation:

(40) פַּלּוּתָ פֶּלֶם וְחָפָםְּ אֶל [חַדְּאַתָה אֶלֹהָאָם מְן וּדְכֶחֶי תִּפְלַחְיָה יִלְהַדְיָו אֶלֶּאָשָּנָל

‘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, lv. 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 לֶמ’ 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 הֶר’/הֶת (CA: ḥattā), which appears both with (42 and 45) and without (41, 43 and 44) the bound morpheme particle ל- (CA: ל-). The addition of the bound particle does not appear to affect the subordinator’s semantic or syntactic functions.¹⁵⁷ As with the fifteenth/sixteenth-century folk tale Evr.Arab.I 2996, הֶר’/הֶת occurs with both prefix and suffix conjugations:

(41) כָּאָנָא אֵלָלְלָא מְן נָדִיד [לְדֵל גְּיִיר חָטָא אָכְפֵר אֶתְכָּבָית לְעָלָה אֶלְעָמָר

‘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) תָּולְמָה חַיְפָלָלֲא לְהַמָּמָלְדוֹטָמְיָנ וּלְהַמָּה יָלְלָת וּלְהַמָּטָנָה

‘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) יִאָכָה אַרְאָא אֶלְעָלְלָא שְּלֵלְלָא חַשְׁתָנָא וּרְאָאָא אָנָאָאָהָא

‘O human! Speak to me and tell me until I answer you!’’ (Cairo JC 104/3r. 13-14)

(44) כָּאָנָא אֵלָלְלָא מְן [נְדִיד [לְדֵל גְּיִיר חָטָא אָכְפֵר אֶתְכָּבָית לְעָלָה אֶלְעָמָר

‘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) יְתוּמֵלָה בָּכָה לְהַמָּה יָכָהְפָחֶלֲא חַשְׁתָנָא וּרְאָאָא

‘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 חָטָה appears. The semantic function of חָטָה as it is used in the following examples (46–50), however,

¹⁵⁷ The insertion of ל- before the subordinator הֶר’ may be indicative of the prestige attached to complex adverbial subordinators by eighteenth- and nineteenth-century writers.

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) התברט פֶּס אָל חַמְבָּה פָּאָל חַמְבָּה $l$+ḥyn+ $m$.

“‘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 משעה אָשָׁה $l$+חַיָּה מֶא מֶהְזָרִים.

“...it will be seven months until you return.” (BnF Hébreu 583, 17)

(48) כָּעֲנָיו לַאֲרָבָן סְעִית מֶא אַל לְיֶל $l$+חַיָּה מֶא פַּרְמִי אַל קָרַיִה.

‘They sat for four hours during the night until the recitation was finished.’ (BnF Hébreu 583, 27-29)

(49) אוֹל וְרֵב אֲבָרֶם מַוא שֵׁאָר אֲבָרֶם $l$+חַיָּה מֶא צֶלַע לַלְּבָנָא אָל הַלָּמָּא פַּרְקִי אַל בָּאָב.

‘And the Rabbi Abraham walked 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) מַטן נוֹרָפִי מַשַּׁדָּה $l$+חַיָּה מֶא הַשָּׁדָה וּרְשָׁרָה לִי הַשָּׁדָה מֶא פַּרְקִי.

‘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 $ḥt$ occurs in conjunction with the CA-derived particle $‘ḏh$ (CA: $‘iḏā$), a construction often found in CA texts:

(51) בַּקָּה $חַיָּה אָזָה מֶא פַּרְקִי.

‘He stayed until they became unreliable.’ (T-S 10J16.35, 1r. margin 3).
Table 2.2. Temporal adverbial subordinators: ‘until’

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th>Subordinator</th>
<th>Frequency</th>
<th>Formal complexity</th>
<th>Syntactic function</th>
</tr>
</thead>
<tbody>
<tr>
<td>15th c. folk tale</td>
<td>Firk. Evr. Arab.II 852</td>
<td>אלילין</td>
<td>4</td>
<td>complex</td>
<td>AS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>בדילין</td>
<td>1</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr. Arab.II 1528</td>
<td>אלהי אלילין</td>
<td>6</td>
<td>complex</td>
<td>AS</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr. Arab.I 2996</td>
<td>אלהי אלילין</td>
<td>3</td>
<td>complex</td>
<td>AS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>בדילין</td>
<td>4</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/13</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/39</td>
<td>בדילין</td>
<td>1</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 1326.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb.c.72/18</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VII.C.16</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>סהרין</td>
<td>1</td>
<td>complex</td>
<td>AS</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>בדילין</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>BrF Heb.ре 583</td>
<td>בדילין</td>
<td>4</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>בדילין</td>
<td>2</td>
<td>simple</td>
<td>AS</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 1325.24</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L192</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10116.35</td>
<td>בשס 'אלין</td>
<td>1</td>
<td>complex</td>
<td>—</td>
</tr>
</tbody>
</table>

