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الفصحى: تحليل توافقي

**Free Relatives in Standard Arabic: An
Agree-Based Account**

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Abstract

This work examines free relative constructions in Standard Arabic (henceforth SA or Arabic) and aims to provide an agree-based analysis for those constructions. The study introduces the free relatives and how they differ from headed relative constructions. It also discusses the nominal nature of SA free relatives. In addition, the study discusses some syntactic properties of the construction under study such as word order and agreement. It also examines the nature of the relative elements *man*, *ma*, and *allađi* and its set. The study introduces a syntactic analysis of SA free relatives that is based on Groos and van Riemsdijk (1981), Caponigro (2000), and Himmelreich (2017) which proposes the movement of the relative pronoun from base generation position to the Spec of the CP headed by an empty D. The analysis accounts for the case matching in Arabic free relatives.

Keywords: Arabic, free relatives, agreement, word order, case, relative pronouns.

المخلص

تهدف هذه الدراسة إلى استعراض التركيب العام لعبارات الوصل الحرة في اللغة العربية الفصحى وإلى تقديم تحليل نحوي توافقي لها. تعرض الدراسة جمل صلة الموصول الحرة واختلافها عن جمل صلة الموصول المقيدة. كما تناقش الدراسة الطبيعة الاسمية ل جمل صلة الموصول الحرة وبعض الخصائص النحوية الأخرى لها. كما تبحث الدراسة في طبيعة ضمائر الوصل في جمل صلة الموصول الحرة. تقدم الدراسة تحليلاً نحوياً لجمل صلة الموصول الحرة والذي يفترض انتقال ضمير الوصل من موضع توليده الأساسي إلى أعلى الجملة. التحليل قدم حلولاً لمشاكل متعلقة بجمل صلة الموصول الحرة.

الكلمات المفتاحية: العربية، جمل صلة الموصول الحرة، التوافق، ترتيب الكلمات، حالة الإعراب، ضمائر الوصل.





1. Introduction

A relative construction is defined as "a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the RC" (Andrews, 2007, p. 206). These clauses are mainly classified into headed and headless relative constructions in terms of the presence of a modified relative head. Check the following English example.

1. I eat the sandwich that you made for me. (headed)
2. I eat what you made for me. (headless)

In (1) above, the relative construction *that you made for me* obviously modifies the relative head *the sandwich* and it is obvious that the verb *eat* is followed by a DP argument. In (2), however, the relative construction *what you made for me* seems to have a nominal nature and it replaces the DP argument where there is no apparent relative head seems to exist in this construction.

Free relatives are headless relatives that are generally defined as constructions that are headed by *wh*-words and that function as nominal, prepositional, adjectival, or adverbial phrases and have distribution similar to those phrases (See van Riemsdijk, 2006; Ott, 2011; and Šimík, 2021 among others). It should be mentioned here that the current study is limited to the presentation of the nominal distribution of free relative constructions in SA.

Free relatives are interesting in general and they are still a subject to a current and heated discussion. This study, therefore, discusses the syntactic nature of such constructions in Standard Arabic. Undoubtedly, free relatives are widely used constructions in Arabic and they have very interesting aspects like the nature of the relative element, word order, and case mismatch which are all interesting and controversial issues.

The study here proposes an analysis for SA free relatives. The proposed analysis is within the agree-based approach (as in Chomsky 2000, 2001, 2008). It efficiently represents the structure of free relative constructions in Arabic and pro-





vides a straightforward account for what seems to be a case mismatch between the relative pronoun and the relativization site.

The study is organized as follows. It starts with an introduction that introduces the construction subject to investigation. free relatives. Section 2 presents the main accounts of free relatives in the literature. Section 3 examines the syntactic nature of Arabic free relatives where it studies the nominal nature, the nature of the relative element, word order and agreement in free relatives. Section 4 provides the proposed syntactic analysis of Arabic free relatives. Section 5, however, provides the conclusion of the study. It should be mentioned here that the study is confined to non-resumptive free relatives.

2. Regarding Relative Constructions

There are two main approaches to the analysis of relative clause in general. These approaches are the Head Account and the COMP Account. This section is briefly presenting both account and the main arguments for and against them.

The Head Account is supported by Bresnan and Grimshaw (1978), Larson (1987), Citko (2002), Ott (2011), Donati and Cecchetto (2011), and Cecchetto and Donati (2015), among others. This account proposes that the relative pronoun is the head as shown in (3) below.

