

A dialect type of Eastern first-layer Maghrebi Arabic

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The present paper, building on the availability of new data concerning so-far undescribed varieties of Eastern Maghrebi Arabic, hypothesizes the existence of a dialectal sub-grouping of first-layer dialects stretching from Libya to Tunisia. New data from Libyan and Tunisian Judeo-Arabic varieties, in fact, present shared isoglosses that breach the traditional boundaries between Libyan and Tunisian Arabic. Most of such isoglosses, moreover, are also shared with Mahdia Muslim Arabic, a variety that so far represented an oddity in the panorama of Tunisian first-layer dialects. The hypothesized dialectal group would represent an older layer of sedentary Maghrebi Arabic, lacking some of the innovations that characterize urban dialects of Tunisia, Algeria and Morocco.

Keywords: Arabic dialectology; Maghrebi Arabic; Tunisian Arabic; Libyan Arabic.

1. Introduction: the current classification of first-layer Maghrebi Arabic

In recent years, the field of Maghrebi Arabic dialectology has witnessed important developments, as more and more data are being published which enlarge and deepen our knowledge of so-far understudied varieties. The new data, in turn, have started to question long-established classifications, calling for more in-depth analyses of both historical and linguistic facts. The reassessment of existing classifications, finally, has also been accompanied by theoretical reflections on the nature of our knowledge concerning (Maghrebi) Arabic dialects and its relation to Europe's colonial past.

In a seminal paper, Adam Benkato (2019) highlighted the colonial undertones of the traditional classification of Maghrebi Arabic dialects into pre-Hilali and Hilali, which ultimately dates back to William Marçais (1961), proposing the more neutral terms first- vs second-layer dialects. In an equally important paper, Alexander Magidow (2021) emphasized the necessity to evaluate the actual ancientness of the isoglosses we use to classify dialects, warning against the tendency to consider present-day linguistic situations as the unmodifiable reflection of a distant past.

Theoretical reflections on the nature of Maghrebi Arabic dialectology have been going hand in hand with studies concerning single isoglosses. Guerrero's (2021) paper on interdental fricatives proves that interdental phonemes have been preserved in a fair number of first-layer Maghrebi dialects, so

that their presence in most Tunisian urban varieties can no longer be considered as an exception. Souag's (2023) study of the influence of Berber on the so-called XI form (*ifʿāl*) in Maghrebi dialects describes a textbook example of contact-induced language change, as is the case with D'Anna's (forthcoming) reconstruction of the spread of *t*- passives with G-stem verbs.

As said above, the emergence of new data also called for a reconsideration of current classifications. In particular, the threefold classification of Maghrebi dialects into pre-Hilali, Hilali and village dialects (Mion 2018) and the category of village dialects (*parlers villageois*) more specifically, both going back to William Marçais (1950: 210-211), have been the object of several papers. Some of them (Mion 2015; Guerrero 2018) have shown the diverse nature of the dialects that were thought to belong to one and the same group, while others have stressed the importance of local histories to ascertain the exact nature of language contact in each different context (D'Anna 2020). More generally, pre-Hilali / first layer and Hilali / second layer refer to historical events that took place between the 7th and the 11th centuries CE. For this reason, Maghrebi dialectologists are in dire need of historical paradigms capable to account for events that occurred between that date and the beginning of the colonial period.

Apart from the broad classification of dialects into first- and second-layer, which is based on (mostly) solid isoglosses, no further internal classification or subgrouping exists which seems to hold up to scrutiny. As far as second-layer dialects are concerned, the classifications dialectologists have to work with label entire areas as Sulaymi, Hilali or Maʿqil, without specifying what makes a dialect Sulaymi vs Hilali and, above all, without any validation of the fact that tribes are linguistic units (Benkato 2019: 21). For smaller areas, such as Tunisia, more meaningful classifications, based on bundles of linguistic isoglosses, have been made available (Marçais 1950: 211-219).

Current classifications of first-layer varieties of Maghrebi Arabic are not in better shape, and leave much to be desired. In Versteegh's famous handbook of Arabic linguistics and dialectology, for instance, the following can be read:

Usually two groups are distinguished:

- the Eastern pre-Hilālī dialects, spoken in Libya, Tunisia and eastern Algeria; these dialects are characterised by the preservation of the three short vowels;
- the Western dialects of the pre-Hilālī group, spoken in western Algeria and Morocco; these have only two short vowels and have developed an indefinite article from the Classical Arabic numeral *wāḥid*, for example, in Moroccan Arabic *waḥd al-mṛa* “a woman,” always used in combination with the definite article, possibly in analogy to the construction of the demonstrative with the article (Versteegh 2014: 211).