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. It appears to be superseded in later texts by the CA subordinator ḥt'/ḥth (CA: hattā), 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).

\[159\] 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 *ḥyn* is altered by the addition of the bound particle *l-* (CA: *li*) from ‘when’ > ‘until’. When performing this function, *ḥyn* 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’da dālika*). 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’da*) appears in conjunction with the complementiser *m* to introduce a temporal adverbial clause (a construction common in CA texts): 

(52) **בעד מא כמעי קפיש אואמסמט ממעה** {מה ותון אלמידיניה}

‘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 תוהביב אללטאנג ווקדאלנאר**

‘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 13126.7. However, in the contemporaneous Maġribi 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 אלנדי אפרטקהנה למוכמס אואפרינה חמיד פ אל שוקי**

‘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
Syntax

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: ‘allaḏī) 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)בעד מאakkono יאנתה לוהמי ולוהמי ואות אתם עלייו מעתלךדו

‘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)בעד מראאסקונא יאנהלה לוהמי ולוהמי ואותקקדאעלייו מעתלךדו

‘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 תלתאושהוראוצפיאמצרףפקקראהקעדואאלאבעדעמןאilih

‘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 בעדם עשל אל רב בימי החמסה חמשא לקראיה קמעה להראות סלאא מיאילה

‘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) פֶּרֶבֶו מַהְיָאָה לָא רַבָא עַל עֵמָרֶה שָׁמְתַּאָה לָהּ אֶצְלָה לֶאֹלְיָה מְעָאָתָי וּלְעֵלָה לָא עָצָלָה מְעָאָתָי אֶל פְּרֵאָה

‘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) פֶּרֶבֶו מַהְיָאָה לָא גְּלֵי פָּרָע אֶל הַלַּפְּדָרָאָה לָא חְלָבַּא מְכָאָרָא

‘After they prayed in the synagouge, 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:

\[(i) \text{ prep. + nom. dep. = prep. phrase} \rightarrow \text{ prep. + compl. = adv. clause marker}\]

\[(ii) \text{ adv./adv. phrase} \rightarrow \text{ adv. phrase + compl. = adv. clause marker}\]

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: *ṯumma*) ‘then’ is enlarged by the addition of the complementiser *’nn* to include that of head of an adverbial clause denoting ‘after’:

(61) תֶּֽם חַפְּרִים לַחֲנִיה יִתְּחַו פִּיה

‘Then, they dug a grave for him and put him in it.’ (Cairo JC 104/8v. 11-12)

(62) תֶּֽם אָנֵהּ מַהְלֵיָה וֹדוֹ כְּמוֹ שְׁמוֹשְׁטִיָּא לֹעַזְיָיָא

‘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) הָֽעַבְּהַנְּוָא עָלָאָה יַבְּיֵי אֶל רָיאָא וּנַעְנַנְּא מַהְלֵיָה בָּאָלָה וּמַפְּנַנְּא 20 רוּיָא פָּרְגָּאָה לְבַעְּסָה מַהֲלֵיָה לְיִדְּבָּאְו בָּסָדְּרָא וּרְיָאָא בָּיָאָא

‘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).
Table 2.3. Temporal adverbial subordinators: ‘after’

<table>
<thead>
<tr>
<th>Genre &amp; Date</th>
<th>Classmark</th>
<th>Subordinator</th>
<th>Frequency</th>
<th>Formal complexity</th>
<th>Syntactic function</th>
</tr>
</thead>
<tbody>
<tr>
<td>15th c. folk tale</td>
<td>Firk. Evr. Arab. II 852</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr. Arab. II 1528</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>15th/16th c. folk tale</td>
<td>Firk. Evr. Arab. I 2996</td>
<td>(non-finite) בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>simple</td>
<td>non-AS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb. c.72/13</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb. c.72/39</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>CUL T-S 13J26.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>late 15th c. letter</td>
<td>Bodl. MS Heb. c.72/18</td>
<td>בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>17th/18th c. (?) folk tale</td>
<td>AIU VII.C.16</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 37.39</td>
<td>בַּאֲוִיָּנוּ</td>
<td>2</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>18th/19th c. folk tale</td>
<td>CUL T-S Ar. 46.10</td>
<td>בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>BnF Hébreu 583</td>
<td>בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>בַּאֲוִיָּנוּ</td>
<td>1</td>
<td>complex</td>
<td>non-AS</td>
</tr>
<tr>
<td>19th c. folk tale</td>
<td>Cairo JC 104</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 13J25.24</td>
<td>(non-finite) בַּאֲוִיָּנוּ</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>Man. Rylands L.192</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>18th/19th c. letter</td>
<td>CUL T-S 10J16.35</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

