

Tanulmány

Amira Dhifallah

Collective Nouns and Reciprocal Anaphors: A Study on Tunisian Arabic

Abstract

This paper aims to investigate the compatibility of singular collective nouns and reciprocal anaphors in Tunisian Arabic. I hypothesize that while singular collective nouns in this Arabic variety are compatible with both singular and plural reciprocal anaphors, agreement in number between the anaphor and the verb is imperative, disallowing instances of mismatch in agreement patterns. These hypotheses were tested through a language questionnaire designed for Tunisian Arabic native speakers to investigate the compatibility of reciprocal anaphors with singular collective nouns in different agreement patterns. Analysis of the questionnaire responses supports the conclusion that a singular collective noun can be the antecedent of both singular and plural reciprocal anaphors, contingent upon the reciprocal anaphor agreeing in number with the verb preceding it.

Keywords: collective nouns, reciprocal anaphors, number agreement, Tunisian Arabic.

1 Introduction

In Arabic, collective nouns represent an intriguing class of nouns with peculiar properties; one of their defining syntactic properties is that a singular collective noun can license both singular and plural subject-verb agreement. While existing literature in Arabic linguistics has examined diverse collective noun types in both singular and plural contexts (Dror 2016; Al-Raba'a 2022; Zabbal 2003), the different agreement patterns and collocational preferences of collective nouns in specific Arabic varieties, particularly Tunisian Arabic (TA), have not received a wide interest in the field of linguistic research. In the scope of studying collective nouns and their characteristics in TA, the present paper focuses on the compatibility of collective nouns and reciprocal constructions. In contrast to English literature (Barker 1992; De Vries 2021), where a singular collective noun can only serve as the antecedent of a reciprocal anaphor when the verb is plural, this restriction seems to be absent in Arabic. Notably, instances of agreement mismatches with reciprocal anaphors and certain noun phrases have been observed in TA (based on a preliminary corpora search that I have conducted using the Tunisian Arabic Corpus (McNeil & Miled 2010-)), prompting an investigation into whether such variation is possible with singular collective nouns. This paper aims to investigate this possible variation in number agreement along with the compatibility of singular collective nouns and reciprocal anaphors. The first section of this paper offers an overview of concepts directly related to collective nouns in both Modern Standard Arabic (MSA) and TA. The second section presents a study designed

2 Number agreement in Arabic

(1) a. alawlādu ġadarū (MSA)
the.boys left.M.PL
'The boys left.'
 b. ġādara alawlādu
left.M.SG the.boys
'The boys left.'
 c. ġadarū
left.M.PL.SUBJ
'(They) left.'

(2) a. ilwlēd mšēw
the.boys left.M.PL
'The boys left.'

b. *mšē ilwlēd
left.M.SG the.boys
'The boys left.'

c. mšēw ilwlēd
left.M.PL the.boys
'The boys left.'

The set of examples in (2) shows that while both SVO and VSO word orders are possible in TA, the agreement patterns that govern them are different than what we find in MSA: the verb agrees in number with its subject in both cases, so there is no instance of partial agreement in terms of ϕ -features as illustrated in (1b). According to Dali (2020), TA is of the SVO type,

which means that verbs occurring in this word order in TA should always agree with their subjects in person, gender and number.

According to Fassi Fehri (1988), in MSA, all non-human and inanimate plural nouns are feminine and they trigger feminine singular agreement with the verb. However, in TA, plural inanimate nouns can trigger masculine plural and feminine singular verbal agreement even though they do not bear any gender markers:

- (3) a. ilšbēbek tkasrū (TA)
 the.window.F.PL break.M.PL
 ‘The windows broke.’
- b. ilšbēbek tkasret
 the.window.F.PL break.F.SG
 ‘The windows broke.’

The phenomenon observed in (3) seems to be restricted to non-human and inanimate nouns (human nouns follow the agreement patterns shown in example (2) above), and it seems that the two agreement patterns here (masculine plural/feminine singular) are in free variation, as they are both acceptable and freely interchangeable. Although the general assumption states that TA verbs fully agree with all the features of their subjects (in SVO order), as in (4a), there are exceptions:

- (4) a. elrğēl ḥarğū (TA)
 the.man.M.PL went.out.M.PL
 ‘The men went out.’
- b. elrğēl ḥarğet
 the.man.M.PL went.out.F.SG
 ‘The men went out.’

(Dali & Mathieu 2020)

Instead of fully agreeing with its masculine plural subject, like in (4a), the verb in (4b) illustrates feminine singular agreement. The only available explanation of this phenomenon in the literature is that the variation in agreement patterns is motivated by the context: in (4a), the men are regarded as individuals acting separately, thus triggering a distributive action through the plural verb, whereas in (4b) they are regarded as one group acting together, which gives a collective reading (Dali & Mathieu 2020). This phenomenon is linked to the difference between sound and broken plurals: sound plurals are formed through the addition of a plural suffix to the singular form, whereas broken plurals are formed through an internal change that the stem undergoes. What we observe in (4b) is only possible with TA broken plurals, masculine sound plural cannot trigger feminine singular agreement with the verb, which is illustrated in example (5). However, in MSA, this shift is not possible with the majority of (human) broken plurals (6a), but only with inanimate and non-human animate nouns (6b) and some nouns that denote groups of people or ethnic groups (6c):

- (5) ilmu‘almīn rağ‘ū / *rağ‘et lelbirū (TA)
 the.teacher.M.PL went.back.M / went.back.F.SG to.the.office
 ‘The teachers went back to the office.’
 (Dali & Mathieu 2020)

- (6) a. *alriğālu ġā‘at (MSA)
 the.man.M.PL came.F.SG
 ‘The men came.’
 b. alkilābu ġā‘at
 the.dog.M.PL came.F.SG
 ‘The dogs came.’
 c. alfalāsifatu taqūlu
 the.philosopher.M.PL say.F.SG
 ‘The philosophers say.’
 (Fassi Fehri 1988)

Both (6b) and (6c) are broken plurals, but of different noun classes. As mentioned above, according to Fassi Fehri (1988), MSA non-human and inanimate plural nouns can trigger feminine singular agreement, as in (6b). Fassi Fehri (2012) argues that nouns like *falāsifa* (philosophers), as used in (6c), belong to what he calls ‘syntactic groups’, which act like collective nouns in the sense that they can license both plural and singular verbal agreement and can be interpreted as a collective (and singular) entity.