This means that the existence of an Eastern first-layer group is based on a single isogloss, to which different counterexamples can be found, while the Western group merely adds another isogloss to the count.

The so-called Eastern pre-Hilālī group, which we will call Eastern first-layer, should include the sedentary Arabic dialects of Libya, Tunisia and Eastern Algeria, allegedly linked by one isogloss, namely the preservation of three short vowels. The idea of such a vast dialectal area bound together by a single isogloss is questionable in itself but, apart from this, it is worth mentioning that several dialects falling in that area, such as Tripoli Judeo-Arabic (Yoda 2005: 31), Yefren Judeo-Arabic (D’Anna 2021a: 17-18), Dellys (Souag 2005: 156) and Jijel (Durand 2018: 180), only have a single short vocalic phoneme, while Annaba has two short vowels (Guerrero and Abdessemed 2019: 9).

Pending a more convincing classification of first-layer Maghrebi Arabic as a whole, the present paper focuses on a specific group of Tunisian and Libyan sedentary dialects, suggesting the possibility that they belong to a so-far undescribed first-layer subgrouping.

In order to do that, it is worth mentioning some of the main isoglosses of Tunisian and Eastern Algerian sedentary dialects. Libyan first-layer dialects, on the other hand, were completely unknown until Yoda published his monograph on Tripoli Judeo-Arabic in 2005, and only recently have started to be investigated more in depth (D’Anna 2023; D’Anna 2024).

As far as Tunisia is concerned, Tunisian urban (first-layer) Muslim varieties are nowadays well represented by Tunis Muslim Arabic, whose main isoglosses include:

1. voiceless uvular realization of etymological /q/ → [q];
2. preservation of interdental fricative phonemes (/θ/, /ð/ and /ðˤ/);
3. closed realization of the etymological diphthongs /ay/ → [ī] and /aw/ → [ū];¹
4. three short vowels (/a/, /i/, /u/);
5. presence of medial and final *imāla*;
6. loss of gender distinction in the plural and in the second person singular of verbs and pronouns (Gibson 2009).

These isoglosses are quite peculiar within the Maghrebi area, especially due to the preservation of interdentals in an otherwise sedentary dialect, which is by no means unique, but quite rare (Guerrero

¹ In female speech, the etymological diphthongs have been preserved, at least in certain lexical items, until recently. This realization, however, was severely stigmatized, which accelerated its disappearance (Gibson 2009: 564).

2021). In Tunisia, the dialectal type of Tunis is represented in most urban varieties, such as Sousse (Talmoudi 1980) and Kairouan (D'Accordio Berlinguer 2024).

Sedentary dialects of Eastern Algeria, such as those of Constantine, Jijel and Dellys, present the following situation:

1. voiceless uvular realization of etymological /q/ → [q];
2. interdental phonemes are preserved, according to Marçais (Marçais 1977: 9), in Dellys² and Constantine, but lost in Jijel (Marçais 1952: 5-7);
3. closed realization of the etymological diphthongs /ay/ → [ī] and /aw/ → [ū];
4. short vowels have been reduced to one in both Dellys (Souag 2005: 156)³ and Jijel (Durand 2018: 180);
5. presence of medial and final *imāla* (Souag 2005: 157);
6. gender distinction in the singular is lost in Jijel (Marçais 1952: 435), but preserved in Dellys (Souag 2005: 159-160).

A comparison between the six isoglosses presented above shows that, even in adjacent areas of the Eastern Maghreb, considerable variation occurs, which should push scholars to work on smaller areas, where more meaningful bundles of isoglosses can be found.

The situation of sedentary Tunisia, moreover, appears to me more homogeneous than that of Eastern Algeria, since the isoglosses observed in Tunis Arabic are the hallmark of basically all varieties of urban Tunisian Arabic, with a single exception.

2. The odd one out: Mahdia Arabic

Among Tunisian urban varieties, the dialect spoken in Mahdia stands out due to two unusual phonological traits, namely

1. loss of the interdental phonemes (/θ/, /ð/ and /ðˤ/), which merged with the corresponding stops (/t/, /d/ and /dˤ/);
2. prevalent open realization of the etymological diphthongs *ay and *aw ([ē] and [ō]), alternating with a minority closed realization [ī] and [ū].⁴

² For a more recent account of interdentals in Dellys, see Souag (2005: 154-155).

³ Souag (2005: 156-157), however, writes that older speakers retain diphthongs “in some words and contexts.”