3. $[_{DP} \text{ whatever}_i [_{CP} \text{ John is willing to do } t_i]]$

The Comp Account, however, is argued for in Groos and Van Riemsdijk (1981), Suner (1984), Grosu and Landman (1998), Grosu (1996, 2003), Caponigro (2000) and Himmelreich (2017). According to this account, the assumption is that the free relative pronoun in the relative construction moves to Spec-CP is headed by an empty head as shown in (4) below.

4. $[_{DP} \emptyset [_{CP} \text{ whatever}_i [_{TP} \text{ John is willing to do } t_i]]]$

Arguments that are proposed in the literature in favor and against those accounts mainly focus on the distribution of free relatives, extraposition, and recon-





struction. However, it seems that the Head Account encounter problems in accounting for extraposition data in some languages (see Groos and Van Riemsdijk (1981) and Himmelreich (2017)). Explanations provided in that aspect seems to fall short to provide a straightforward account for such data and conclusions are even made to that ever relatives are not free relatives (For recent arguments in this regard, see Caponigro (2019) and Donati et al (2022).).

3. The Syntactic Nature of Arabic Free Relatives

This section investigates the syntactic nature of SA free relative constructions and it is divided into three parts. The first part discusses the general nature of free relatives as a nominal component. The second part deals with the word order in free relatives in the light of the general structure of the Arabic clause. The third part, however, investigates the nature of the free relative element and presents argument in favor of its being a pronoun.

3.1. Free Relatives as a Nominal Component

Arabic free relative constructions exhibit nominal distribution and they usually occur in positions where a DP argument can occur. Examine the Arabic examples below.

5. jaʔa man kuntu antaZiru
came.3sg.m who was.1sg wait-1sg

‘The one (male) I was waiting for came.’

6. alqa ar-rajulu ma kan yaħmilu
threw.3sg the-man.nom what was carry.3sg.m

‘The man threw what he was carrying.’

7. iʃtaðara majdun ʃam-maa faʃala
apologized.3sg majd for-what did.3sg.m

‘majd apologized for what he did.’





In the examples above, the free relative constructions appear in positions where a DP argument is supposed to occur. The free relative occurs in a subject position in (5), in a direct object position in (6) and in a prepositional complement position in (7). Now check the examples (8), (9) and (10) below where the free relative in (5), (6) and (7) are replaced with corresponding DPs. This clearly exhibits the nominal distribution of free relatives in Arabic.

8. jaʔa al-Talibu

came.3sg.m the-student.nom

‘The student came.’

9. alqa ar-rajulau al-haqibata

threw.3sg the-man.nom the-bag.acc

‘The man threw the bag.’

10. iʃtaðara aliun ʃan ghalTati-hi

apologized.3sg Ali for mistake-his

‘Ali apologized for his mistake.’

3.2. Word Order

The general structure of a simple SA clause can be either an SV or a VS. That is to say, Arabic clauses can have preverbal subjects where the subject precedes the verb, or they can have postverbal verbs where the subject follows the verb as in (11a) and (11b) respectively.

11. a. majdun kasara al-mazhariyah

Majd.nom broke-3sg.m the-vase





b. kasara majdun al-mazhariyah
broke-3sg.m Majd.nom the-vase

'Majd broke the vase.'

Let us now examine such variations in free relative constructions. Check example (12) below.

12. a. * aSlahtu ma al-maTaru damara.3sg

fixed-1sg what the-rain destroy

b. aSlahtu ma damara al-maTaru

fixed-1sg what destroy.3sg the-rain

'I fixed what the rain destroyed.'

As it can be clearly noticed from the example above, Arabic free relative constructions do not show the same optionality in subject verb inversion as it is the case with simple clauses. The example above shows that the structure is only acceptable when the subject follows the verb. When the subject *al-maTaru* (the rain) precedes the verb *damara* (destroy) in (10.a), it results in an ungrammatical structure. On the contrary, the structure is grammatical when the subject *al-maTaru* follows the verb *damara* in (12.b).

3.3. The Nature of the Relative Element

This part investigates the nature of the relative element in Arabic free relatives. This is interesting since Arabic free relatives makes use of both wh-words and non-wh-words as a relative element. This does not go in line with defining free relatives as constructions that are headed by wh-words/phrases.

SA free relatives have two different types of relative pronouns. The first type forms the wh-relative pronouns which include *man* and *ma*. Pronouns *man* and *ma* are equivalent to the English *who* and *which* respectively where *man* is used





with people and *ma* is used with things. They are used interrogative and in headless relatives as well. However, they are not used in headed relatives. The other type of pronouns includes *allaði*, *allati*, etc. These are non-wh pronouns and their use is limited to relative constructions, both headed and headless. This type, however, carries number and gender features. The following table presents the non-wh relative pronouns in SA and shows these features.

