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Writing Judaeo-Arabic

Abstract: The transcoding of Arabic in Hebrew script found in Judaeo-Arabic texts presents a unique case study in the investigation of standardisation processes. Three major orthographical phases can be discerned. A *phonetic orthography* was used to write early Judaeo-Arabic. A new *Arabicised orthography* emerged in the 9th century known as Classical Judaeo-Arabic, setting the norms used by a large middle class of Jewish Egyptian writers. The economic deterioration and political changes which began in the 12th and 13th centuries resulted in the breakdown of the Jewish middle class. Segregation between Muslims and the minorities in the Islamicate increased, leading to a return to religious values and a more inward-facing attitude within the Jewish communities. This is also reflected in the written language, which shows an increase in markedly Jewish forms, and eventually led to the *Hebraisation* of Judaeo-Arabic orthography.

In addition, vast differences in writing standards can be observed in the various genres of Judaeo-Arabic from the 13th century onwards, with a widening gap between literary and utilitarian writing. This indicates the absence of an ack-nowledged supra-regional standard across the Jewish communities. In turn, this perhaps points to the lack of a central authority, which the Babylonian and Palestinian Academies had been in the Geonic period, issuing norms to which writers felt it necessary to adhere. The disappearance of universal standards may have been aided by the employment of Jews in government offices and the accompanying education of the Jewish elite with respect to the Arabic script. With segregation and the lack of Jewish clerks in official government functions in the late Ayyubid and Mamluk periods, this particular alley of secondary education became unavailable, which produced a knock-on effect on scribal practice within the Jewish community.

1 Judaeo-Arabic

In sociolinguistics, language is seen as a means of identity for speakers and writers. Writers of particular social groups employ particular forms of speech and written text, sometimes consciously, sometimes unconsciously, that mark them as members of a certain social entity. Religious communities are a particularly interesting object for sociolinguistic studies because they are among the groups that draw the strongest sense of communal belonging.

The sociolinguistics of medieval Arabic and the diverse religious sociolects of Arabic present intriguing topics as there is a clear dichotomy in the Muslim part of the population between the spoken vernacular, on the one hand, and the literary language, so-called Classical Arabic, based on the prescriptive norms collected by the grammarians of the 9th century. Classical Arabic probably emerged from a register associated with poetry and divination, and became the language variety in which the Qur'an and the religious literature were codified in the first centuries of Islam. It forms the prescriptive standard for Muslim literary writing, is relatively uniform and exhibits only minimum variability. Due to its link with the Qur'an, Classical Arabic was and is considered 'correct' Arabic, while the vernacular has, or at least used to have, little prestige in comparison.[1]

The situation in the Christian and Jewish parts of the medieval population was slightly different as they were not bound to the same degree as their Muslim counterparts to the literary ideal of *al-'arabiyya*. As a result, the norms of Arabic in the writings of Christians and Jews varied, at certain times to a considerable degree, from those standards employed by their Muslim compatriots.

Jews in particular created their own language standards as their primary education – focussed on enabling children to read the Bible – was conducted in Hebrew.[2] The Hebrew alphabet was thus part of Jewish linguistic ability as well as of Jewish identity, although there may have also been pressures from outside not to use Arabic script for Jewish community affairs. The Pact of 'Umar[3], for example, contains the promise 'not to engrave Arabic inscriptions on our seals'.[4]

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1 Admittedly, we may be at a watershed moment in time as this attitude appears to be changing among younger Arabic speakers, due to the use of mixed registers that include many vernacular forms in mobile phone and internet communication, such as on Twitter or Facebook, which is written in a modified Latin alphabet.
2 See Olszowy-Schlanger 2003, and also Wagner 2018.
3 I will not discuss the disputed historic authenticity of the Pact of Umar here, but refer to the article by Cohen (1999) on the topic, and to the discussion pertaining to the general dubiousness of historic sources from the Early Islamic period as put down in Astren 2009.
4 See Cohen 1999, 107.

Although this may only reflect social attitudes of the 8th and 9th centuries, it could be suggested that the principles of this text, created as a precedent of relations between Muslims, Christians and Jews, still shaped linguistic policies at a much later time. Whether it was a matter of identity, literacy or political pressure, or most likely a combination of all three factors, Jews mostly wrote their Arabic texts in the Hebrew alphabet, creating what we call Judaeo-Arabic.[5] Our earliest sources of written Judaeo-Arabic are a small number of papyri from the 8th–9th century, whereas the earliest extant texts on parchment and paper date from the 10th century.

It was not only the written language forms that differed; speech too was specific to the respective faith communities. Specific spoken Jewish sociolects may possibly have existed as early as the 7th century, as reported in Islamic sources, but scholars such as Fred Astren have pointed out that these early accounts have to be read with caution and may possibly reflect much later attitudes (Astren 2009). Khan (2007, 526) has advised similar caution, since the surviving works of pre-Islamic poets 'do not exhibit anything that distinguishes them from the works of their non-Jewish contemporaries'. While it is therefore very likely that Arabic-speaking Jews spoke a sociolect among themselves throughout the centuries, the degree to which it differed from their non-Jewish neighbours must have varied considerably. The difference between Jewish and non-Jewish varieties of Arabic might have been both marginal and limited to the lexicon in pre-Islamic times, but this probably changed with the Islamisation of Arab society and the increasing association of Arabic with Islam, which led to the linguistic segregation of non-Muslim communities. The less Jews and Christians were part of the state, the

