



Gender and Number Agreement in Libyan Judeo-Arabic (research paper)

Gaia Sorge, Università degli Studi di Modena e Reggio Emilia

Maydan: rivista sui mondi arabi, semitici e islamici 3, 2023

<https://rivista.maydan.it>

ISSN 2785-6976

Riferimento bibliografico:

Sorge, Gaia. 2023. "Gender and Number Agreement in Libyan Judeo-Arabic", *Maydan: rivista sui mondi arabi, semitici e islamici* 3. 65-78. <https://rivista.maydan.it/maydan-vol-3/publicazioni/>

Gender and Number Agreement in Libyan Judeo-Arabic

Gaia Sorge

Università degli Studi di Modena e Reggio Emilia

gaiasorge16@gmail.com

ABSTRACT

In recent decades, agreement has attracted considerable interest in the field of Arabic linguistics and dialectology. Since the second half of the 20th century, there has been a growing concern for agreement regarding both Modern Standard Arabic and dialects. More recently, Bettega and D’Anna (2022) have provided a comprehensive survey of agreement in Arabic language and dialects from both diachronic and synchronic perspectives. One of the lacunas in their work concerns the agreement pattern of adjectives that possess a plural of the apophonic type in modern dialects. This paper aims to fill this lacuna. We add new data to bridge the gap represented by the lack of studies on the agreement type of adjectives featuring broken plurals. To achieve this, we analyze a small, yet representative, corpus of typologically similar Judeo-Arabic varieties spoken in various cities across Libya. Through our work, we attempt to shed light on agreement patterns with broken plurals in spoken Arabic.

KEYWORDS

Agreement / Libyan Judeo-Arabic / Arabic dialectology / Apophonic plural / Individuation

1 - Introduction

This article describes agreement with plural controllers in the Judeo-Arabic dialects of Libya, with a focus on apophonic adjectival agreement and its semantic value. In the last few decades, agreement in Arabic and its dialects has attracted significant interest, both from a diachronic and a synchronic perspective. In this paper, we provide a concise overview of the study of agreement in Arabic – mostly spoken Arabic – in order to illustrate the current state of literature on this topic. Thereafter, we present the results of our analysis, with a particular focus on individuation and broken plural, to better understand their role in the agreement.

2 - State of the art

Concerning agreement in spoken Arabic, the first fundamental work is *Dual and Pseudo-Dual in the Arabic Dialects*, published in 1970 by Haim Blanc. Through his study,

Blanc offered huge quantities of information – looking at agreement from an interdialectal perspective for the first time – as well as instruments and methodologies still used in the contemporary era. Blanc noticed that in certain varieties of gender-distinguishing dialects – which means those dialects that maintain the distinction between genders in the plural form of verbs and pronouns – feminine plural agreement is often used when referring to irrational subjects (Blanc 1970). Nineteen years after Blanc, Charles A. Ferguson published *Grammatical Agreement in Classical Arabic and the Modern Dialects: a Response to Versteegh’s Pidginization Hypothesis* (1989). In this work, the author introduces the definitions of “strict agreement” and “deflected agreement”. The term “strict” refers to the type of agreement in which a plural controller triggers a plural target. On the other hand, “deflected” agreement occurs when a plural controller triggers a feminine singular target.

Ferguson introduced this distinction because, while Modern Standard Arabic has a rule that quite categorically imposes feminine singular agreement with plural irrational controllers, dialects show more variation in the system of agreement. In 1999, Kirk R. Belnap published the first work on agreement in Arabic that included a considerable amount of statistical data. The dataset used in his study was drawn from oral interviews with native speakers of Cairene Arabic. It included 873 agreement targets depending on 520 controllers (Belnap 1999). His methodological approach served as the basis for several subsequent studies. In 2000, Kristen E. Brustad introduced the topic of individuation in her study *The Syntax of Spoken Arabic* (Brustad 2000). In fact, it was Bernard Comrie who introduced the notion of “salience” in 1989 (Comrie 1989). Brustad, however, identified it as a cause for the unstable nature of agreement with plural subjects, in view of the fact that speakers can use agreement pragmatically to signal their perception of the referent (Bettega & D’Anna 2022:23).

All these studies focused on non-distinguishing dialects. This occurred because, in some way, the basis offered by Ferguson, especially his terminology, influenced the following studies towards those dialects that lost gender distinction. Often, even when studies focused on gender-distinguishing dialects, they tended to use the same notions of “strict” and “deflected”, generating misunderstanding since “strict agreement” only refers to plural agreement, making irrelevant any kind of variation but singular/plural. This perspective is definitely too simplistic for gender-distinguishing dialects¹.