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 אלמלככ מבלקה תמאエリア אקרה מי חת אלתחמק אלירל מתקרבת מהה

‘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)

\[(65)\] תםאנייאכדתסיפיוגרדתהופיוכפיאשההא[\] \[דהלאחקולאה[\]

‘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.160

In the following example (66), we find an asyndetic purpose clause:

160 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 Maghribi letter MS Heb.c.72/18.161 The purposive clauses that occur in the letter are all introduced with the unusual subordinator b-š:

‘R. Tsuri’el and R. Mṣlḥ disembarked in order to buy the bread and wine.’ (MS Heb.c.72/18, 1r. 5-6)

‘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)

‘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 ‘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 ’anl’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- + ‘ğl +

161 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 Maġribian writer. The address on the recto of the letter also states that it was sent from srqwsh, which may be interpreted as either Syracuse, Sicily or Zaragosa, Spain. Given the time at which the letter was written, the former seems a more probable place of origin.

162 cf. p. 60, n.69.
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 TintColor" occurs as follows: l- +TintColor" + 'n/'nn 'so that, in order to/that':

(76) אללה הращה להברעם אספו אלד פיסט נדאל קאנה לנגהים אל אמרויה שלג מאם מאתר

‘God, the Almighty, blessed be His name, who released me from that punishment so that I could

---

163 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., '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)

‘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-ḥt’) 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’:

‘(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- + l.c.sg. prefix conjugation verbal forms (CA: li- + subjunctive):

‘One day, I was entering the hammām in order to bathe, thereupon I became dizzy inside the hammām and I fell and fainted.’ (Cairo JC 104/5r. 13-15)

‘(One) day, I was entering the hammām in order to bathe (when) intoxication seized me and I fainted in the hammām.’ (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:

‘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 Maqribian 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-ğumgūma* (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.,

‘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)

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)

The old man said to them, ‘Take him and tie him to a tree seventy dirā‘ long because he destroys the goodness of God and worshipping others.’’ (T-S Ar. 37.39, 3v. 20-2)

Then the šayḥ 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.):

‘(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 or to’* (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:

‘...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)

‘... and do not burn it, like the sack that we sent to you, because (some) people are talking about the

---

164 Despite representing the Arabic grapheme ḥā‘ in this context (i.e., šayḥ), *kāf* 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.

165 One *dir’a* is equal to 58 metres.

166 *’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)  

‘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)  

‘...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)  

‘...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 [...] Háṣan ‘Abū al-Faḍal visited our region...’ (Rylands L192, 1r. 19-21)  

‘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)  

‘...(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 ʿalašān appears in conjunction with a complementiser (i.e., ʿlšʾ nʿ 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:  

‘... 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-’nnl-*’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/l’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) וån כנת בקית֗הכדא֗מן֗تجارי֗ומכרי֗פאכרג ֗מן֗הדה֗אלצורה֗אלי֗צורתך֗אלאולאני֗באדן֗כאלק֗אלبري֗ה

‘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) פכאל אלשאב הל 45 אדאמ אמלקל צי נ iht אמשיק

‘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) לוכתב באלאבר עצ אמאק אלברצער לתאכ נכרע הלמ אמלַבר

‘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).

192
This folk tale also exhibits a single example (98) of a negative conditional clause introduced with the compound particle lw! ‘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) והלאה היו אלדagate דק תספרתי מ[זוזא]
‘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 כלת הל אני ינכתב לך ואני תספרתי התנ服務 את עמדת המאלא וanyeumblingtomham פאתו
‘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 Fāʿid. May God, (O) God be active in this (matter).’ (MS Heb.c.72/13, 1r. 18–9)

(100) והן אתהซ้ำ עליהם של מ干部队伍 אולאברנק
‘...and if you take anything from me after that, send (word), informing me (of it).’ (MS Heb.c.72/39, 1r. margin 2)