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5 Several definitions for the term 'Judaeo-Arabic' have been proposed, which appears to be part of a larger terminological problem when discussing any Judaeo-X language. Criteria suggested by a variety of scholars include: 'written by Jews', 'written for Jews', 'using the Hebrew alphabet', 'using Hebrew loanwords' etc. Controversy is often caused by texts that are written in Hebrew characters but which present a simple one-to-one transcription of a text in a different alphabet, and as to whether these can be defined as being written in a Jewish sociolect based solely on the fact that the Hebrew alphabet was used. Such one-to-one transcription of Arabic works into Hebrew script, for example in scientific manuscripts, are not viewed as Judaeo-Arabic by some scholars because they are seen as mere renderings of an Arabic text in Hebrew characters. These texts are therefore sometimes referred to as 'Arabic written in Hebrew characters'. Yet the rendering of a text in Hebrew script shows in itself that the writer and intended audience of a piece of texts must have been of Jewish background. If definition requires that authorship and audience be discussed for every piece of writing, this raises highly controversial issues. Geoffrey Khan (2007) has, therefore, suggested that the nomenclature of Judaeo-Arabic should be based on a purely descriptive criterion: the use of Hebrew script. We follow his suggestion, and call Judaeo-Arabic all texts that are written in Hebrew characters.

more their language was removed from that of Muslims. In Fatimid Egypt on the one hand, where the Shiite rulers created a relatively tolerant atmosphere with a large Jewish middle class, in a state in which members of the minorities could rise to influential positions in the bureaucracy, the language of the correspondence of Jewish merchants would betray little difference to that written by contemporary Muslim traders. The linguistic non-conformity of Jewish writing in comparison to contemporary Muslim language norms during the later Ayyubid and Mamluk rule, on the other hand, is conspicuous.[6]

It is thus not surprising that the best known examples of religiously marked speech forms are the spoken early 20th-century Arabic dialects. Blanc (1964) describes how in Baghdad Muslims spoke a variety based on rural bedouin Arabic (the so-called *gilit* dialect) whereas Christian and Jews used to converse in an older, urban variety (of the so-called *qeltu* type). Initially, following the Islamic conquests, all three communities probably spoke the same emerging Baghdadi form of spoken Arabic. The variety that Muslims spoke, however, changed after subsequent waves of immigration from Arabia brought Arab Bedouin who settled in and around Baghdad. Due to the prestige that the language of Bedouin had among the Muslim population – Bedouin were seen as the arbiters of Arabic, preserving its true original character – their speech patterns spread in the Muslim population of Baghdad, who subsequently adopted this more rural dialect as their own. Christians and Jews, on the other hand, continued to speak the older urban dialect that had emerged following the original Muslim conquests.

An additional factor for the development of different forms of speech and written language particular to their religious groups may have been the desire of Christian and Jewish speakers to segregate themselves linguistically from the Muslim population and to create their own way of speaking and writing. Perhaps this happened not only on account of minority-internal linguistic politics, but also due to pressure from the religious majority. In the Pact of 'Umar, mentioned above, one of the tenets put down by the minority communities contains the phrase ولا نتكلم بكلامهم 'we shall not speak as they [Muslims] do'.[7] Although there is a debate as to what is really meant by this statement, and editions such as the 1990 version of Muḥammad Ibn al-Walīd al-Ṭarṭūšī 's *Sirāj al-Mulūk* (the most commonly used source for the Pact of 'Umar) by Jaafar al-Bayati omit the phrase,

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6 See Wagner 2010, 229–233; 2017.

7 Taken from page 136 of the *Sirāj al-Mulūk* shelved as Arab.d.58 in the Bodleian Library Oxford, which is catalogued as the 1872 Cairo edition, but differs in page numbers from the numbering (pp. 229–230) given in Cohen (or any of the popular Pact of 'Umar webpages), and also does not agree with any of the page numbers provided by Cohen (1999, 104) for the other known editions.

we could interpret it as a deliberate attempt to linguistically separate Christians and Jews from Muslim speakers. The specific cultural environment and segregation of non-Muslim communities thus led to the emergence of sociolects particular to religious communities such as Jews and Christians.

2 The Cairo Genizah

The transcoding of Arabic in Hebrew script that we find in Judaeo-Arabic texts presents a unique case study for the investigation of standardisation processes. The most suitable sources for this sort of research are documents as they can usually be reliably dated and have not been subject to copying and re-editing in the same way that literary sources are. Documents also allow us to investigate the role of scribes for the standardisation of languages.

The majority of Judaeo-Arabic documents have emerged from the Cairo Genizah. A *genizah* is a storeroom where old manuscripts are discarded and stored. Every synagogue has one, because Jewish customs dictate that anything with the name of God written on it cannot be destroyed but must be stored away, or buried. In medieval penmanship, almost every piece of writing would mention God, and so there was reason to handle them all with care. Through various historical circumstances, the manuscripts of the Ben Ezra synagogue in Cairo were never interred but for nine hundred years, Egyptian Jews deposited anything they wrote into a large, walled-off chamber, where they were unearthed at the end of the 19th century.