4 Reciprocity

In MSA, the reciprocal anaphor is built based on the root *ba‘ḍ* (which is translated as *some* in English), to which gender, number and case markers are added (Kremers 1997). We can express reciprocity through a reciprocal anaphor as in (7a), or a morphological marker on the verb (*ta-*) as in (7b):

- (7) a. alriğālu sālādū ba‘ḍahumu alba‘ḍa (MSA)
 the.men helped.PL some.PL.ACC some.DEF.ACC
 ‘The men helped each other.’
 b. alriğālu tasālādū
 the.men ta.helped.PL
 ‘The men helped each other.’

The verb used in (7a) is transitive, it is followed by a subject performing the reciprocal action requiring an object, and is followed by the reciprocal anaphor to indicate the mutual exchange of the action. The verb in (7b) is intransitive, but it conveys a reciprocal action thanks to the morphological reciprocity marker (*ta-*) that it bears (Al-Raba’a & Kitagawa 2022; Darwish 2021). Another difference between the two examples is that, while (7a) can be interpreted both

in a collective and distributive manner, (7b) can only have a collective reading. The reciprocal action in (7a) may occur collectively, which means that it happened simultaneously with each of the men helping one another at the same time, or distributively, with the men helping each other at different times with different matters. With the morphologically marked reciprocal verb in (7b), the action can only happen simultaneously, with the men helping each other at the same time. This difference is explained through the use of collective and distributive adjuncts with the two different reciprocal examples (Al-Raba'a & Kitagawa 2022):

(8) a. alriḡālu sā'adū ba'ḡahumu alba'ḡa sawiyyan (MSA)
 the.men helped.PL some.PL.ACC some.DEF.ACC together.ACC
 'The men helped each other together.'

b. alriḡālu sā'adū ba'ḡahumu alba'ḡa biṣaklin munfasilin
 the.men helped.PL some.PL.ACC some.DEF.ACC in.manner.GEN separate.GEN
 'The men helped each other separately.'

(9) a. alriḡālu tasā'adū sawiyyan (MSA)
 the.men ta.helped.PL together.ACC
 'The men helped each other together.'

b. #alriḡālu tasā'adū biṣaklin munfasilin¹
 the.men ta.helped.PL in.manner.GEN separate.GEN
 'The men helped each other separately.'

In MSA, the reciprocal anaphor can have different forms based on gender, number, case and definiteness. Both parts of the anaphor show case: the first part bears gender and number markers through a pronoun suffix, while the second part only bears case morphology. The first part of the anaphor is always definite, while the second part can be definite or indefinite, and when it is indefinite, it shows nunation (Ryding 2005):²

(10) a. sā'adū ba'ḡahumu alba'ḡa (MSA)
 helped some.M.PL.ACC some.DEF.ACC
 'They helped each other.'

b. sā'adna ba'ḡahunna alba'ḡa
 helped some.F.PL.ACC. some.DEF.ACC
 'They (feminine) helped each other.'

c. sā'adū ba'ḡahum ba'ḡan
 helped some.M.PL.ACC some.INDF.n
 'They helped each other.'

¹ The hash is used here to indicate that this sentence is grammatical, but semantically ill-formed.

² Nunation is represented through the addition of the indefinite suffix *-n* in speech and it indicates that the word lacks definiteness. It is also used to indicate case.

In Classical Arabic (CA), the first part of the reciprocal anaphor takes the subject position in the sentence and a pronoun suffix bearing gender, number and case markers, whereas the second part is indefinite and takes object position (Kremers 1997):

- (11) sāʿada baʿduhum baʿdan (CA)
 helped some.PL.NOM some.INDF.ACC
 ‘They helped each other/ Each helped the other.’

While in CA, the first part of the reciprocal anaphor can take subject position and the second part can take object position, in MSA, the first part of the anaphor can be an appositive to the subject (whether the subject is explicit or implicit in the sentence) and agrees with it in case. In MSA, there is a change in the use of the reciprocal anaphor, as it no longer allows the insertion of other grammatical elements (e.g., prepositions) between the two parts: the whole reciprocal construction is one element that cannot be separated and it can take object position, or it can be the complement of a preposition as in (12) below:

- (12) wa hum yulawihūna (...) li baʿdihim albaʿdi (...) (MSA) (Kremers 1997)
 and they wave to some.PL.GEN some.DEF.GEN
 ‘and they wave to each other.’