As for gender-distinguishing dialects, there are few studies about agreement. One

¹ Speaking of terminology, incidentally, the terms controller and target - used in this paper - have been borrowed from Greville G. Corbett’s *Agreement* (2006), in which he defined the controller as «the element which determines the agreement (say the subject noun phrase)», and the target as «the element whose form is determined by agreement» (Corbett 2006:4). In other words, the controller is the head-noun, while the target is every element of the discourse that refers to it, in terms of adjective, verb, and pronoun.

of the earliest publications on this topic was by Jonathan Owens and Raslan Bani-Yasin in 1987. The authors conducted a study on a rural dialect of Jordan and concluded that feminine singular agreement with plural controllers is an innovation of Modern Standard Arabic, while the original rule of dialects requires a feminine plural agreement (Owens & Bani-Yasin 1987). In 2013, Bruno Herin and Enam Al-Wer published another study on a Jordanian dialect (Herin & Al-Wer 2013). Herin and Al-Wer, as well as Owens and Bani-Yasin, maintained that the original rule of dialects requires a feminine plural agreement, but according to their study, the use of feminine singular agreement with plural controllers has spread due to contact with prestigious urban dialects. More recently, Simone Bettega and Luca D'Anna (2022) consider the possibility of a feminine singular agreement with plural controllers as «a very old shared retention, rather than an innovation» (Bettega & D'Anna 2022:371). Stating that dialects - gender-distinguishing dialects as well as non-distinguishing ones - have always been characterized by oscillation between plural and feminine singular agreement, since:

Though it is perfectly possible that contact with Modern Standard Arabic and other spoken varieties has contributed to increase or decrease the frequency with which plural nouns attract f.sg agreement in any given dialect, this syntactic pattern has constituted one of the signature characteristics of Arabic since long before the dawn of Islam (Bettega & D'Anna 2022:371).

So that, «conversely, the loss of this possibility constitutes the real innovation: since the dialects in which this has happened are spoken in areas that are very distant from each other» (Bettega & D'Anna 2022:371). In 2016, Veronika Ritt-Benmimoun, in a study on the Bedouin dialect of the Nifzāwa region in Southern Tunisia, confirmed what Brustad wrote about the influence of individuation on agreement (Ritt-Benmimoun 2016). She stated that any kind of controller can trigger a feminine singular agreement if they show a low level of individuation. The following year, D'Anna published *Agreement with plural controllers in Fezzānī Arabic* (D'Anna 2017), in which the results regarding the use of feminine singular agreement are consistent with those achieved by Ritt-Benmimoun. Therefore, he further proves that feminine singular agreement is related to a scarce level of individuation of the controller.

In what follows, we investigate the role of apophonic plurals within the agreement system of spoken Arabic, since a significant number of studies have been dedicated to the topic of apophony in Arabic, but only a few have tackled their agreement type.

3 - Data and methodology

In order to conduct our investigation, we made use of Judeo-Arabic dialects of

Libya. Libyan Judeo-Arabic was the dialect spoken by the Jewish communities of Libya until 1967. It is a sedentary variety that belongs to the *Eqāl* group of North African dialects (Chetrit 2016): as such, it is a non-distinguishing dialect. Nowadays, Libyan Judeo-Arabic is only spoken in the diaspora, or, to use a broader term, in migratory settings. Our corpus of data is drawn from oral interviews with native speakers, personally conducted by Luca D’Anna (University of Naples “L’Orientale”)² and Hamos Guetta,³ as well as interviews from the website *Leshon Ha-bayit*,⁴ which is a project devoted to documenting and preserving Jewish languages from all over the world. All the interviews date back to a period between 2017 and 2022. We have 14 informants: eight women and six men. All of them were born between 1933 and 1955, which means that they are currently between 68 and 90 years old. All of them emigrated from Libya between 1949 and 1967. They come from various cities in Libya: Tripoli, Zawiya, Zanzur, Misrata, Yefren, Msellata, Khoms, and Benghazi. Today, most of them live in Israel, except for four informants from Benghazi who reside in Italy.