The total number of leaves and fragments from the Genizah comes to *c.*350,000, of which about two thirds are currently stored in the manuscript rooms of Cambridge University Library. The manuscripts date from the 7th to the 19th century, and are mostly composed in Hebrew, Judaeo-Arabic, and Arabic, alongside other languages such as Greek, Judaeo-Persian and Yiddish. Many of the Genizah manuscripts are Bible fragments, pieces of religious literature such as Talmud or Mishnah, religious poetry and ethical treatises, but there is also an astonishing wealth of letters and legal documents. It has been estimated that about one seventh of all the Genizah fragments are documentary.

Because of the wealth of data gained from the sources of the Genizah, we also have sufficient background information about the writers of the documents. The biographies and connections between the more prolific scribes of legal documents are known as well as those of the merchants belonging to the network of traders exchanging business letters. Observations on the linguistic behaviour of these protagonists have informed the following sections.

3 Standardisation vs. de-standardisation

In our present world, an innate desire of individuals to standardise language forms appears to be taken for granted, whereas linguistic variation is often looked upon with disdain and resentment. This was not always the case in the past. In the documents and letters of the Cairo Genizah we find that in many cases scribes displayed 'an astonishing degree of inconsistency' or 'a predilection for variety' which the scribes 'must have regarded as a virtue' (Goitein 1971, 236). This can also be seen in spelling. Even the most prolific scribes, such as the court clerk Hillel b. Eli who, by Goitein's estimation, was the second most prolific Genizah scribe and who composed hundreds of documents and letters preserved in the Cairo Genizah 'would spell the same word in two adjacent lines in two different ways' (Goitein 1971, 237).[8] Modern sociolinguists, such as Kretzschmar (2009), have shown that, in speech, variation is a natural part of the linguistic system. In the variations in the writing of the Genizah scribes we may find the equivalent in the realm of the written language.

It is not only the lack of desire to homogenise one's own language, in itself and in comparison to others, that contributes to variation in language. Another factor that counteracts standardisation is the desire of scribes to give texts regional flavours, or to mark them as having emerged from a particular school of scribes. Stenroos (2013) has shown this phenomenon for Middle English scribes who wilfully introduce linguistic forms into legal documents which do not conform to the supralocal standardised variety but which are part of a local dialects. They do this in order to produce 'copies with a local identity', perhaps as a means to assert their authenticity by giving documents regional rooting, or out of a sense of regional pride.

Standardisation therefore cannot be seen as an unavoidable, linear process. Rather, there are factors that may aid de-standardisation, such as regionalisation, and deliberate efforts of scribes to vary the language in which they are writing, perhaps similar to how we in modern times paraphrase particular words in adjacent sentences. Yet, at the same time, within a network of writers certain people may attempt to alter their own individual writing style. Nissim b. Ḥalfon, an 11th-century Genizah trader who left behind dozens of mercantile letters, chooses to write Arabic ẓāʾ with the Hebrew letter ט for the first decades of his career, but in his later letters switches to the more popular צ employed by the majority of contemporary 11th-century Jewish Egyptian writers of mercantile correspondence

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8 In my years of cataloguing Genizah documents I have seen many such examples, sometimes three or four different variations of the same word appear in one document by the same scribe.

(see Wagner 2010, 30). So within networks of writers we may indeed find efforts to produce a linguistic standard universal to that particular group.

4 Early Judaeo-Arabic orthography

The earliest works composed in Judaeo-Arabic are papyri from the 8th/9th century,[9] which have been analysed and published by Blau and Hopkins (1987, 1988). These extant Judaeo-Arabic papyri are composed in the Early Judaeo-Arabic phonetic orthography, which is based on phonetic principles and shows no influence from Classical Arabic orthography (Blau and Hopkins 1984, 124 and Hary 1996, 731). This lack of influence is not surprising yet the orthographical choices of those early Jewish writers cannot reasonably be compared to medieval material as we still do not know enough about the spelling conventions in the Muslim sources in the early Islamic period.[10] The Arabic language reforms of the 9th century ana-chronistically superimpose an impression of Classical Arabic normative rules onto the earlier centuries, yet the linguistic reality was very different. Ideas on this topic have been expressed by various scholars in the last years, in particular in the collected volume on Middle Arabic edited by Jérôme Lentin and Jacques Grand'Henry (2008), which clearly demonstrate that many phenomena normally attributed to Middle Arabic are in fact early Islamic writing conventions. Further research is therefore still urgently needed to inform our understanding of early Islamic written Arabic.

In the early, phonetically based writing efforts of Judaeo-Arabic the conso-nantal correspondences between Arabic and the Hebrew alphabet are as follows:

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9 The papyri were initially thought to have been written in the 9th century, but were subsequently estimated as being of earlier provenance.
10 Early Muslim documents have been analysed and edited by Khan (1992, 1993, 2007), Hopkins (1984) and Grob (2010), but most early texts come from the middle of the second century of the Islamic era, i.e. the late 8th century.