⁴ As a matter of fact, the situation of diphthongs in Mahdia might be slightly more complex than we sketched it above. Yoda (2008: 485-486) mentions an open realization [ē] / [ō], while La Rosa (2021: 12) observes a prevalence of [ī] and [ū]. The nature

As far as loss of interdental is concerned, in Tunisian Muslim Arabic the phenomenon only occurs in Mahdia and the neighboring dialect of Moknine (Mion 2014: 59), while it generalizes to all variety of Tunisian Judeo-Arabic of which we have knowledge (Cohen 1975: 19-20).

The open realization of etymological diphthongs, on the other hand, is more widespread in Tunisian Arabic, but not in the way it occurs in Mahdia Muslim Arabic. Second-layer varieties spoken in the Douz area, in fact, feature a conditioned realization of etymological diphthongs, which result in

1. [ē] / [ō] in an open syllable, e.g., *mšētu* “PFV.go:2.M.PL,”⁵ *yōm-i* “day-1.SG;”
2. [ī] / [ū] in a closed syllable, e.g., *mšīt* “PFV.go:1.SG,” *yūm* “day” (Ritt-Benmimoun 2014: 25-26).

Such conditioned variation does not exist in Mahdia, where we hear both *lēl* “night” and *lēla* “night:SGLTV” and, for those few words that have [ī] / [ū], both *l-yūm* “today” and *l-yūma* “today”. The apparent irrelevance of the syllabic structure in Mahdia diphthongs, thus, leads us to think that the open realization is independent from what observed in Douz second-layer varieties and is not the result of Bedouin influence.⁶

In the area going from the Tunisian Sahel to Tripolitania, the peculiar situation of diphthongs did not escape William Marçais, who wrote what follows:

Dans les parlers des bédouins en général, dans les parlers des ruraux tunisiens, et dans ceux de Libye, la situation apparaît particulièrement confuse, selon les parlers et, même, dans un parler donné, selon les milieux, allant jusqu'à varier selon les individus. Ce n'est jamais réduction totale ā, ū, ī ; mais hésitation entre conservation diphtongue ǝw, ǝy et réduction partielle ǝ, ē ; les milieux féminins optant souvent pour la première solution. Mais, là encore, l'environnement consonantique peut jouer son rôle, favorisant l'état diphtongue : ǝǝwm "jeûne" (plutôt que ǝǝm) , ǝǝyf "été" (plutôt que ǝǝf) (Marçais 1977: 17).

of La Rosa's data, partially coming from online sources and not only from the town of Mahdia, but also from surrounding areas, might explain the prevalence of [ī] and [ū]. Fieldwork conducted by the author revealed a prevalence of [ē] and [ō], but also the presence of specific lexical items, such as *l-yūm* “DEF-day” realized with [ū]. Interestingly, *l-yūm* is precisely one of the samples reported by La Rosa. The nature of such variation should be the object of further research. It might be a case of merger by transfer (Trudgill & Foxcroft 1978: 72) due to progressive levelling toward the prestigious dialect of the capital or, if our hypothesis is correct, an ancient phenomenon.

⁵ In glosses, the Leipzig Glossing Rules (<https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>) are used throughout.

⁶ As far as Libyan Judeo-Arabic is concerned, D'Anna (2024) hypothesized that the variation between open and closed realization of diphthongs might represent a later stage of the situation found in dialects of the Egyptian Delta, such as ad-Daxila and Burg Migizil, where diphthongs are either retained or reduced to [ī] and [ū] according to different syllabic patterns.

More generally speaking, an open realization is not usually observed in first-layer Tunisian varieties,⁷ so that the co-occurrence of a voiceless realization of etymological /q/, the loss of interdentalals and the prevalent open realization of diphthongs really marks Mahdia Muslim Arabic as unusual in the context of the Eastern Maghreb. Possibly for this reason, William Marçais does not mention Mahdia in his famous overview of the linguistic situation of Tunisia (1950). It definitely is an urban, first-layer variety, yet it appears to belong to a distinct urban type than Tunis Muslim Arabic.

Isoglosses	Tunis MA	Mahdia MA	Douz MA
/q/	[q]	[q]	[g]
/θ/, /ð/ and /ðˤ/	[θ], [ð] and [ðˤ]	[t], [d] and [dˤ]	[θ], [ð] and [ðˤ]
*ay / *aw	[ī] / [ū]	[ē] / [ō]	conditioned

Table 1. A comparison between selected isoglosses in Tunis, Mahdia and Douz Muslim Arabic.