From a methodological point of view, we investigated the agreement patterns with plural controllers, by scrutinizing controllers and targets offered by our corpus on an Excel spreadsheet in order to conduct a statistical analysis. Our corpus yielded a total of 200 targets. We analyzed controllers consisting of morphological plurals, collectives, and chains of conjoined nouns, by following the traditional distinction between human – further subdivided into masculine and feminine – and inanimate. For the sake of completeness, we took into account several categories and factors that could influence the patterns of agreement. Concerning the controllers, we considered number, gender, definiteness, quantification, qualification, abstractness, and individuation. As for the targets, we considered type (adjective, pronoun, verb), word order, and distance between target and controller.

4 - Human controllers

The category of human controllers appears quite clear and straightforward, in line with our expected results. As previously mentioned, Judeo-Arabic dialects are sedentary dialects, which means they have lost the gender distinction in verbs and pronouns in the second- and third-person plural. Consequently, the originally masculine form of the plural is used as the common plural form.

² I would like to thank Luca D’Anna for sharing with me his work and for the great support he gave me during the processing stage of this study.

³ His interviews can be found at <https://shorturl.at/giL89>. Last accessed 18/04/2023.

⁴ <https://www.lashon.org/en>. Last accessed 18/04/2023.

4.1 - Masculine human controllers

There are no surprises resulting from the analysis of the agreement patterns with masculine human plural controllers. From our corpus, we extracted 45 controllers: 40 are morphological plurals and five are chains of conjoined nouns of various types (three chains formed by two singular nouns and two chains formed by two plural nouns). They feature a total of 66 targets, all of which display agreement in the masculine plural, with the exception of one broken plural and a single occurrence of a masculine singular, shown in the following example:⁵

1. *mša* *ṁmāli*
 PFV.3:go:M.S parent.PL
 “parents went”

This is the only instance in our corpus in which word order affects the pattern of agreement. Generally, it does not play a role. Unexpectedly, in this example, the informant follows the Modern Standard Arabic rule, which requires that in a VSO pattern, the verb agrees only in gender and not in number, as it will always go in the singular. Based on the data, this does not occur in the dialects here analyzed, in which, typically, even when the verb precedes the subject, it agrees both in gender and number. As the following examples demonstrate:

2. *yəməšu* *r-ržāl*
 IPFV.3:go:M.PL DEF-man.PL
 “men go”
3. *bū-ya* *u-xū-* *mšāw*
 father-1s and-brother.3M.S PFV.3:go:M.PL
 “my father and his brother went”
4. *lə-msəlmīn* *daxlu*
 DEF-muslim.M.PL PFV.3:go.in:M.PL
 “Muslims entered”

We can clearly observe that example 1 represents an anomaly in the patterns of agreement provided by our corpus, in which all the VS structures feature strict mascu-

⁵ In this work, we adopt the system of transcription more generally used in the field of Arabic dialectology.

line plural agreement. Although in countertendency, a similar occurrence could appear simply because word order does affect agreement, and this could happen even in those dialects that generally do not show this kind of agreement. As Bettega and D’Anna (2022:3-4) point out, «the role of word order seems to be stronger in certain dialects and less evident in others» still «the fact remains that word order does have an influence on agreement in N[eo] A[rabic], contrary to what many scholars have claimed».

4.2 - Feminine human controllers

The situation is not different as far as feminine human controllers are involved. Our corpus contains 20 occurrences controlling 24 targets, and there is almost no variation, as 22 out of 24 targets display as masculine plural. The two exceptions are a feminine singular agreement, namely an adjectival target, and a verb conjugated in the feminine plural form, as shown in the following example:

- | | | |
|----|-----------------|------------------|
| 5. | <i>ṣ-ṣabāya</i> | <i>yegəʕdən</i> |
| | DEF-girl.PL | IPFV.3:stay:f.PL |
| | “girls stayed” | |

A similar occurrence is totally unusual for a non-distinguishing dialect. The only hypothesis we can put forward to explain this peculiarity lies in sociolinguistics. The informant responsible for this occurrence is from Benghazi. As D’Anna (forthcoming) informs us:

Within the town of Benghazi, the Jewish community did not live in a specific neighborhood (*ḥāra*) but was dispersed throughout the town [...] The reports we have from different speakers all seem to agree on the fact that the Jewish community of Benghazi was integrated within the social fabric of its town to a higher degree than most other communities (D’Anna 2023:3).