ا	'	א	ض	ḍ	ד
ب	b	ב	ط	ṭ	ט
ت	t	ת	ظ	ẓ	ד
ث	ṯ	ת	ع	'	ע
ج	j	ג	غ	ġ	ג
ح	ḥ	ח	ف	f	פ
خ	ḫ	כ	ق	q	ק
د	d	ד	ك	k	כ
ذ	ḏ	ד	ل	l	ל
ر	r	ר	م	m	מ
ز	z	ז	ن	n	נ
س	s	ס	ه	h	ה
ش	š	ש	و	w	ו
ص	ṣ	צ	ى	y	י

The letter *dalet* ד thus represents Classical Arabic ظ <ẓ>, ض <ḍ>, ذ <ḏ> and د <d>. The difference between the various consonant qualities in Arabic is not marked with supralinear signs on top of the Hebrew letter, nor is it marked in the letter *tav* ת representing both ت <t> and ث <ṯ>. Yet it is difficult to assess to what extent this reflects the phonetic nature of contemporary spoken Arabic as there is also a lack in graphic distinction between phonetically distinct ج <j> and غ <ġ> both written as ג. In addition, it is hardly imaginable that ظ <ẓ>, ض <ḍ>, ذ <ḏ> and د <d> would all have had the same place of pronunciation. As Blau and Hopkins (1987, 133) point out 'dalet must have polyphonic function' in the papyri. Yet, the writers chose to use the same letter for all the phonetic realisations of various letters they perceived were best represented by *dalet* ד.

The Arabic article *al* is spelled phonetically such as ארחמן for <al-raḥmān> *ar-raḥmān*. This is a main point of difference to the later emerging Classical Judaeo-Arabic, which only very rarely spells the article in non-morphophonematic spelling, i.e. for example אלרחמן, often also separated אל רחמן. Short vowels, in particular [i] and [u], are frequently spelled *plene*, whereas long ā is spelled defectively (also a common feature of Early Islamic Arabic).[11]

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11 For a more extensive in-depth analysis, see Blau and Hopkins 1987, in particular 124–151.

5 Transcoding medieval Judaeo-Arabic

The early phonetic writing appears to have largely been replaced by the 9th and 10th centuries, depending on the geographic region. The change came from the East, associated with the transition in writing materials. The 9th century in the area that covers modern Iraq was characterised by a surge in literary production. One of the factors that aided this increase in intellectual activity was probably the introduction of paper to the country. Paper as a writing material is transformative as it facilitates the education of a large mass of people. It is probably no coincidence that the 9th-century sees the rise of the Arabic grammarians, and advent of the standardisation of the Arabic language.

Thus, with the arrival of paper and the surge of literary production, efforts were made to standardise writing. Not only do we see this development in Arabic, but also in Judaeo-Arabic. The new Judaeo-Arabic norms that were being introduced in the 9th century were influenced by contemporary Arabic writing conventions. In contrast to the earlier Judaeo-Arabic writing efforts, the newly emerging Judaeo-Arabic standard was heavily Arabicised and written in an orthography where Classical Arabic spelling conventions were imposed on the Hebrew letters. Relatively little is known from which scribal schools this new standard emerged, but it is clear that the one book that made this style of writing popular was the Bible translation by Saadiah Gaon, a resident of Sura and Baghdad in what is modern Iraq. His Judaeo-Arabic version of the Holy Scriptures spread far beyond his own country, and was 'quickly found everywhere throughout the communities of the Near East, North Africa and Muslim Spain, which attest to the fact that it acquired an authoritative, almost canonical, status among all Arabic speaking Rabbanite communities' (Vollandt 2014, 69). Saadiah's Bible translation was not entirely original and probably based on earlier Bible translations, but the 'pinnacle in an evolutionary process in which first oral and then written Judaeo-Arabic translation had emerged since the early days of the Arabic conquests' (Vollandt 2011, 11).

Like the translations of scriptures in so many other languages, Saadiah's Judaeo-Arabic version of the Holy Scriptures became linguistically extremely influential. Because of its popularity it started to suppress the previous, phonetic writing system people had used, set the new standards of writing Arabic across the Islamic empire and became the norm for literary Judaeo-Arabic for the next centuries. This normative, Arabicised spelling is called Classical Judaeo-Arabic by most scholars.

The use of the Hebrew alphabet meant that particular Arabic orthographical traditions were easily abandoned, and it also facilitated the influence of Hebrew norms on written Judaeo-Arabic. On the other hand, Muslim standards were occa-

sionally applied as a means to alter the register of written Judaeo-Arabic texts, and thus, the proximity to Muslim traditions varies considerably in the different genres, and throughout time.

As in the earlier phonetic alphabet, the writers of Judaeo-Arabic had to accommodate the fact that the Hebrew alphabet consists only of 22 graphemes, while Arabic possesses 28, in Judaeo-Arabic a number of Hebrew graphemes were each called upon to represent two (or more) Arabic graphemes in the newly emerged Judaeo-Arabic orthography. This concerns the graphemes ג, ד, כ, צ, ט, and ת. In most cases, one of the set is provided with a dot above the grapheme whereas the other is not. Those graphemes supplied with a dot are in many cases those equivalent to Classical Arabic ث <t̠>, ج <j>, خ <ḫ>, ذ <d̠>, ض <ḍ> and ظ <ẓ> (כ̇ ג̇ ד̇ etc.), whereas Classical Arabic ت <t>, د <d>, ص <ṣ>, ط <ṭ>, غ, <ġ>, and ك <k> are without dot (כ ת etc.). Some writers, however, indicate ġ with the dot and not j. Others point both ġ and j.