Although the most common form of the reciprocal anaphor in MSA is the two-unit construction, according to Bar-Asher Siegal (2014), a one-unit construction using the first part of the anaphor can also be used as follows:

- (13) muraddidīna ʿalā-masāmiʿi baʿdihim ḥikāyāti alʿayāmi wa-allayālī
 repeating on-ears some.M.PL.GEN stories the.days and.the.nights
 ‘Retelling to one another the stories of the days and nights’
 (Cantarino 1975, as cited in Bar-Asher Siegal 2014)

Just like in MSA, in TA, we can express reciprocity with the reciprocal anaphor, or with a marker on the verb (*t-*):³

- (14) a. ilrğēl ʿāwnū bʿaḍhum (TA)
 the.men helped.PL each.other.INDF.PL
 ‘The men helped each other.’
 b. ilrğēl tʿāwnū
 the.men t.helped.PL
 ‘The men helped each other.’

³ Unlike English, Arabic does not have reciprocal verbs (such as *kiss*, *fight*), instead, certain verbs need to have the marker (*-t*) to express reciprocity (Al-Raba’a 2017).

Unlike MSA, TA allows the use of only one part of the reciprocal anaphor, which bears markers of gender and number but is not marked for case and is not definite in any of its forms.⁴ In fact, in MSA, nouns, participles and adjectives are marked for case (nominative, genitive or accusative) through short vowel suffixes. These suffixes appear at the end of definite nouns and adjectives to mark their case. If the noun or adjective is indefinite, then the suffix is followed by a marker to indicate nunation, which is represented through the addition of the indefinite suffix *-n* in speech and it indicates that the word lacks definiteness (Ryding 2005).

- (15) a. al-walad-u (MSA)
 the.boy.DEF.NOM
 ‘The boy.’
- b. waladu-n
 boy.INDF.NOM
 ‘A boy.’

Identifying case in MSA can be dependent on diacritics, which are used to indicate the vowels and consonant length that are missing from writing. Some texts in MSA lack diacritics, and some narrators of MSA texts opt from pronouncing the full form of words, thus, omitting case markers. On the other hand, TA does not have a full-fledged case system, which explains why, as mentioned above, the reciprocal anaphor is not marked for case.

In TA, the general observation states that a plural noun followed by a plural verb cannot serve as the antecedent of a singular reciprocal anaphor, as illustrated in (16):

- (16) a. ilrġēl ‘āwnū b‘aḏhum (TA)
 the.men helped.M.PL each.other.M.PL
 ‘The men helped each other.’
- b. *ilrġēl ‘āwnū b‘aḏū
 the.men helped.M.PL each.other.M.SG
 ‘The men helped each other.’

Notably, some exceptions to this generalization exist, as the reciprocal anaphor does not always match the number features of its antecedent. In the following examples taken from Tunisian Arabic Corpus (TAC), the agreement patterns deviate from the norm, since in both cases a plural noun serves as the antecedent of a singular reciprocal anaphor:

- (17) ilḥkēyēt titalif min b‘aḏha (TA, TAC)
 the.story.F.PL borrow.F.SG from each.other.F.SG
 ‘*The stories borrows from each other.’

⁴ While the reciprocal anaphor is glossed *some ... some* in the Arabic literature, I chose to directly translate it to *each other* in my TA examples, for the simple reason that *b‘aḏhum* (in TA) does not have the same literal meaning as *ba‘ḏahum alba‘ḏ* (in MSA).

- (18) wǧūhum ilkol tišbah b‘aḏha (TA, TAC)
 their.face.M.PL all resemble.F.SG each.other.F.SG
 ‘*All their faces resembles each other.’

In both of the examples above, it is possible to switch from the singular to the plural verb and reciprocal anaphor and the sentences would still be perfectly grammatical. What is interesting to note here is that the speakers who uttered these sentences (as the examples were taken from a conversation transcribed for the corpus) opted for the use of a singular verb and a singular reciprocal anaphor with the plural subjects. This odd choice of singular agreement may be linked to the variation in number agreement based on the context of the utterance: the speakers may have regarded both plural nouns as a set of entities acting in a collective, and thus singular, manner.

5 Reciprocity with collective nouns

Reciprocal anaphors usually require having unambiguous plural antecedents. However, it is unclear how these pronouns can be used with some constructions, namely collective nouns. Since these nouns are singular in form but can be plural in reference, there is a debate on whether they can always be used as antecedents for reciprocal anaphors such as *each other*. The fact that a singular collective noun can be interpreted as either referring to a singular unit or to a group of entities makes its use with reciprocals either marginally acceptable or, sometimes, unacceptable at all in the English literature. According to De Vries (2021), collective nouns do not allow “quantification over their members in the same way that [plurals] do”, and she illustrates the difference between the use of the reciprocal anaphor with plural NPs and with a singular collective noun:

- (19) a. Mary and Sue/the women love each other.
 b. *The couple loves each other.

(De Vries 2021)

Barker (1992) argues that collective nouns cannot be the antecedents of *each other*, as in example (20) below, and states that “it is a mystery” why the reciprocal pronoun is compatible with plural but not with collective nouns.

- (20) *The committee fought each other.

(Barker 1992)

According to Schwarzschild (1996), these judgements depend on the collective noun itself, and also on the speaker and their dialect: example (21) below is unacceptable for American English speakers, but is perfectly grammatical in British English:

- (21) The group like each other.

(Schwarzschild 1996)

The restriction in the use of collective nouns with the reciprocal anaphor seems to be absent in MSA, since it is possible to find its different forms (mainly based on gender and number agreement) used with either a singular or a plural predicate. The general rule is that, in MSA, whether we have a singular verb with a plural subject (VSO word order) or a plural verb with a plural subject (SVO word order), the reciprocal anaphor always agrees with its antecedent in number and gender, but in the case of collectives, we seem to have an exception. The following examples are taken from the internet, and they demonstrate how in MSA, variation in the use of singular and plural reciprocal anaphors is possible in VSO word order:

- (22) a. ittahama alğayšu ba‘dahum ba‘dan (MSA)
 accused.SG the.army some.M.SG.ACC some.INDF.ACC
 ‘The army accused each other.’
- b. yu‘īnu alğayšu ba‘dahū alba‘da
 help.SG the.army some.SG.M.ACC some.DEF.ACC
 ‘The army helps each other.’