3. Neither one nor odd

In 2021, D'Anna (2021a) published a preliminary account of Yefren Judeo-Arabic, followed by a paper concerning the linguistic history of Libya (D'Anna 2021b). In the latter, he wrote that “From a typological perspective, this dialect group [i.e. the one to which Yefren Judeo-Arabic belongs] features very similar traits to pre-Hilali varieties of the neighboring Tunisian coast.” In particular, and with reference to what has been said in § 2., Yefren Judeo-Arabic also features the three isoglosses that mark Mahdia Muslim Arabic and set it apart from the rest of Tunisian urban dialects, namely voiceless realization of the uvular /q/, lack of interdentalals and prevalent realizations of etymological diphthongs as [ē] and [ō], with a minority presence of [ī] and [ū].

Yefren Judeo-Arabic belongs to the more archaic group of Libyan Judeo-Arabic,⁸ including also Msellata and Khoms Judeo-Arabic (D'Anna 2024) and characterized as a whole (among other things) by the three isoglosses above. These dialects can be taken to represent the closest thing we have to Libyan first-layer Arabic, since Libyan Muslim dialects are all second-layer or, at best, mixed varieties. This

⁷ An open realization of diphthongs is also reported for Takrouna (Marçais and Guîga 1925: xxi-xxii) and Msaken (Bouhleb 2009: 128).

⁸ As opposed to the dialects spoken in Tripoli and the surrounding communities, which are characterized by several innovations. See D'Anna (2024).

fact makes Mahdia Muslim Arabic far less unique but, above all, attests to the ancientness of the isoglosses it features.

Even though Judeo-Arabic varieties of the Eastern Maghreb are still understudied under many aspects, online repositories and documentation projects, such as *Leshon ha-Bayit*, have been providing us with more and more materials in the last few years. Such materials usually take the form of raw video or audio interviews, conducted with very old speakers, but they allow us to acquire a basic knowledge of varieties for which very few speakers are left. Using these data, and integrating them (whenever possible) with traditional fieldwork, we can investigate whether these three isoglosses co-occur together also in varieties of Tunisian Judeo-Arabic.

As a matter of fact, they do, in quite a few varieties. At the present state of our knowledge, such varieties include Moknine Judeo-Arabic, Nafta Judeo-Arabic and Tozeur Judeo-Arabic.⁹

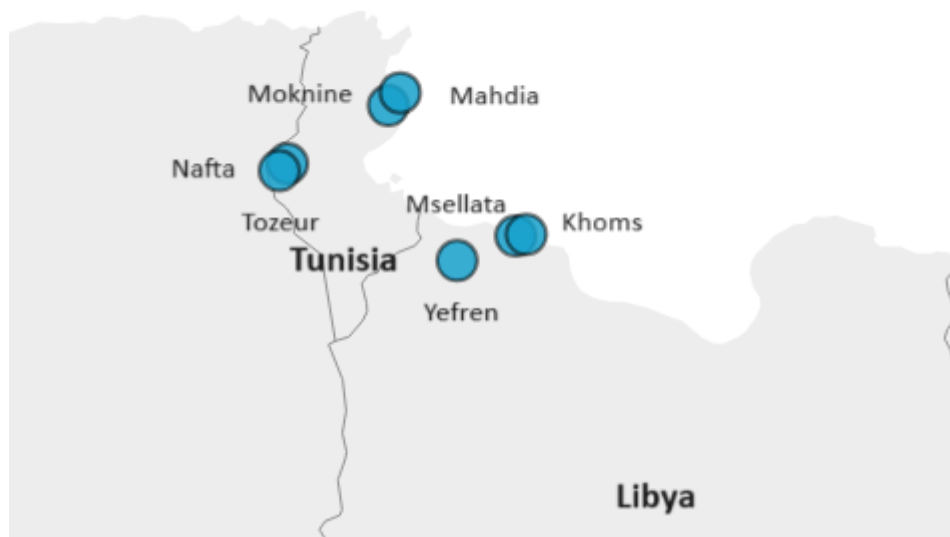


Figure 1. Distribution of possible new dialectal subgrouping.¹⁰

As evident from the map presented in Figure 1, the geographic distribution of the dialects featuring the three isoglosses is only partially homogeneous. It includes:

⁹ The situation of Sousse Judeo-Arabic is quite peculiar. The two informants recorded by the team of the *Leshon ha-Bayit Project*, in fact, present the three isoglosses featured in the dialectal bundle under analysis. The descriptions published by Lucienne Saada (1956; 1969) provide quite a different picture. Further research with surviving informants is needed to investigate the reasons behind such a difference.