ا	ʾ	א	ض	ḍ	צ̇
ب	b	ב	ط	ṭ	ט
ت	t	ת	ظ	ẓ	צ̇ ט̇ ט
ث	t̠	ת̇ ת	ع	ʿ	ע
ج	j	ג̇ ג	غ	ġ	ג̇ ג
ح	ḥ	ח	ف	f	פ̇ פ
خ	ḫ	כ̇	ق	q	ק
د	d	ד	ك	k	כ
ذ	d̠	ד̇ ד	ل	l	ל
ر	r	ר	م	m	מ
ز	z	ז	ن	n	נ
س	s[12]	ס	ه	h	ה
ش	š	ש	و	w	ו
ص	ṣ	צ	ى	y	׳

In contrast to the earlier Judaeo-Arabic orthography, it is very obvious that the Arabic alphabet undoubtedly served as a template. In Early Judaeo-Arabic, ض <ḍ>[12]and ظ <ẓ> for example, would have been written with *dalet* ד, which was perhaps closer to the actual pronunciation in the spoken dialects. However, the literary standards of Classical Arabic exerted their influence in Classical Judaeo-Arabic, and thus the letter that corresponded in form to the one used in the Arabic alphabet was chosen, i.e. the graphemes צ or צ̇ were employed for ض. A slightly

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12 In particular in letters from Byzantium, we also find ש for s/ س, see Outhwaite 2009, 214.

more complex situation is found in the spelling of Classical Arabic ظ. Because ض ‹ḍ› and ظ ‹ẓ› had merged in the spoken language probably fairly early, or perhaps, more precisely, because the difference had phonetically never been realised at all to start with in spoken dialects outside the Arabian peninsula, צׄ was used to represent both consonants. However, ظ is also found spelled as טׄ, in analogy with the shape it takes in the Arabic alphabet.

Most importantly, in contrast to the phonetic orthography of the earlier period, Classical Judaeo-Arabic to a large degree also observes Classical Arabic rules concerning the spelling of short and long vowels. Short vowels are only rarely spelled, at least in the early medieval period, whereas long vowels are usually represented in spelling, as in Classical Arabic.

Not all medieval writers, however, follow the rules of Classical Judaeo-Arabic. In particular in letters written in crude hands we very often encounter spellings that are more reminiscent of the earlier phonetic writing conventions, see Blau and Hopkins (1984). Since crude letter writing is associated with a lack of formal scribal education, it is only natural that their writers would not be affected by Arabicised orthographical conventions that are clearly a result of educational standards of the upper classes (Goitein 1971, 346).

6 A middle class of medieval writers

We have an abundance of information concerning the education of medieval Jewish Egyptians from the Genizah sources. Children's education in Hebrew was mentioned above, where all boys but also girls went to schools, with literacy 'exceptionally high' (Olszowy-Schlanger 2003, 47), in particular in urban centres. Once more grown up, the Genizah writers had their skills honed by various channels of secondary education. Goitein (1971, 183–185) has distinguished three different types of professional scribes: first the government clerks working for the chanceries, who were proficient in writing Arabic script, and who received their training within these government institutions (*kātib*). Secondly, there are scribes who wrote legal documents and letters for the Jewish community and its legal institutions, mostly in Hebrew script (*sofer*). These scribes were trained within the Jewish scriptoria; Wagner (2018) has shown the similarity in handwriting between teachers and students, and the way students appear to have learned by copying out older documents. Arad and Wagner (2013) have also demonstrated how professional scribes working for community dignitaries were the final arbiters of linguistic style used in documents, rather than their socially and politically more prestigious masters. Thirdly, we have scribes who copied books (*nāsiḫ*),

which seems to have been a specialised branch of scribal work. Added to this are traders and physicians, who – out of need for their professions often proficient in Hebrew and Arabic scripts – developed their own writing standards slightly outside of the norms and habits of professional scribes, which includes different styles of handwriting.[13]

The effect of high educational standards for all professional classes is convincingly demonstrated in mercantile letter writing from the 11th- century, which represents by far the largest percentage of medieval Genizah writing.[14] Religious tolerance and economic prosperity in 11th-century Fatimid Egypt produced a large middle class of Jewish traders who conducted business around the Mediterranean. These merchants created their own writing conventions in their extensive business correspondence, which is astonishingly homogeneous on a linguistic level and also displays a strong influence of contemporary Muslim letter writing norms. This is all the more astonishing as traders are usually known for their 'pragmatic literacy' (Parkes 1973, 555) and lack of adherence to superimposed literary norms.

From the way Arabic is used in merchants' letters and from information stated by the traders in their correspondence we can infer that many were very familiar with the Arabic alphabet. Muslim-Jewish business partnerships were common under the Fatimids, making it necessary for the Jewish merchants to deal with Arabic mercantile documents on a daily basis. Letters often have addresses in both Arabic and Hebrew script, displaying how fluid many merchants were in both alphabets.

Not only merchants do display their aptitude in the different alphabets. Some authors use different alphabets almost playfully. For example, Daniel b. Azaryah, an 11th-century leader of the Jewish community, employs Arabic script in letters to particular recipients as a way to save space at the end of line (writing the same expression in Arabic script is a lot more space effective than it would be in Hebrew script, see Fig. 1). Others, for example a writer called Judah b. Abraham, switch between Arabic and Hebrew script when they alternate between the Hebrew and Arabic languages (Fig. 2). We can thus assume schooling in both Hebrew and Arabic scripts for the protagonists of particular professions.