Several factors seem to influence the choice between singular and plural reciprocal anaphors when used with singular collective nouns in Arabic. One of these factors is what we can call *semantic plurality*, which refers to the inherent semantic plurality or singularity of the collective noun and which can have an influence on its “preferences” regarding verbal agreement or the choice of the reciprocal anaphor that it can license. A singular collective noun can either have a singular or plural semantic reference, i.e., it can be regarded as either a single entity, thus favoring a collective (singular) reading, or it can be regarded as a whole made of different entities, thus favoring a distributive (plural) reading. It is important to note that there may be a referential shift in the speaker’s perception of the collective noun, which can influence agreement patterns: the focus can shift from the collective whole to the distributed individual members, and as a consequence of this shift in perception, the speaker can opt for the plural reciprocal anaphor instead of the singular form to reflect what they perceive. Another factor is verbal agreement, since the choice of using either a singular or a plural reciprocal anaphor with a singular collective noun can be influenced by the syntactic agreement patterns governing the sentence in general. These agreement patterns can be related to the agreement preferences or the semantic plurality of the collective noun itself or they can also be related to the phi features of the verb: it is possible that, since singular collective nouns can license both singular and plural verbal agreement, the verb itself can influence the choice of the reciprocal anaphor following it. Furthermore, some pragmatic factors may have an influence on the choice of either singular or plural anaphors: the speaker’s intentions, the discourse focus or whether the emphasis is on the inclusivity or exclusivity of the members of the collective whole or, in other words, the speaker’s perception of the collective / distributive distinction are all related to the semantic, syntactic, as well as contextual factors. Finally, being a variety of Arabic itself, TA also has different dialects. Based on that, there may be different dialectal preferences in relation to the choice of singular or plural agreement with collective nouns followed by reciprocal anaphors.

6 The current study

6.1 The language questionnaire

The primary aim of this study is to explore the compatibility of collective nouns and reciprocal anaphors in TA. Specifically, the study assesses the extent to which TA native speakers accept the use of the singular form of the reciprocal anaphor (*baḍū/baḍha*) when coupled with a singular verb and a singular collective noun. Additionally, the study examines the acceptability of the plural form of the reciprocal anaphor (*bāḍhum*) when used with a plural verb and a singular collective noun. The questionnaire further explores whether native speakers accept instances of agreement mismatch between the reciprocal anaphor and the verb.

The first hypothesis in this study posits that a singular collective noun can function as an antecedent for both the singular and the plural forms of the reciprocal anaphor in TA, as long as the anaphor agrees in number with the verb. The second hypothesis asserts that cases of agreement mismatch in number features between the verb and the reciprocal anaphor are not possible.

Initially, a total of 116 Tunisian Arabic native speakers participated in the questionnaire. However, 19 participants were excluded based on their evaluations of control sentences, which resulted in a final dataset comprising 96 participants. Gender distribution among participants skewed towards females, constituting 63% of the participants, while males only constituted 37% of the participants. Participants' ages spanned from 18 to 70, with the majority falling within the 21 to 30 age group (56% of the participants were within this age group). The questionnaire, which was delivered through an online survey on Google Forms, employed a 6-point Likert scale ranging from 1 (totally unacceptable) to 6 (totally acceptable). The first part of the questionnaire consisted of an introduction including task description and an example. Participants had to provide demographic information including age, gender and where they grew up in the initial section. Subsequent sections included all together 24 randomized stimuli: 12 test sentences, 6 filler sentences, and 6 control sentences.⁵ Participants had to evaluate pairs of sentences, each containing a singular collective noun followed by either a singular or a plural verb and either the singular or the plural form of the reciprocal anaphor, or with sentences including a mismatch (the test sentences in TA and their translation in English are included in the appendix). The following variables were used in this study: the collective noun itself with three distinct options: *il'ayla* 'the family', *ilǧmē'a* 'the group', *ilša'b* 'the nation', the verb (singular or plural), and the reciprocal anaphor in its different forms: singular masculine or feminine (*baḍū/baḍha*) and plural (*bāḍhum*). Moreover, the investigation extends to sociolinguistic factors, specifically age and gender, to test whether these variables exert any influence on participants' judgements.

6.2 Results and discussion

In the questionnaire, participants were presented with pairs of sentences, each comprising a singular collective noun followed by a verb and a reciprocal anaphor. In each pair, one sentence maintained agreement in number between the verb and the anaphor (both singular or both

⁵ The 6 control sentences that I included in this questionnaire have a similar grammatical structure (yet different components) to the test sentences. They were presented in the form of pairs, and each pair had one grammatical and one ungrammatical sentence.

plural), while the other presented a case of agreement mismatch between the verb and the anaphor (one singular, the other plural). To examine the set hypotheses, the test sentences were categorized into two main groups: the first group contained sentences with matched number feature in verbs and reciprocal anaphors (i.e., either containing a singular verb and a singular reciprocal anaphor or a plural verb and a plural reciprocal anaphor), and the second comprised sentences with mismatched features (i.e., either a singular verb and a plural reciprocal anaphor or a plural verb and a singular reciprocal anaphor). Mean values were computed for each group accompanied with standard deviation values, with higher means reflecting more positive judgements (ranging from 4 to 6 on the Likert scale) and lower means indicating more negative judgments (ranging from 1 to 3 on the Likert scale). The difference in the means and their respective standard deviation values are shown in figure 1 below.