¹⁰ In Figure 1, Mahdia refers to the Muslim variety, the only one for which data exist, while the remaining sample points refer to Judeo-Arabic varieties.

1. all Libyan Judeo-Arabic dialects with the exception of Tripoli and the surrounding communities, whose history has been marked by profound influences from Western Maghrebi dialects (D'Anna 2024);¹¹
2. two Tunisian dialects of the Sahel region, namely Mahdia Muslim Arabic and Moknine Judeo-Arabic;
3. the two Tunisian Judeo-Arabic varieties of Tozeur and Nafta, which were basically sedentary confessional varieties in an area characterized by the almost exclusive presence of Bedouin second-layer varieties.

Dialects on the Libyan and Tunisian sides of the proposed subgrouping are separated by a vast area, stretching from Tripolitania to southern Tunisia, in which mainly second-layer varieties are spoken, and where most of the Judeo-Arabic sedentary dialects for which we have data, such as Gabes, Zarzis, Matmata and Bengardane, showcase different features.¹²

It is, however, important to note that the seven dialects so far located do not necessarily represent the only members of the dialectal subgrouping we are proposing. The rural area surrounding Mahdia and, in general, the Tunisian Sahel represents a promising field of research, in which more specimens of this dialectal type might be located.

That said, it is clear that we are here dealing with a dialectal type that did not fare particularly well in the Eastern Maghreb. In Libya, sedentary dialects in general were obliterated by second-layer varieties that spread throughout the country, leaving only Judeo-Arabic as a witness of the linguistic past of the area. In Tunisia, the sedentary dialectal type represented by Tunis Muslim Arabic is by far the most common, and is relentlessly spreading due to the prestige of the capital. The areas in which our proposed subgrouping resisted are (so far) parts of the Sahel and remote first-layer islands in heavily Bedouinized areas, which probably served as a buffer against innovations spreading from other urban centers. An alternative view explaining the presence of shared isoglosses in the seven dialects under analysis would involve the spread of such traits from one area to the others. However, mountain Jewish communities such as those of Yefren and Msellata have no history of contacts with either Mahdia or the other areas in which the isoglosses are found, so that the most likely explanation is that we are here dealing with shared retentions.

¹¹ Benghazi Judeo-Arabic should not be counted, since it is a direct offshoot of Tripoli Judeo-Arabic (D'Anna 2023).

¹² By “data” we here mean raw interviews drawn from the *Leshon ha-Bayit* project which have been investigated by the author. The situation of Djerba Judeo-Arabic appears to be more complex and necessitates further research.

4. Further isoglosses

Apart from the three phonological traits discussed above, the dialects that, according to our hypothesis, belong to a so-far undescribed subgrouping share more isoglosses that set them apart from other neighboring varieties.

4.1. Sibilant harmony

The first phonological isogloss shared by the seven dialects is the presence and, above all, the quality of sibilant harmony. With specific reference to Maghrebi dialects, Benkato (2023) describes in detail the two different phenomena of sibilant merger and sibilant harmony.

In the case of sibilant merger, the phonological distinction between sibilants is completely lost, yielding different results in different dialects. Sibilant merger is quite widespread in Tunisian Judeo-Arabic, being attested in Tunis, Gabes and Djerba, although with slightly different outputs (Benkato 2023: 15). No dialect featuring sibilant merger, on the other hand, has so far been described in Libya. Interestingly enough, none of the seven dialects that are part of the dialectal subgrouping we propose features sibilant merger, despite its frequency in Tunisian Judeo-Arabic and the prestige deriving from its being attested in the Judeo-Arabic dialect of the capital.

Sibilant harmony also features different possible outputs, all conforming to the “conditioned alteration *chuintant-sifflant*” described by Yoda (2005: 74). The conditioned alteration consists in the dissimilation of a pre-palatal fricative (*chuintant*) into an alveolar fricative (*sifflant*), or vice versa, whenever, irrespectively of their order,

1. an alveolar and a pre-palatal fricative cooccur within a single word;
2. two pre-palatal fricatives cooccur within a single word, provided they are not the same (which means that one of them must be [ʃ] and the other one [ʒ]).