Education in Arabic must be responsible for the linguistic behaviour of particular writers, who follow particular Muslim conventions that are not ordinarily part of the Judaeo-Arabic repertoire. These are typically linguistically conservative

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13 For traders, see Wagner 2017.
14 Circa 1000 letters have been edited in Gil's monumental works *In the Kingdom of Ishmael* alone (Gil 1997).
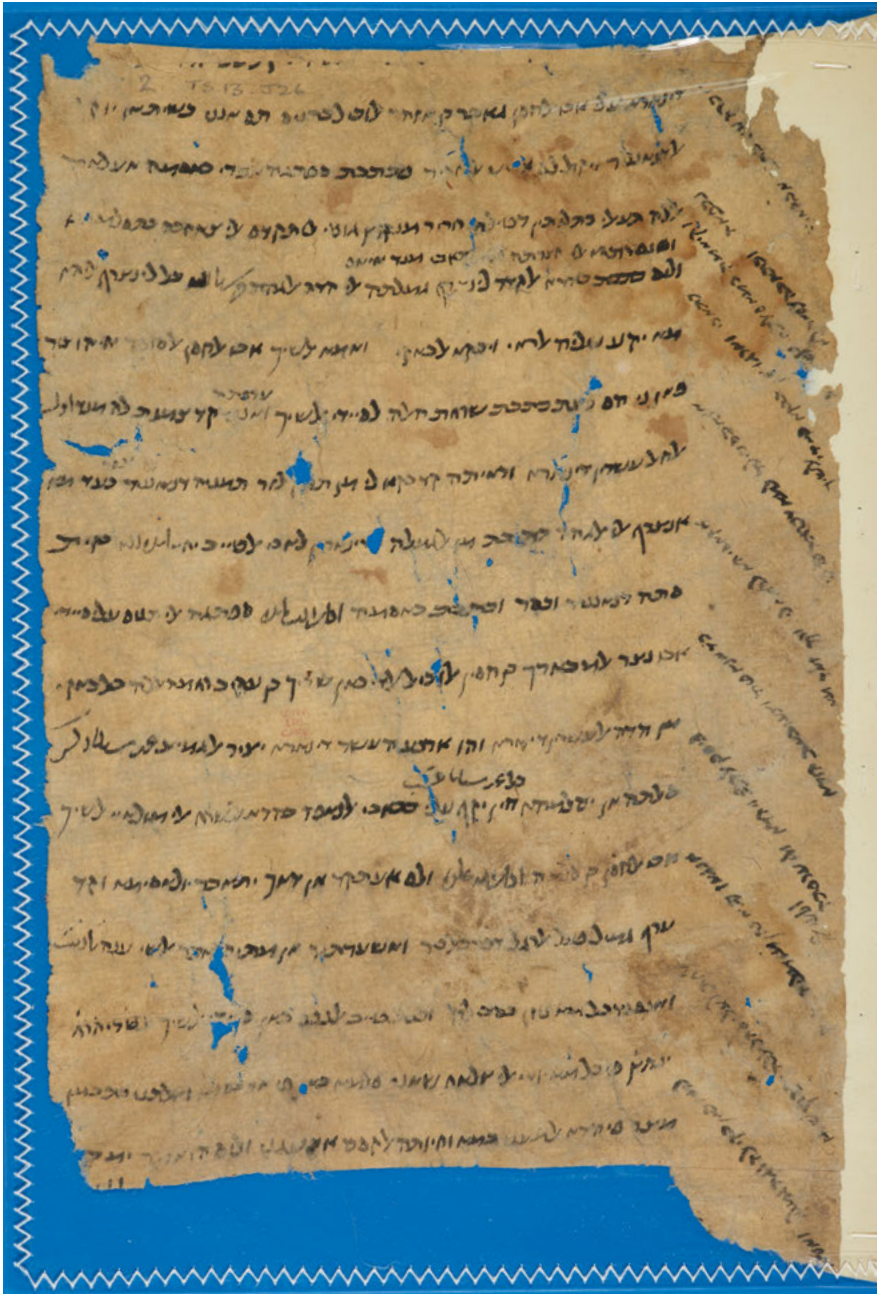
Fig. 1: TS-013-J-026-002-F. © Reproduced by kind permission of the Syndics of Cambridge University Library.
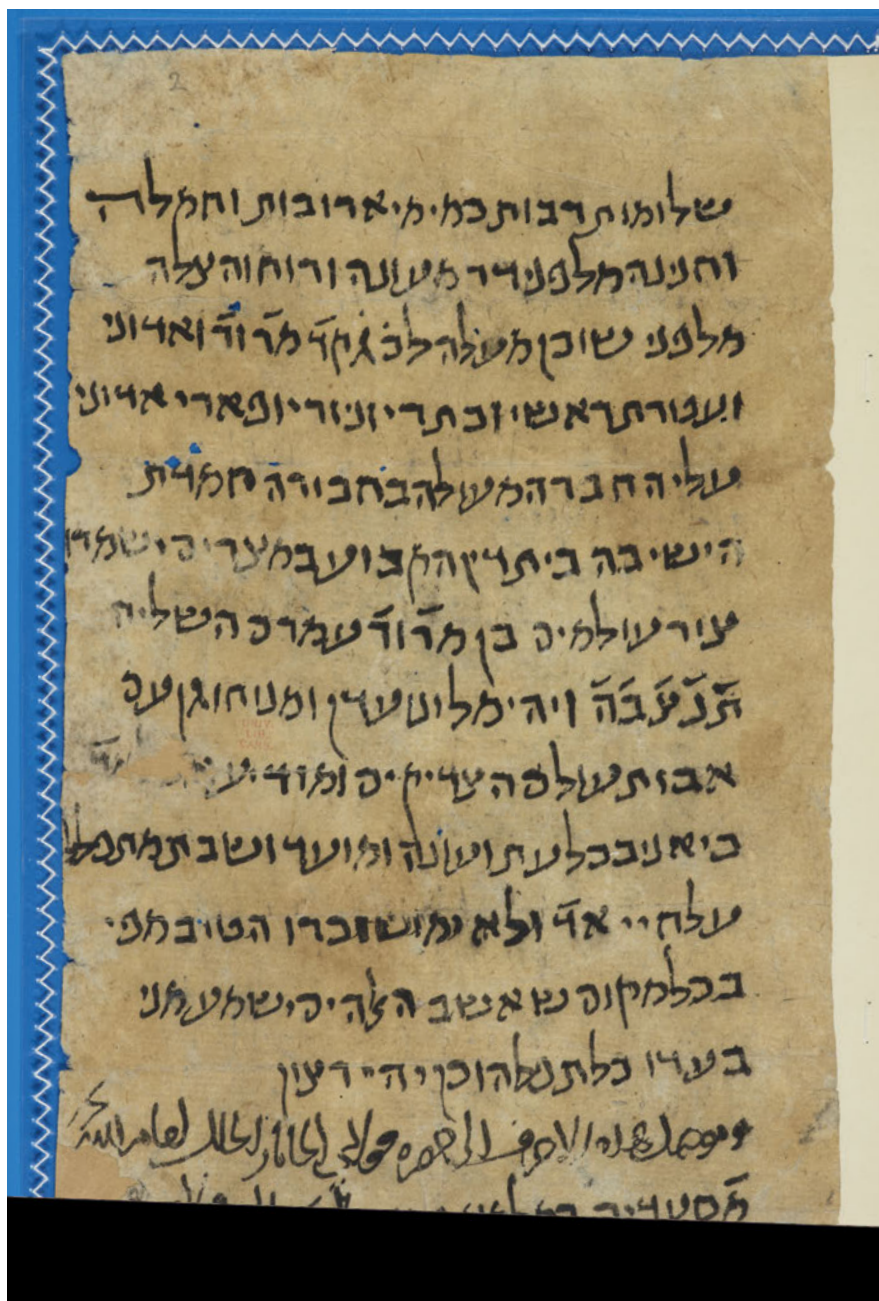
Fig. 2: T-S 13J13.2. © Reproduced by kind permission of the Syndics of Cambridge University Library.