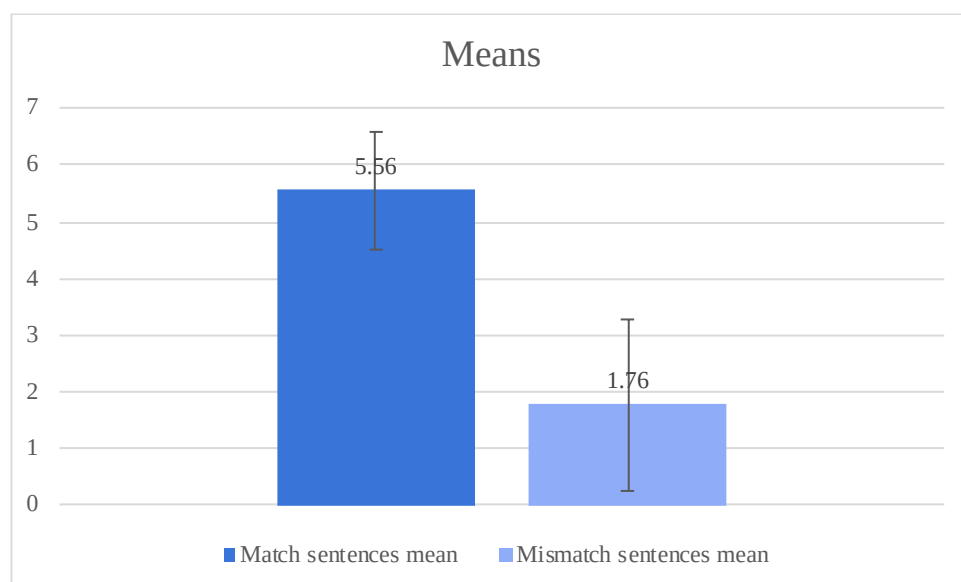


Figure 1. The mean of each group of sentences with error bars indicating the SD

The analysis revealed that match sentences had a higher mean compared to mismatch sentences, signifying a clear preference for sentences containing a singular collective noun followed by a verb and reciprocal anaphor that agree in number. Conversely, sentences with mismatched number features had a low acceptance rate. Further examination of individual sentence means within both groups confirmed these patterns, with match sentences consistently receiving higher scores on the Likert scale denoting higher acceptability, while mismatch sentences consistently scored lower, suggesting lower acceptability, as illustrated in figures 2 and 3 respectively:

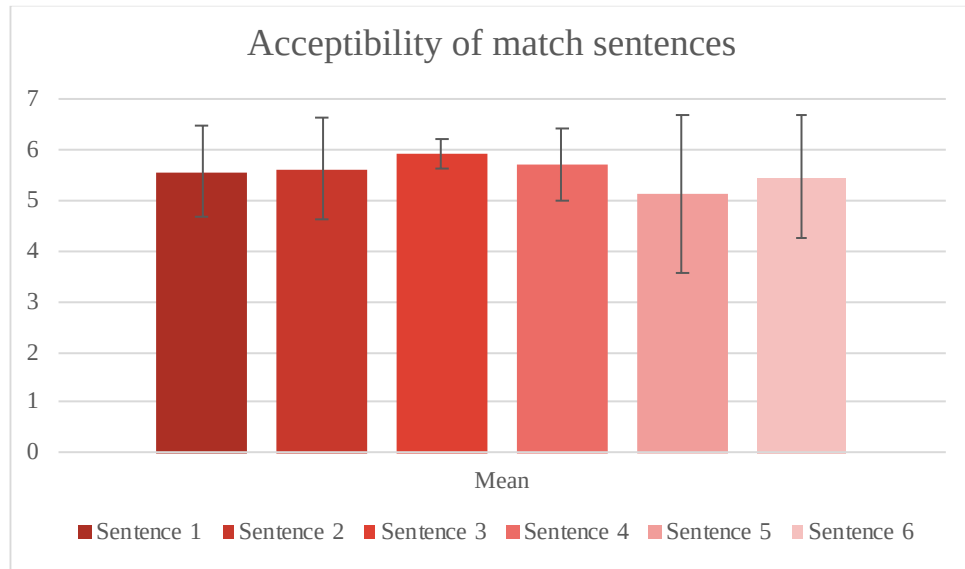


Figure 2. The acceptability of each match sentence with error bars indicating the SD

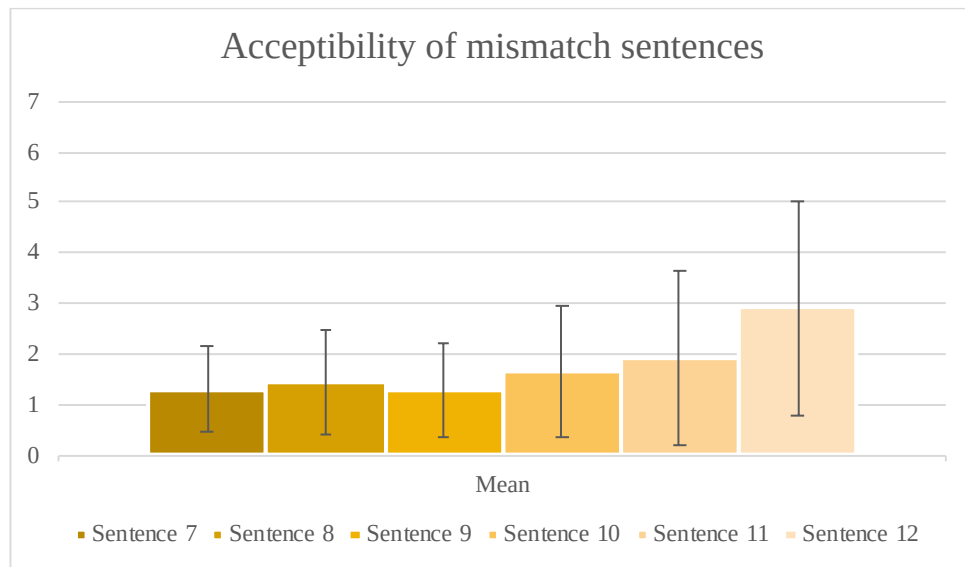


Figure 3. The acceptability of each mismatch sentence with error bars indicating the SD