In the seven dialects under analysis, sibilant harmony consistently patterns as follows:

- [z] + [ʒ] results in [z] + [z], e.g., *zawǧ zōz “two” (Yefren JA, Moknine Judeo-Arabic), *nuzawwiǧ nzawwəz “IPGV.1:marry.SG” (Tozeur JA) ;
- [ʒ] + [z] also results in [z] + [z], e.g., TJA, YJA, BJA *ʕaǧūza “old woman” → ʕzūza (Mahdia, Yefren Judeo-Arabic);
- [ʃ] + [s] usually results in [s] + [s], e.g., *šams → səms “sun” (Khoms Judeo-Arabic), *nušammiṣu-hu “IPFV.1:sun.dry.SG-3.M.SG” → nsammiṣu (Yefren Judeo-Arabic);

- [ʃ] + [z] tends to result in [s] + [z], e.g., *šāğara “tree” → *sazra* (Khoms Judeo-Arabic, Mahdia); Yefren Judeo-Arabic, however, we also find *šəžra* and *šāğar → *šəžər* “tree.coll.”

Phenomena of sibilant harmony tend to be more and more stigmatized by younger informants, at least in those dialects that are still currently spoken (Benkato 2014: 69-70). In Mahdia, for instance, younger generations use *šəžra* “tree”, while older speakers still realize *sazra*. A certain instability of sibilant harmony, however, was already visible in Yefren Judeo-Arabic.

4.2. *Imāla*

The term *ʔimāla* is widely used by the medieval Arab grammarians to denote the fronting and raising of Old Arabic *a* toward *i*, and of the correspondent short *a* toward *i* (Levin 1992: 74). For the purpose of this paper, we will only consider final *imāla*. This trait is considered by Philippe Marçais as a hallmark of Eastern Maghrebi Arabic (Marçais 1977: 14-15). In Libyan Arabic, final *imāla* is not attested in Benghazi (Benkato 2014: 73-74), but present in Misrata Muslim Arabic (D'Anna 2017: 131), Tripoli Muslim Arabic (Pereira 2010: 33), Khoms Muslim Arabic (Benmofteh & Pereira 2017: 309), Jadu Muslim Arabic (Pereira 2012: 171-172) and in Fezzani Muslim dialects in general (Caubet 2004: 73). In Tunisian Arabic, *imāla* is present in both the Muslim (Gibson 2009: 564; Durand and Tarquini 2023: 4-6) and the Judeo-Arabic variety of the capital (Cohen 1975: 56), Kairouan (D'Accordio-Berlinguer 2023: 255), Sousse (Talmoudi 1980), Chebba (D'Anna 2020: 89), Mateur (Mion 2014: 59-60), Douz (Ritt-Benmimoun 2014: 31-32), Tozeur (Saada 1984: 32), Ben Gardane (Mion 2021: 111) and, generally speaking, in the vast majority of described varieties.

As evident from the following samples, none of the dialects under analysis, except Mahdia, features final *imāla*, despite it being one of the hallmarks of the whole area: *hna* “1.PL” (Tozeur Judeo-Arabic), *āna* “1.SG” (Moknine Judeo-Arabic), *mša* “PFV.go.3.M.SG” (Msellata Judeo-Arabic), *dwa* “PFV.speak.3.M.SG” (Yefren Judeo-Arabic), *kla* “PFV.eat.3.M.SG” (Khoms Judeo-Arabic).

Mahdia Arabic represents an exception to this trend, as it regularly features final *imāla*, e.g., *hne* “here”, *ʔale* “on”, *xde* “PFV.take.3.M.SG” (La Rosa 2021: 145). Although this is only a hypothesis, however, the presence of *imāla* in Mahdia Arabic might not be an ancient trait. Moknine Judeo-Arabic, as we have seen, does not feature any kind of *imāla*. According to historical records, the Jewish community of Moknine originated from Mahdia. In 1550, when the Spaniards captured Mahdia, Jews fled to Moknine,

fearing religious persecution. Having obtained asylum there, they settled permanently in town.¹³ This does not prove, of course, that Moknine Judeo-Arabic can give us a precise picture of Mahdia Arabic in the 16th century. However, we should at least entertain the possibility that Moknine Judeo-Arabic might include older traits later replaced in Mahdia Muslim Arabic, such as lack of final *imāla*.