forms, which can be found in otherwise linguistically quite progressive material. This is not unusual: Nevalainen (2013) has shown that individual Middle English writers may adopt some progressive forms, but shun others. A good example is presented by otiose ’*alif* – the silent ’*alif* at the end of particular verbal forms such as 3rd person plural perfect. This otiose ’*alif* features in Saadiah’s Bible translation and following that becomes part of Judaeo-Arabic literary texts emulating Saadiah’s linguistic standards, yet it is never actually a full part of the repertoire in epistolary writing. In a corpus of more than a hundred medieval Judaeo-Arabic letters, otiose ’*alif* only features in the correspondence of three writers: in a circle of educated writers surrounding the 13th-century judge Elijah b. Zechariah. Thus, within Judaeo-Arabic letter writing, otiose ’*alif* was used exclusively by small networks of people, perhaps as a means to demonstrate a certain standard of education. The prestige of a Classical Arabic form that is very markedly a part of a high register thus also appears to have held appeal in Jewish writing networks.

Prestige and precedent generally play an important role in the letters. Once a form has been brought to paper, it is then often used by other authors. Writers with high prestige will find the forms they employ being used by those of lower social standing. A good example demonstrating the importance of prestige may be found in the handwriting of scribes and individuals of the late Fatimid and early Ayyubid period. From the 12th-century onwards, the handwriting of Egyptian Jews became considerably more cursive compared to the earlier, squarer way of writing Hebrew script. It has been suggested that this is due to the influx of Spanish Jews into Egypt. In Spain, through the closer contact with Arabic culture, the way of writing Hebrew had been permeated by the cursivity of the Arabic script. Due to the high prestige of Spanish Jews (among them the most famous personality of the Genizah, Moses Maimonides), this trend of cursivity also caught on among the Egyptian Jewry.

7 Changes from the 13th century onward: the 'Hebraisation' of Judaeo-Arabic writing

The homogeny and orientation along the lines of Classical Arabic found in 11th-century mercantile writing contrasts sharply with letter writing in the Ayyubid empire in the 13th century. During that time, we see the economic worsening already experienced in the 12th century coming into full effect, which results in the breakdown of the Jewish middle class. Segregation between Muslims and the minorities in their states increased, which led to a return to religious values and

a more inward-facing attitude within the Jewish communities.[15] This can also be observed in writing: correspondence of the 13th century begins to exhibit a much stronger influence of Hebrew norms, counteracting the Arabicisation imposed in the earlier centuries. These differences can be correlated to the advancing lack of integration of Jews within Egyptian society. In the Jewish communities, increasingly more isolated from other faith communities, the Hebrew influence on language became much stronger and where we used to find Arabic formulae in the introduction and blessings of letters, they have now been largely replaced by their Hebrew counterparts.