(101) והן אמצא את חשבם עלでも ואתה ימצא את כבר
‘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) והן אתה אני את בכר ימצא את
‘...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) נשלך אתה אני שמעך ואת זה לא תتصرים קטנלאי אסמא מיריס ברוארדרי לא תראו נמרוארניドイツ נרברך או אתה שישמע
‘I (am writing to) inform you that a Christian, a Catalan 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
Syntax

in conjunction with the auxiliary verb $k'n$ and the apodosis is unmarked:

(104) ולָכֵא לִאֱלֹהֵי אָבֵדָהּ נִנְתֵּהָ קְנֵהַ קַנְּעָן

‘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) וְלָכֵא שֶבֶם לִאֱלֹהֵי אָבֵדָהּ נִנְתֵּהָ אַלְפֵּקָרָבָּה. ולָכֵא לִאֱלֹהֵי מַעַּה שֶבֶם קְנֵהַ קַנְּעָן

(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: $iḏā$) 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 קַנְּאָל עַל עָרָיִל אֲרֵא לִיאַדֵּךְ אֲרֵא קָנָא אֱלַע הָאֲרָיִל אֲרֵא קָנָא אֱלַע הָאֲרָיִל

‘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) אֲרֵא קָנָא אֱלַע הָאֲרָיִל אֲרֵא לְאָרָיִל אֲרֵא לְאָרָיִל אֲרֵא לְאָרָיִל

‘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: $kānā$):

(108) אֲרֵא קָנָא קֶבֶרְחָה אֶרֶץ הַרְעָיָה נְפָרֵסָה כָּפִ' קְבֶרֶתָה וְלָכֵא מִנְתֶּהָ.

‘If you have received them, send (word and) let us know what you thought of the (business) deal.’ (Rylands L192, 1r. 13-4)

(109) אֲרֵא קָנָא קֶבֶרְחָה פִּלְעָיִל אֶרֶץ הַרְעָיָה [טָקָע] מִנְתָּה נְפָרֵסָה קָטֵל מִנְתָּה

‘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) אֲרֵא לְאָרָיִל אֲרֵא לְאָרָיִל הָאֲרָיִל נְפָרֵסָה [טָקָע] מִנְתָּה נְפָרֵסָה מִנְתָּה

‘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) הָרָאָיָה נְפָרֵסָה לְאָלָל אֲדֹרֶתָה אֲרֵא קָנָא הָאֲרָיָה נְפָרֵסָה לְאָלָל אֲדוֹרֶתָה אֲרֵא קָנָא הָאֲרָיָה נְפָרֵסָה

194
...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 Naʿ Amūn which contain (new) merchandise.’ (Rylands L192, Ir. 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., 'n-k'n 'if'. This orthographic representation of 'n and k'n is also common in contemporaneous šurūḥ (Hary 2009: 234–5) and MCA:

‘If he frees you, let us know.’ (T-S 13J25.24, lv. col.1, 38)

‘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, lv. col.2, 3-4)

‘...and (let us know) if Sayyid Simeon Francis, may God comfort him, has paid you.’ (T-S 13J25.24, lv. 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-):

‘...and if they do not send (it) to us, then they will force us to send them an injunction’ (T-S 13J25.24, lv. 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:

‘And the aforementioned said to us if he had known that they would not be checking at the doors he}

---

167 In only one instance in T-S 13J25.24 is the construction 'n k'n ‘if’ written as two separate entities: ‘ואל אלא מאמר WAL אפיסצי של פיוס מה באב באב נושא ופיוס מה באב אליא ופיוס מה (that) if anything arrives (with the help of God) from abroad, then we should take what is allotted to us...’ (T-S 13J25.24, lv. 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 adverbial 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 ta'fīm, 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’ marbūta 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 yod and yod are common to both genres, it was revealed that they 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 ġīm’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 ġayn 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 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.

168 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


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

Separate Particle’. Bulletin of the Jewish Palestine Exploration Society, 141–53. (Hebrew)


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

Arabic: Diachrony and Synchrony. Leiden; Boston: Brill, 157–73.


—— (2016). New Texts Written in Late Judaeo-Arabic from the Firkovitch Collection: Classification, Description and Sample Texts. Hebrew University of Jerusalem. (Unpublished) (Hebrew)


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


—— (2004). The Jewish Neo-Aramaic Dialect of Sulemanyya and Halabja. Leiden; Boston: Brill
Lingustic variation in Egyptian Judeo-Arabic folk tales and letters from the Ottoman period


Lane, E.W(1863) .. Arabic-English Lexicon. London: Williams and Norgate.


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


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