4.3. Existential *famma* and other function words

The existential *famma*, or its less common variant *tamma*, is one of the most typical isoglosses of Tunisian Arabic (Gibson 2009: 566), while being completely absent from Libyan Muslim Arabic, where the existential is consistently *fī-(h)*. All the Libyan Judeo-Arabic varieties mentioned in this paper, however, employ *tamma* and not *fī-(h)*,¹⁴ e.g.:

1. *tamma* *ḥwāyž* *tānyīn* (Yefren)
 EXIST thing.PL second:M.PL
 “There are other things”

While this isogloss sets Libyan Judeo-Arabic apart from Libyan Muslim Arabic, another interesting trait is shared by two Libyan and Tunisian Judeo-Arabic dialects belonging to our group. In Yefren Judeo-Arabic, an interesting innovation was recorded, due to which *tamma* is transitivized and followed by suffix pronouns, as in the following sample from Yefren:

2. *tammā* *tammā-ni* *fī* ^{HEB}eret
 now EXIST-1.SG in land Israel^{HEB}
 “Now here I am in Israel”
3. *u-l-yōm* *tammā-kām* *antām* *u-d-daḥi* *mā-šād-š* *tamma*
 and-DEF-day EXIST-2.PL. 2.PL. and-DEF-egg.COLL NEG-PFV.return.3.M.SG-NEG EXIST
 “Now here you are and there’s no more eggs”

¹³ <http://archive.diarna.org/site/detail/public/394/>, last accessed on July 10th, 2024.

¹⁴ As a matter of fact, *tamma* (or the affricated version *čamma*) is also employed in Tripoli Judeo-Arabic and neighboring varieties. These dialects were, however, heavily influenced by migrations from the western Maghreb (D’Anna 2024).

Such an innovation is not shared by Libyan Muslim dialects or any other Maghrebi dialect for which we have data.¹⁵ It was only observed, interestingly, in Moknine Judeo-Arabic, e.g., *ma-təmmā-wū-š* “NEG-EXIST-3.M.SG-NEG.”

As a matter of fact, Libyan Judeo-Arabic dialects as a whole share many lexical isoglosses with Tunisian dialects, including the presence of the suffix *-āš* in the interrogative adverbs *kīfāš* “how” and *waqtāš* “when,” which further strengthens the hypothesis that we are dealing with a distinct dialect group:

4. *ḥam-nəmši* *nāra* *kīfāš* *ən-nās* *yərkbū*
 WANT-IPFV.1:go.SG IPFV.1:see.SG how DEF-people IPFV.3:get.on:PL
 “I would go and see how people got on [the ship]”

5. *qbəl,* *waqtāš* *iṭāru,* *kəll* *wāḥəd* *yərfaḥ*
 before when IPFV.3:circumcise:PL every one.M.SG IPFV.3:bring:M.SG
šwəyya *šwəyya* *fi* *yədd-u*
 DIM.thing DIM.thing in hand-3.M.SG
 “Before, when they circumcise, everyone brings a little in their hands”

5. Conclusions

In the previous sections, we have presented data from seven dialects of eastern Maghrebi Arabic, only one of which, i.e. Mahdia Muslim Arabic, has been partially known to scholars until recent times. The remaining six dialects are all Judeo-Arabic varieties that have been described in D’Anna (2021a; D’Anna 2024) or still lack a proper description, although interviews have been made available in online repositories.

A compared analysis of these dialects showed that the isoglosses that made Mahdia Muslim Arabic stand out within the panorama of Tunisian first-layer varieties are actually shared by other sedentary dialects, some of them located in Tunisia, such as Moknine, Tozeur and Nafta, some in Libya, such as Yefren, Khoms and Msellata. Upon closer scrutiny, these dialects appeared to share a number of other

¹⁵ Augmented forms of adverbial *təmma* are attested in Djidjel, e.g., *l-təmmītək*, *l-təmmīnātik* (Marçais 1952: 578), and in Moroccan Arabic, e.g., *l-temmak*, *l-temmaya* (Harrell 1966: 205). These are, however, augmented forms of adverbial, and not existential, *təmma*. What is more important, they only feature a distal deictic extension and not a properly inflected set of pronominal forms, which makes YJA *təmma* behave like a pseudoverb.

meaningful isoglosses, some of which, e.g., lack of *imāla*, are somewhat rare in the area they are located. The different extents to which the dialects under analysis are known limits the depth of our analysis. While the description of the three Libyan varieties draws upon corpora of acceptable size, considering the nature of the dialects in question,¹⁶ more data would be needed for the three Tunisian Judeo-Arabic varieties and also for Mahdia. The addition of more data would hopefully allow us to go beyond phonology and a superficial analysis of lexicon and investigate shared isoglosses at the morphological and syntactical levels.

Even considering the data at our disposal, however, the possibility that the isoglosses presented are shared by these dialects by pure coincidence is quite remote. As said before, in fact, some of them, such as lack of *imāla*, are quite rare in the area, and at least two dialects, Yefren and Moknine, share a usage of *tamma* that has never been attested elsewhere.