Furthermore, standard deviation tests were performed on each sentence within each group and across the entirety of both groups to ascertain any substantial distinctions in the judgements across the questionnaire sentences and between the groups made of these sentences. The standard deviation values for each sentence are indicated through error bars on figures 2 and 3.

Analysis of these statistical outcomes reveals a certain degree of consensus among participants' judgements for sentences in both groups. Notably, the prevailing assessment for match sentences tends to be “totally acceptable”, while for mismatch sentences, it tends to be “totally unacceptable”.

Some instances of variation between subjects are noted in each group of sentences for both the match and mismatch conditions. In the match condition group, 5 out of 6 sentences had standard deviation values less than or equal to 1, and only one sentence had a relatively high standard deviation value (more than 1.5). As for the mismatch condition group, 4 out of 6 sentences had standard deviation values less than or equal to 1, and two sentences had relatively high standard deviation values (more than 1.5). These values are illustrated in the following table:

	Test Sentence	Mean	Standard Deviation
Match condition	Test Sentence 1	5.55	0.89
	Test Sentence 2	5.61	1
	Test Sentence 3	5.91	0.29
	Test Sentence 4	5.69	0.73
	Test Sentence 5	5.11	1.58
	Test Sentence 6	5.46	1.21
Mismatch condition	Test Sentence 7	1.30	0.86
	Test Sentence 8	1.45	1.02
	Test Sentence 9	1.30	0.92
	Test Sentence 10	1.67	1.30
	Test Sentence 11	1.93	1.72
	Test Sentence 12	2.91	2.11

Table 1. Mean and standard deviation values of each test sentence

The three test sentences with the highest standard deviation values, which indicates a high degree of variation in judgements, are the following: sentence 5 in the match group and sentences 11 and 12 in the mismatch group, shown in examples (23), (24) and (25) respectively:

(23) الشعب يعاونو بعضهم في كل مشكلة (test sentence 5, match condition)
 ilša‘b y‘āwnū b‘aḏhum fī kol moškla
 the.nation help.PL each.other.PL in every problem
 ‘The nation help each other in every problem.’

(24) الشعب يعاونو بعضو في كل مشكلة (test sentence 11, mismatch condition)
 ilša‘b y‘āwnū ba‘ḏū fī kol moškla
 the.nation help.PL each.other.M.SG in every problem
 ‘The nation help each other in every problem.’

(25) الشعب يعاون بعضهم في كل مشكلة (test sentence 12, mismatch condition)
 ilša‘b y‘āwen b‘aḏhum fī kol moškla
 the.nation help.SG each.other.PL in every problem
 ‘The nation helps each other in every problem.’

While most of the sentences with the match condition were “slightly acceptable” to “totally acceptable” by participants, test sentence 5 (example 23 above) was judged “totally unacceptable” by 8 different participants out of 96, and had the highest standard deviation

compared to other sentences in this group. On the other hand, while sentences with the mismatch condition were judged “slightly unacceptable” to “totally unacceptable” by participants, test sentence 11 (example 24 above) was judged “totally acceptable” by 11 different participants out of 96, and test sentence 12 (example 25 above) stood out through being the most acceptable compared to other sentences in this group, as it was judged “totally acceptable” by 23 different participants out of 96, and it had the highest standard deviation as well. All of the above sentences contain the same collective noun *ilša‘b* ‘the nation’ used with different number agreement combinations, and the fact that they all stood out in their respective groups has something to do with the collective noun itself. In fact, this collective noun seems to have a preference for singular agreement, as it occurs only with singular verbs in a corpus study (TAC), and TA native speakers seem to prefer using it in singular contexts rather than plural ones (Dhifallah 2022). Based on this singular agreement preference, example (23) had a low acceptance rate because the collective noun in question is not usually used with plural verbs; in example (24), the verb is also plural, and the use of a singular reciprocal anaphor does not necessarily make the whole context singular, which is why it still had a low acceptance rate; and although in example (25) the same collective noun occurs with a plural reciprocal anaphor, the fact that the verb is singular makes the whole sentence have a higher acceptance rate.

The use of the other two collective nouns in the other test sentences (*il‘ayla* ‘the family’, *ilǧmē‘a* ‘the group’) with either singular or plural agreement in the match condition seems to be acceptable for native speakers, and their use in the mismatch condition seems to be unacceptable for native speakers with no significant variation in judgements. Taking into consideration that test sentence 5 had the lowest acceptance rate in the match condition, it is interesting to compare it to the two other sentences containing the two other collective nouns with the same condition and number agreement (test sentences 1 and 3 respectively). From a semantic point of view, these two collective nouns may have a different interpretation than the collective noun *ilša‘b* ‘the nation’ when used with a plural verb and a plural reciprocal anaphor, as explained below:⁶

- (26) العائلة يحبو بعضهم برشا (test sentence 1, match condition)
 il‘ayla yhibū b‘aḏhum barša
 the.family love.PL each.other.PL a.lot
 ‘The family love each other a lot.’