On an orthographic level, Hebrew influence is most noticeable in the increase of *plene* spelling of vowels, in the spelling of reduplicated [w] and [y] and in the way particular morphemes are written. For example, the early medieval sources usually follow Classical Arabic conventions and do not mark the reduplication graphically within the *rasm* (graphic line) of the word (although we also find *šadda* used above the Hebrew letters by certain writers). In the spelling of the 3rd person singular masculine suffix pronoun, the spelling ו- <-w> that denotes the suffix in Hebrew occurs as frequently as (and in particular texts even more frequently than) the Classical Judaeo-Arabic spelling ה- <-h>. It is worth noting that the Hebrew spelling conventions that are applied in the latter example are closer to the actual pronunciation of the suffix [-u] in the spoken Egyptian Arabic than the Standard Arabic orthography of [-h]. These phenomena can already be observed in material from the 10th–12th centuries but the increase in frequency over the century from the 13th century onwards is very noticeable (see the table in Wagner 2010, 40).

In addition, vast differences in writing standards can be observed in the various genres of texts from the 13th-century onwards and in particular in the Late Judaeo-Arabic of the Ottoman period.[16] The norms start to be mostly dependent on the type of text, in contrast to the period of the 10th–12th centuries during which Judaeo-Arabic across the genres was largely standardised. For example, the gap between utilitarian prose (in particular letters) and literary works is widening; letters are often written in a much more colloquial language than literary texts, which still follow Classical Judaeo-Arabic standards to a degree. At the same time, there is also enormous variation of forms when different writers are compared to

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15 Goitein 1978, 161–162. For the changing attitudes towards minorities, also see Leiser 1976, in particular 68–88.
16 This article follows Khan's (2007, 526) periodisation, who proposes three major phases: Early (9th century), Classical (10th–15th centuries) and Late Judaeo-Arabic (from 15th century onwards).

one another, even though the Genizah contains much fewer sources from the 13th-century onwards as compared to material from the 10th–12th centuries.

8 Conclusions

To sum up: Language provides identity for its speakers and writers, and members of the different confessional groups employ particular forms of speech and written text that mark them as members of a certain social entity. Jews in particular created their own language standards as they, because of education, religious identity and perhaps political pressure, wrote their Arabic texts in the Hebrew alphabet, creating what we call Judaeo-Arabic in the process.

The transcoding of Arabic in Hebrew script found in Judaeo-Arabic texts presents a unique case study for the investigation of standardisation processes, and the most suitable corpus can be found in the documents of the Cairo Genizah. Standardised and varying forms used by the scribes of the Genizah demonstrate that standardisation cannot be seen as an unavoidable, linear process. Various factors may lead to de-standardisation, whereas network-internal linguistic standardisation may prove to be the driving force behind general standardisation processes. The main factor controlling the assertiveness of linguistic forms is perhaps the social prestige of those protagonists setting precedent.

In Judaeo-Arabic, three major orthographical phases can be discerned. In the early Islamic centuries, a *phonetic orthography* is used to write early Judaeo-Arabic. Affected by the standardisation efforts of Classical Arabic in the 9th century, a new *Arabicised orthography* emerged for Judaeo-Arabic too, aided by the spread of Saadiah's Bible translation; this initiated the period of so-called Classical Judaeo-Arabic. Classical Judaeo-Arabic was not only a literary standard but can be found in utilitarian prose, too: the efficiency of high educational standards in the relatively tolerant and prosperous 11th-century Fatimid Egypt produced a large middle class of Jewish traders who produced their own writing conventions in their extensive mercantile correspondence, displaying a strong influence of contemporary supra-communal letter writing norms.

The economic deterioration which began in the 12th and 13th centuries resulted in the breakdown of the Jewish middle class, and eventually led to the *Hebraisation* of Judaeo-Arabic orthography. Segregation between Muslims and the minorities in the Islamicate increased, leading to a return to religious values and a more inward-facing attitude within the Jewish communities. This can also be observed in writing: correspondence of the 13th century begins to exhibit a much stronger influence of Hebrew norms.

In addition, vast differences in writing standards can be observed in the various genres of Judaeo-Arabic from the 13th century onwards, with a widening gap between literary and utilitarian writing. This could be interpreted as indicating that, in the absence of an acknowledged supraregional standard across the Jewish communities, local networks, scribal schools and gathering of writers developed their own norms, which they then followed. In turn, this perhaps points to the lack of a central authority, such as the Babylonian and Palestinian Academies had held in the Geonic period, issuing norms to which writers felt the urge to adhere. In comparison, during the Classical Judaeo-Arabic period, the writing standards used in the various literary and utilitarian genres were relatively homogeneous, and fairly close to those norms used by Muslim contemporaries. This may have also been aided by the employment of Jews in government offices, and accompanying Arabic script education of the Jewish elite. With segregation and the lack of Jewish clerks in official government functions in the late Ayyubid and Mamluk periods, this particular alley of secondary education became unavailable, which must have had a knock-on effect on scribal practice within the Jewish community.

The phenomenon of linguistic de-centralisation from the 13th century onwards is by no means restricted to the Jewish community; comparable processes can be observed in Muslim Arabic writing, too, as can be best seen in Muslim Arabic from the 16th century onwards.[17] Social, political and economic circumstances thus exerted a similar influence on all religious communities, regardless of their linguistic differences.

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17 See for example the analyses of Ottoman Arabic in Lentin 2008.

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