This means that «in the absence of a *ḥāra*, men worked in close contact with Muslim speakers and consequently showed a more marked adaptation to Benghazi Muslim Arabic» (D’Anna 2023:3). Muslims speak a Bedouin variety of Arabic, namely a gender-distinguishing one. Therefore, this informant simply displays a higher level of adaptation to the Bedouin variety along which he lived. In all other cases, the results are consistent with what we would expect from a Judeo-Arabic dialect, as is evident from the examples provided below:

- | | | | |
|----|------------------|---------------|------------------|
| 6. | <i>iḏīw</i> | <i>ən-nsa</i> | <i>iṣāwnu</i> |
| | IPFV.3:come:M.PL | DEF-woman.PL | IPFV.3:help:M.PL |

“women used to come and help”

7. *lā-bnāt* *γəmšīw*
 DEF-daughter.PL IPFV.3:come:M.PL
 “daughters came”

In addition, from these occurrences, we can also observe that word order does not play any role in the agreement patterns of feminine human plural controllers.

5 - Inanimate controllers

Concerning inanimate controllers, our corpus yielded 31 occurrences, including a chain of conjoined nouns, controlling 34 targets. This category is definitely less straightforward than the ones previously examined, since:

In the transition from pre-Classical to Classical Arabic, plural nouns denoting inanimate entities underwent, like all nonhuman controllers, a process of standardization that made agreement in the feminine singular nearly categorical. The process did not affect, at least not in this form, the spoken varieties that can be considered the ancestors of contemporary dialects, so that variation occurs also with inanimate controllers (D’Anna 2017:115).

Hence, we have obtained the following results:

	Contr.	Targ.	M.Sg	M.Pl	F.Sg	F.Pl	Br.Pl
Total	31	34	1	24	4	1	4
Plural	30	33	1	23	4	1	4
Chain	1	1	-	1	-	-	-

A great majority of masculine plural agreement is not surprising, since, concerning feminine singular agreement, we can affirm that «in general, Libyan dialects make little use of this syntactic option» (Bettega & D’Anna 2022:130). However, it is possible to ascertain a significant variation, both in gender and number. Out of a total of 34 targets, 24 are masculine plurals (70,6%), one is masculine singular (2,9%),⁶ one is feminine plural (2,9%),⁷ four are broken plurals (11,8%), and four are feminine singulars (11,8%). This latter data is particularly interesting. Our four occurrences of feminine singular

⁶ *hāḍa flūs* (“this money”).

⁷ *ṭḥəyyfāč šġəyybāč* (“little pieces”). Here, the diminutive form of the controller triggers the diminutive form of the target, due to the morphological assonance between them.

agreement consist of adjectives.

- | | | |
|----|---|---------------------------|
| 8. | <i>ḥāžāt</i>
thing.F.PL
“great things” | <i>kbīʿa</i>
big.F.SG |
| 9. | <i>furāṣ</i>
occasion.PL
“many occasions” | <i>kṭīra</i>
many.F.SG |

From the analysis of these occurrences, we can observe that, except for one sample, these adjectives describe controllers that always happen to be non-individuated by the speaker. This affirmation confirms what Bettega and D’Anna (2022:122) already stated about the semantic role of feminine singular agreement: «it represents an alternative agreement option for plural controllers, available to nouns [...] that are perceived by the speaker as non-individuated». Furthermore, these controllers share another feature, since all of them, except for one, are abstract nouns (*ḥāžāt*, *furāṣ*, *aṣyād*). Consequently, we can assume that, as for the individuation, the abstractness also influences agreement patterns of inanimate controllers, which lean towards a feminine singular agreement, under such conditions. In this regard, it is worth noting that the feminine marker in Arabic, as in other semitic languages, tends to carry semantic values, including the possibility of giving rise to abstract nouns, so that the notion of a connection between the concept of femininity and abstractness is well established in the literature (Bettega & D’Anna 2022:126). Thus, feminine singular agreement takes charge of two features: abstractness and lack of individuation.

6 - Individuation

Individuation is a quite broad term. It gathers multiple features and is not easy to define, although Comrie (1989) has proposed a clear definition:

Salience relates to the way in which certain actants present in a situation are seized on by humans as foci of attention, only subsequently attention being paid to less salient, less individuated objects [...]. Salience is not treated as a primitive in itself, but rather as the result of the interaction of a number of factors, such as animacy in the strict sense, definiteness, singularity, concreteness, assignability of a proper name (Comrie 1989:199).