(Interpretation: distributive reading, every member of the family loves every other member of the family)

- (27) الجماعة يعرفو بعضهم بالباهي (test sentence 3, match condition)
 ilǧmē‘a ya‘rfū b‘aḏhum b-ilbēhī
 the.group know.PL each.other.PL PREP.well
 ‘The group know each other very well.’

(Interpretation: distributive reading, every member of the group loves every other member of the group)

⁶ According to Dhifallah (2022), while the collective noun *ilša‘b* ‘the nation’ prefers singular agreement, both *il‘ayla* ‘the family’ and *ilǧmē‘a* ‘the group’ trigger both singular and plural agreement.

(28) الشعب يعاونو بعضهم في كل مشكلة (test sentence 5, match condition)

ilša‘b y‘āwnū b‘aḏhum fī kol moškla
 the.nation help.PL each.other.PL in every problem
 ‘The nation help each other in every problem.’

(The distributive interpretation is not possible: every member of the nation cannot help every other member of the nation)

On the other hand, test sentence 6 (example 29 below) has a better semantic interpretation, as it had a slightly higher acceptance rate than test sentence 5 (example 28 above) with a slightly smaller standard deviation value (while test sentence 5 (example 23 above) was judged “totally unacceptable” by 8 different participants out of 96, test sentence 6 was judged “totally unacceptable” by only 4 different participants out of 96):

(29) الشعب يعاون بعضو في كل مشكلة

ilša‘b y‘āwen ba‘ḏū fī kol moškla
 the.nation help.SG each.other.M.SG in every problem
 ‘The nation helps each other in every problem.’

(A collective interpretation is possible: the whole nation helps members of the nation)

In general, there were instances of variation in native speakers’ judgements regarding all test sentences in both the match and the mismatch groups. The variation in judgements regarding the mismatch group can be explained by the fact that the use of different number features for the verb and the reciprocal anaphor can confuse participants especially since they are presented with the same sentences in the match group. By providing participants with the same test sentences but in different conditions, I tried to minimize the risk of variability in native speakers’ interpretations of the sentences, but there was still a risk of confusion due to the similarities between the sentences with different number features of the verb and the reciprocal anaphor. Furthermore, as mentioned above, in TA, each collective noun can have its own agreement preferences that can affect native speakers’ assessment of number agreement.⁷

Despite the instances of variation in speakers’ judgments, which are mainly based on the preferred agreement patterns of individual collective nouns, the findings of this study align with the initially posited hypotheses: firstly, that a singular collective noun in TA is compatible with singular and plural reciprocal anaphors as long as the anaphor agrees in number with the verb; and secondly, that instances of mismatch in number agreement between the verb and the reciprocal anaphor had a low acceptance rate.

⁷ In the English literature, collective nouns are also known to have their individual number agreement preferences, which differ based on various factors including the difference between the varieties of English, and which can have an influence on native speakers’ perception of the collective noun (Biber et al. 1999; Levin 2001; Wong 2009).

7 Summary and conclusion

This study aimed to investigate the compatibility of collective nouns and reciprocal anaphors in TA. The results of the questionnaire conducted for this study indicate that this compatibility is restricted by one factor: the verb and the reciprocal anaphor have to agree in number, as cases of mismatch in agreement patterns had a low acceptance rate. The results of this language questionnaire confirm both hypotheses that were introduced earlier in this paper. These results confirm that a singular collective noun can be compatible with some grammatical constructions that are otherwise only used with plural NPs, and give a better understanding of this peculiar class of nouns in a relatively under-researched variety of Arabic, namely TA. Further research ideas would revolve around exploring the compatibility of collective nouns with other grammatical constructions while focusing on any possible variation in their agreement patterns.

References

- Abdul-Raof, H. (1998): *Subject, theme and agent in Modern Standard Arabic*. London: Routledge. <https://doi.org/10.4324/9780203036730>
- Al-Raba'a, B. I. (2017): *Reflexivity and reciprocity in Arabic*. Doctoral dissertation. Indiana University.
- Al-Raba'a, B. I. & Kitagawa, Y. (2022): Reflexivity, reciprocity and collectivity in Jordanian Arabic. *Glossa: a Journal of General Linguistics* 7(1).
<https://doi.org/10.16995/glossa.5799>
- Al-Raba'a, B. I. (2022): On the morphosyntax of hybrid agreement in Jordanian Arabic. *Acta Linguistica Academica* 69(3), 334–364. <https://doi.org/10.1556/2062.2022.00465>
- Bar-Asher Siegal, E. A. (2014): Notes on the History of Reciprocal NP-Strategies in Semitic Languages in a Typological Perspective. *Diachronica* 31(3), 337–378.
<https://doi.org/10.1075/dia.31.3.02bar>
- Barker, C. (1992): Group terms in English: Representing groups as atoms. *Journal of Semantics* 9(1), 69–93. <https://doi.org/10.1093/jos/9.1.69>
- Biber, D., Johansson, S., Leech, G., Conrad, S. & Finegan, E. (1999): *Longman grammar of spoken and written English*. London: Longman.
- Cantarino, V. (1975): *Syntax of Modern Arabic prose*. Vol. 3. Bloomington: Indiana University Press.
- Dali, M. (2020): *Gender and number in Tunisian Arabic: A case of contextual alloosemy*. Ottawa: University of Ottawa. <http://dx.doi.org/10.20381/ruor-24907>
- Dali, M., & Mathieu, E. (2020): Broken Plurals and (mis)matching of ϕ -features in Tunisian Arabic. *Brill's Journal of Afroasiatic Languages and Linguistics* 12(2), 164–203.
<https://doi.org/10.1163/18776930-01202005>
- Darwish, S. (2021): Reflexives and Reciprocals in English and Modern Standard Arabic: An Investigation and a Comparison. *Journal of Language Teaching and Research* 12(6).
<https://doi.org/10.17507/jltr.1206.12>
- De Vries, H. (2021): Collective nouns. The oxford Handbook of Grammatical Number. Oxford: Oxford University Press, 257–274.
<https://doi.org/10.1093/oxfordhb/9780198795858.013.12>
- Dhifallah, A. (2022): Collective nouns and agreement preferences in Tunisian Arabic. *Argumentum* 18, 219–235. <https://doi.org/10.34103/ARGUMENTUM/2022/12>