Since the idea of a monogenetic origin of Maghrebi Arabic dialects appear more and more difficult to maintain, the dialectal bundle we are here dealing with would represent the offshoot of one of the varieties that reached the eastern Maghreb during the first wave of Arabization. This dialect bundle possibly stretched from Tripolitania to Mahdia, and its presence in inland Libya and Tunisia, as far as Yefren and Tozeur, indicates that it might have once been more widespread than it is today. One of its traits, i.e. the variable realization of diphthongs, appears to be an archaism, since it is shared with both extinct varieties, such as Siculo-Arabic (Avram 2017: 14-15; La Rosa 2019: 79), and dialects of the Egyptian Delta, although outputs are different (Woidich 1996). In contrast, sedentary Maghrebi dialects located further west have usually generalized the closed realization [i] / [ū]. As we have said above, however, this dialectal type did not fare particularly well, neither in Libya nor in Tunisia. In the former case, it was almost completely ousted by second-layer dialects, resisting only as a confessional variety. In the latter, it lost ground to the more prestigious dialectal type of the capital, whose isoglosses are spreading as we speak and impacting also Mahdia Arabic, while all the Judeo-Arabic varieties here analyzed are no longer spoken in Tunisia.

The presence of a relatively important regional center, such as Mahdia, probably contributed to the partial preservation of this dialectal type in the Sahel region. All the other varieties observed, on the other hands, are dialect islands, confessional varieties surrounded by second-layer Bedouin dialects, which apparently screened them from external influence.

¹⁶ We are, in fact, dealing with severely endangered varieties that have now been spoken in diasporic contexts for over half a century. The number of first-generation speakers is, as might be expected, dwindling very rapidly and, despite some commendable attempts at language revitalization, it is unlikely that the dialects will survive past second or third-generation speakers.

Drawing from Mufwene's (2001: 4-6) account on restructuring and the formation of *koinés* and creoles, Benkato (2023) applies the tools of language evolution and new dialect formation to Maghrebi dialects. Within the specific context of a paper describing sibilant harmony in Maghrebi dialects, Benkato hypothesizes three input dialects, a feature pool where all variants are available to (second-generation) speakers and two output dialects, where the original traits have been randomly selected and stabilized into discrete new dialects.

[...] we would assume that speakers of a number of Arabian dialects, each with various combinations of the features given in Table 4, comprised the group of speakers that moved into northern Africa during the “first wave”. In so doing, the existing variants were combined, in a second generation, into a “feature pool” (Mufwene, 2001, pp. 3-6, 30). Then, *koinézation* took place and certain features were selected and focused, ultimately yielding new and stable dialects (Benkato 2023: 26).

It is important to note that the input dialects and feature pools are abstractions posited by Benkato for speculation purposes. The output dialects, on the other hand, represent actual Maghrebi dialects. The description of areal dialect bundles, from this perspective, greatly improves our chances to obtain a realistic picture of the original feature pool.¹⁷

In the light of the data presented in this paper, the presence of *imāla*, the preservation of interdentalals and the realization of diphthongs might probably be added to the list of isoglosses featured in the input dialects hypothesized by Benkato. The output dialect we have just described, as a result, might be phonologically characterized as follows:¹⁸

¹⁷ The issue of successfully reconstructing the input varieties from feature pools, on the other hand, is a different matter, whose discussion lies outside the scope of the present work.

¹⁸ Benkato (2023: 27) also includes the preservation or loss of /h/ among the input features. We are reluctant to do the same here, because Yoda (2017: 88) convincingly demonstrated that this evolution probably happened in recent times, and definitely after the *Umspringen*, i.e., the syllabic shift of CvCC patterns to CCvC.

Eastern first-layer Maghrebi

/q/ → [q]

/s/ / /ʃ/

ḍād → [dʰ]¹⁹

/t/ → [t]

/θ/, /ð/ and /ðˤ/ → [t], [d] and [dʰ]

/ay/ / /aw/ → [ē] / [ō] ([ī] / [ū])

Imāla → no

First-layer dialects of eastern Tunisia and Libya appear to have much to say regarding the Arabization of northern Africa, yet they remain dramatically understudied. Further avenues of research, with specific reference to the subject of this paper, include both dialectological investigation in the areas where specimens of this dialectal group were located and the collection of additional ethnographic texts for the seven dialects so far identified, in order to better describe their features at the morphological and syntactic levels.

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¹⁹ As opposed to the voiceless realization found in some first-layer dialects (Benkato 2023: 27).

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