Geoffrey Khan (1984) was the first to apply this concept to the field of Semitic linguistics. In addition to what Comrie had already stated, he also argues «that nominals

which refer to specific entities are more individuated than generic nominals referring to a whole class of entities» (quoted in Bettega & D’Anna 2022:24), and the concept of textual salience, namely if the role of the referent within the text is a prominent one or not.

To sum up, the factors that can influence the individuation of a controller are animacy, definiteness/indefiniteness, concreteness/abstractness, quantification, assignability of a proper name, the quality of ego-like (humanness), textual salience. Therefore, the concept of individuation (or salience) «appears to be a somewhat loose umbrella term» (Bettega & D’Anna 2022:24), in which all the categories listed here are not meant to be considered as a hierarchy of elements and phenomena, but rather as a “complex intertwining”, in the words of Comrie (Comrie 1989:199). In addition to all this, the concept of individuation is closely related to the way in which the speaker perceives the referent, this is the fundamental crux of the matter. This is the reason why it is not an easy task to understand and define whether a specific controller is individuated or non-individuated, and yet plays a decisive role in the agreement pattern, since it leads to the possibility of triggering the feminine singular agreement, that thereby becomes a marker for the lack of individuation.

7 - Broken plural

Before proceeding with the last category analyzed, namely the broken plural adjectival target, and attempting to explain its semantic role as far as agreement is concerned, it is necessary to illustrate what we mean by apophonic plural and offer an overview of the main studies that investigated its nature.

We obtain broken or apophonic plural – of nouns or adjectives – by means of changes in the form of the singular, which may translate into adding, dropping, changing, lengthening, and shortening of vowels, and occasionally by adding prefixes and suffixes, often in unpredictable ways. There are over 30 forms of broken plural, and there are no fixed rules to determine what type of apophonic plural corresponds to a specific singular form. Moreover, «broken plurals [...] are underspecified for gender, which implies that, for agreement purposes, speakers have to retrieve gender information from the singular» (Bettega & D’Anna 2022:185).

Studies on the topic of apophonic plural mainly focused on its nature and its origin from a morphological point of view, but only to a lesser extent on its functionality and role within the syntax of those languages that possess this feature. Among these works, we can mention Barth (1894), who supported the hypothesis that broken plural forms were originally deverbal abstract nouns. Actually, this is only true for a few plural forms, but not for the large majority of them. Carl Brockelmann (1908) hypothesized the existence, within Proto-Semitic, of a category gathering abstract, collective, and plural nouns, from which sound and broken plurals are gradually told apart. This theory, as

well, is based on a small group of apophonic plural forms. Federico Corriente (1971) proposed an original thesis supporting the idea that Proto-Semitic «originally possessed a rich system of noun classes, from which the broken plurals ultimately derived» (quoted in Bettega & D’Anna 2022:14). The drawback of this theory lies in the fact that it lacks supporting evidence. Robert R. Ratcliffe (1998) provided an overview of the main studies published since then and proposed a new hypothesis himself, based on the prosodic analysis of pluralization strategies. However, his hypothesis was not fully convincing either (Bettega & D’Anna 2022:15). Eventually, the question concerning the origin of apophony in Semitic languages remains open.

When it comes to the role of broken plural within the syntax, and specifically, within agreement patterns, the number of publications decreases. Abdel-Moneim Sallam (1979) addressed the issue as part of a study on agreement; likewise, more recently, Bettega and D’Anna (2022).

In an attempt to figure out a usage pattern for apophonic agreement, we come across a recurring theory involving the existence of a possible link between broken plural and lack of individuation. Therefore, in the following section, we attempt to answer this question, through the analysis of our data including apophonic plural adjectival targets.

8 - Broken plural adjectival targets

Our corpus yielded a total of 41 adjectival targets, seven of which are broken plurals. Although this may not be a particularly high figure, we managed to conduct a rewarding qualitative analysis. Moving on to our data, the seven adjectives are controlled by four broken plural nouns, one feminine sound plural noun, one masculine sound plural noun, and one collective.