- Dror, Y. (2016): Collective Nouns in Journalistic Arabic. *Bulletin de l'academie Belge pour l'Etude des Langues Anciennes et Orientales* 5 (mars), 301–329.
<https://doi.org/10.14428/babelao.vol5.2016.20203>
- Fassi Fehri, A. (1988): Agreement in Arabic, binding and coherence. *Agreement in Natural Language: Approaches, Theories, Descriptions*, 107–158.
- Fassi Fehri, A. (2013): *Issues in the Structure of Arabic Clauses and Words* (Vol. 29). Berlin: Springer Science & Business Media. <https://doi.org/10.1007/978-94-017-1986-5>
- Fassi Fehri, A. (2012): *Key features and parameters in Arabic grammar*. Amsterdam: John Benjamins. <https://doi.org/10.1075/la.182>
- Kremers, J. (1997): *When Arabs talk to each other about themselves: a study of nafs and ba'd in Modern Standard Arabic*. Nijmegen: Katholieke Universiteit Nijmegen.
- Levin, M. (2001): *Agreement with collective nouns in English*. Lund: Lund University.
- McNeil, K. & Miled, F. (2010-): Tunisian Arabic Corpus (TAC): 895,000 words. Available online at <http://www.tunisiya.org/>
- Ryding, K. C. (2005): *A Reference Grammar of Modern Standard Arabic*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511486975>
- Schwarzschild, R. (1996): *Pluralities* (Vol. 61). Berlin: Springer Science & Business Media. <https://doi.org/10.1007/978-94-017-2704-4>
- Wong, M. L. (2009): Committee, staff, council, etc.: A corpus analysis of collective nouns in Hong Kong English. *Asian Englishes* 12(1), 4–19.
<https://doi.org/10.1080/13488678.2009.10801246>
- Zabbal, Y. (2002): *The semantics of number in the Arabic noun phrase*. Master's thesis. Calgary: University of Calgary. <http://hdl.handle.net/1880/39330> (12.12.2023)

Amira Dhifallah
 University of Debrecen
 Doctoral School of Linguistics
 H-4002 Debrecen
 Pf. 400
 amira.dhifallah@arts.unideb.hu

Appendix: The test sentences in Tunisian Arabic and their translation in English (including glosses)

Sentences with the match condition:

(1) العايلة يحبو بعضهم برشا

il'ayla	yhibū	b'aḍhum	barša
the.family	love.PL	each.other.PL	a.lot

'The family love each other a lot.'

(2) العايلة تحب بعضها برشا

il'ayla	thib	b'aḍha	barša
the.family	love.SG	each.other.F.SG	a.lot

'The family loves each other a lot'

(3) الجماعة يعرفو بعضهم بالباهي

ilǧmē'a	ya'rfū	b'aḍhum	b-ilbēhī
the.group	know.PL	each.other.PL	PREP.well

'The group know each other very well.'

(4) الجماعة تعرف بعضها بالباهي

ilǧmē'a	ta'ref	b'aḍha	b-ilbēhī
the.group	know.SG	each.other.F.SG	PREP.well

'The group knows each other very well.'

(5) الشعب يعاونو بعضهم في كل مشكلة

ilša'b	y'awnū	b'aḍhum	fī kol moškla
the.nation	help.PL	each.other.PL	in every problem

'The nation help each other in every problem.'

(6) الشعب يعاون بعضو في كل مشكلة

ilša'b	y'awen	ba'ḍū	fī kol moškla
the.nation	help.SG	each.other.M.SG	in every problem

'The nation helps each other in every problem.'

Sentences with the mismatch condition:

(7) العايلة يحبو بعضها برشا

il'ayla	yhibū	b'aḍha	barša
the.family	love.PL	each.other.F.SG	a.lot

'The family love each other a lot'

(8) العايلة تحب بعضهم برشا

il'ayla	ṭhib	b'adhum	barša
the.family	love.SG	each.other.PL	a.lot

'The family loves each other a lot'

(9) الجماعة يعرفو بعضها بالباهي

ilǧmē'a	ya'rfū	b'adha	b-ilbēhī
the.group	know.PL	each.other.F.SG	PREP.well

'The group know each other very well.'

(10) الجماعة تعرف بعضهم بالباهي

ilǧmē'a	ta'ref	b'adhum	b-ilbēhī
the.group	know.SG	each.other.PL	PREP.well

'The group knows each other.'

(11) الشعب يعاونو بعضو في كل مشكلة

ilša'b	y'āwnū	ba'dū	fī kol moškla
the.nation	help.PL	each.other.M.SG	in every problem

'The nation help each other in every problem.'

(12) الشعب يعاون بعضهم في كل مشكلة

ilša'b	y'āwen	b'adhum	fī kol moškla
the.nation	help.SG	each.other.PL	in every problem

'The nation helps each other in every problem.'