- | | | |
|-----|---|---------------------------------|
| 10. | <i>ūlād</i>
child.PL
“young children” | <i>zġār</i>
little.BR.PL |
| 11. | <i>r-rabbīn</i>
DEF-rabbi.PL
“great rabbis” | <i>lā-kbār</i>
DEF-big.BR.PL |
| 12. | <i>nās</i>
people
“nice people” | <i>mlāḥ</i>
nice.BR.PL |

We know that it is impossible to determine the gender of a broken plural, by its

very nature. For this reason, to figure out the kind of agreement pattern that takes place when an apophonic plural is involved, we can compare the data including adjectival targets. The outcome of the comparison shows that - with a single exception - the nouns controlling the seven adjectival targets share the same feature: a lack of individuation. We can observe a lack of individuation, for example, in *ūlād zġār*, since here the speaker was not talking about some specific children, she actually says *mā-ʕand-ū-š ūlād zġār* (“he did not have young children”), so that it seems clear that she was not thinking of any particular young children. Analogously, we can consider in the same way example 11 (*r-rabbīn lə-kbār*), for the informant, here, is talking ideally about some hypothetical rabbis, rather than specific individuals. Once again, we can recognize the same feature in the following example:

13.	<i>hūwa</i> he	<i>kān</i> PFV.3:be:M.SG	<i>mudarrəb</i> coach
	<i>l-aʕyāl</i> DEF-team.PL	<i>aš-šġār</i> DEF-little.BR.PL	<i>lə-kurət səlla</i> DEF-basketball
	“he was the coach of small basketball teams”		

As in the two previous examples, the informant here clearly does not refer to individuated entities. In all these cases, we can infer from the context that our speakers do not refer to defined subjects, but rather to vague elements, so we can consider them non-individuated. For the sake of clarity, it must be stated that determining whether a controller is individuated or non-individuated is not always easy, as it strongly depends on the speaker’s mind, as we have already seen. Therefore, we must infer this information from the context, which means that often this kind of task consists of an interpretation of the informants’ words.

At this point, we can observe that 85,7% (6 out of 7) of broken plural adjectival targets define non-individuated controllers, and 75% (3 out of 4) of feminine singular adjectival targets define non-individuated controllers. In light of this data, it is possible to suppose the existence of a connection between apophonic plural and lack of individuation. Thus, we conclude that a lack of individuation can be revealed by both the feminine singular agreement and the broken plural agreement. To be fair, though, we must make clear that our analysis would require a larger dataset to ensure the reliability of our results, since the majority of our broken plural adjectives do not possess a sound plural form. Consequently, it is not completely possible to determine whether the informant’s choice of opting for the broken plural form has a semantic value or not.

9 - Conclusions

This article has examined patterns of agreement with plural controllers in Libyan Judeo-Arabic. Our controllers consist of morphological plurals, chains, and collective nouns, which have been analyzed following the traditional distinction between human and inanimate controllers, as well as taking into account gender, definiteness, qualification, quantification, abstractness, and individuation. We scrutinized all the plural controllers and all the targets they controlled. Targets consist of pronouns, verbs, and adjectives, taking into consideration all the features that can influence them, namely if a target precedes or follows the controller and the distance between them.

At first glance, our data revealed an overwhelming majority of masculine plural agreement, since out of 200 occurrences, 87,5% showed this type of agreement. This means that, in general, Libyan Judeo-Arabic prefers plural agreement with controllers that are either morphologically or semantically plural. Moreover, it shows that Libyan Judeo-Arabic is currently in the last stage of the loss of gender distinction, which now includes not only pronouns and verbs but also adjectives. Concerning human plural controllers, agreement patterns are completely straightforward. On the other hand, with inanimate controllers, agreement shows a higher level of variation. Although in this category as well, we can observe a predominance of masculine plural agreement, our data has enabled us to determine a correlation between feminine singular agreement and apophonic plural. We can see, in fact, that speakers opt for both kinds of agreement when they perceive a controller as non-individuated. Once again, however, we remark that an analysis of a corpus that includes a larger number of broken plural adjectives would be advantageous, in order to prove with greater certainty the idea that opting for a broken form of a given adjective is actually a semantic choice.

Another point raised from the analysis is that our data shows that only speakers living in Italy made some use of the feminine singular agreement, while those living in Israel never showed this pattern of agreement. In the light of this information, we can suppose that speakers residing in Israel lean towards a minor use of feminine singular agreement, because of the influence of Hebrew, which would guide Judeo-Arabic speakers to use plural agreement to a greater extent, and further reducing feminine singular agreement. In response to this statement, it might be argued that Italian could influence Judeo-Arabic speakers to use the plural as well, since it does not possess deflected agreement. However, it is hard to think that Italian might influence Judeo-Arabic patterns of agreement, given the major morphological distance between these two languages. Conversely, this could happen with Hebrew, which is morphologically and typologically close to Arabic. Hence, in the attempt to answer our initial question regarding apophonic plural agreement, we ended up getting another question: does the majority language have an influence on the agreement systems of the minority language? In other words, why do Judeo-Arabic speakers living in Israel show less frequent employment of feminine singular agreement in comparison to Judeo-Arabic speakers living in

Italy? Unfortunately, however, it is not possible to conduct a fulfilling comparative analysis with our corpus because it lacks sufficient data. It would be needed to undertake a comparative study, which would allow us to compare Judeo-Arabic speakers living in Italy with those living in Israel, with respect to the occurrence of feminine singular agreement, to figure out the influence of the majority language on the agreement systems of the minority language.

Bibliography

- Barth, Jakob. 1894. *Die Nominalbildung in den Semitischen Sprachen*. Leipzig: Hinrichs.
- Belnap, Kirk R. 1999. "A New Perspective on the History of Arabic Variation in Marking Agreement with Plural Heads", *Folia Linguistica* 33(1-2). 169-186.
- Bettega, Simone. 2019. "Rethinking Agreement in Spoken Arabic: The Question of Gender", *Annali. Sezione orientale* 79. 126-156.
- Bettega, Simone, & D'Anna, Luca. 2022. *Gender and Number Agreement in Arabic*. Leiden/Boston: Brill.
- Blanc, Haim. 1970. "Dual and Pseudo-Dual in the Arabic Dialects", *Language* 46(1). 42-57.
- Brockelmann, Carl. 1908. *Grundriss Der Vergleichenden Grammatik Der Semitischen Sprachen*. Berlin: Verlag Von Reuther and Reichard.
- Brustad, Kristen E. 2000. *The Syntax of Spoken Arabic. A Comparative Study of Moroccan, Egyptian, Syrian and Kuwaiti Dialects*. Washington D.C.: Georgetown University Press.
- Chetrit, Joseph. 2016. "Diversity of Judeo-Arabic Dialects in North Africa: *Eqa:l, Wqal, kjal* and *?al* Dialects", *Journal of Jewish Languages* 4(1). 1-43.
- Comrie, Bernard. 1989. *Language Universals and Linguistic Typology*. Chicago: IL.
- Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Corriente, Federico. 1971. *Problemática de la Pluralidad en Semítico. El Plural Fracto*. Madrid: Instituto Benito Aria Montano.
- D'Anna, Luca. 2017. "Agreement with Plural Controllers in Fezzānī Arabic", *Folia Orientalia* 54. 101-122.
- 2023. "On the Nature of Benghazi Judeo-Arabic", *Wiener Zeitschrift für die Kunde des Morgenlandes* 113. 1-26.
- Ferguson, Charles A. 1989. "Grammatical Agreement in Classical Arabic and the Modern Dialects: A Response to Versteegh's Pidginization Hypothesis", *Al-'Arabiyya* 22. 5-17.
- Herin, Bruno, & Enam, Al-Wer. 2013. "From Phonological Variation to Grammatical Change: Depalatalisation of /č/ in Salti", in Holes, Clive, & de Jong, Rudolf (eds.), *Ingham of Arabia. A Collection of Articles Presented as a Tribute to the Career of Bruce Ingham*. Leiden/Boston: Brill. 55-73

- Khan, Geoffrey. 1984. "Object Markers and Agreement Pronouns in Semitic Languages", *Bulletin of the School of Oriental and African Studies* 47(3). 468-500.
- Owens, Jonathan, & Raslan, Bani-Yasin. 1987. "The Lexical Basis of Variation in Jordanian Arabic", *Linguistics* 25. 705-738.
- Ratcliffe, Robert R. 1998. *The "Broken" Plural Problem in Arabic and Comparative Semitic. Allomorphy and Analogy in Non-Concatenative Morphology. Current Issues in Linguistic Theory*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Ritt-Benmimoun, Veronika. 2016. "Agreement with Plural Heads in Tunisian Arabic. The Bedouin South", Veronika, Ritt-Benmimoun (ed.), *Tunisian and Libyan Arabic Dialects. Common Trends, Recent Developments, Diachronic Aspects*. Zaragoza: Prensas de la Universidad de Zaragoza. 261-287
- Sallam, Abdel-Moneim Mohammad. 1979. "Concordial Relations within the Noun Phrase in Educated Spoken Arabic (ESA)", *Archivum Linguisticum* 10(1). 20-56.