Singular	Masculine		allaði
	Feminine		allati
Dual	Masculine	Nominative Form	allaðaani
		Accusative and Genitive Form	allaðaini
	Feminine	Nominative Form	allatani
		Accusative and Genitive Form	allataini
Plural	Masculine		allaðiina
	Feminine		allaatii/ allaʔii

Table 1.1: The Various Forms of the Non-wh Pronouns in SA Relatives

Now check the following examples.

13. a. akaltu allaði Sanaʕ-ti

ate.1sg which.sgm made-2fs

b. akaltu ma Sanaʕ-ti

ate.1sg which made-2fs

‘I ate what you made.’

14. a. akaltu aT-Taʕam allaði Sanaʕ-ti

ate.1sg the-food which.sgm made-2fs

‘I ate the food that you made’





b. * akaltu aT-Taṣam ma Sanaṣ-ti-h

ate.1sg the-food which made-2fs-it

From the example (13), it is clear that free relative constructions in Arabic can be constructed with the use of both *wh*-relative and non- *wh*-relative pronouns. However, using a relative pronoun as the relative element is limited to free relatives and not acceptable in headed ones as shown in (14).

3.3.1. Is the relative element a complementizer?

In regard to the nature of the relative pronouns in SA, there are some main assumptions in the literature. Alqurashi (2012) has assumed that *man* and *maa* are complementizers. On the other hand, Aoun and Choueiri (1997) has assumed that *allaḍi* and the set are determiners as indicated in Ouhalla (2004).

Alqurashi (2012) has based the assumption that relative pronouns *man*, *maa*, *allaḍi* and the set are on two points. The first point is that SA relative constructions do not allow pied-piping. The other point is related to the case mismatch between the relative pronoun and the relativization site. The study addresses the issue related to pied-piping here. The issue of case mismatching is addressed later since the researcher provides a syntactic analysis that accounts for the case mismatch in Arabic free relatives in section 4.

It seems that Alqurashi (2012) has ignored the fact that the use of pied-piping is universally restricted in free relatives. Let us examine the following examples from Dutch, Spanish, Rumanian and English.

15. a. De man met wie ik gesproken had, vertrok. [RRC]

the man with whom I spoken had, left

'The man with whom I had spoken left.'





b. * Met wie ik gesproken had, vertrok. [FR]

int. 'With whom I had spoken, left.' (De Vries, 2004, p. 196)

The example above from Dutch is presented by De Vries (2004) where it clearly exhibits that pied-piping is allowed in Dutch headed clauses as (15a) shows. However, such process is not possible in the case of free relatives as shown in (15b).

Now let consider the following examples from Spanish and Rumanian as presented by Grosu (1987).

16. a. [El tipo con cuya foto Maria se fue] es muy simpático

The guy with whose picture Maria left is most pleasant.'

b. *[Con lafoto de quien Maria se fue] es muy simpático

*'With the picture of whom Maria left is most pleasant.'

17. a. [Individul cu ale căruia tablouri/cu tablourile căruia a plecat Maria] e
Pictor măre

The guy with whose pictures/with the pictures ofwhom Maria left is a great painter.'

b. *[Cu ale cui tablouri/cu tablourile cui a plecat Maria] e pictor măre

*'With whose pictures / with the pictures ofwhom Maria left is a great painter.'

(Grosu, 1987, 45)

Both examples show that pied piping is also allowed in headed relative clauses in Spanish and Rumanian as in (16a) and (17a) respectively. Free relatives, on the other hand, do not allow such process as indicated in (16b) and (17b).

Horvath (2006) has also indicated that such restriction on pied-piping does not apply to English wh-question. Such restriction, however, applies in the case of





free relatives as shown in (18) and (19) below.

18. a. I wonder [whose picture] you lost.
b. I wonder [whose mother's picture] is hanging on the wall.
19. a. *I admire [whose picture] you lost.
b. *[Whose mother's picture] is hanging on the wall should be fired.

(Horvath, 2006, 581)

The data presented in this part shows that pied-piping is generally restricted in free relative construction. This also explains the restriction on pied-piping in Arabic free relatives as shown in (20) and not in wh-interrogatives as shown in (21) below.

20. [_{pp} maʕa man] takallamta?
with whom talked.2sg.m
'With whom did you talk?'
21. *qaabaltu [_{pp} maʕ man] takallamta.
met.1.sg with who(m) talked.2sg.m

Intended: 'I met with whom you talked.' (Alqurashi, 2012, p. 13)

The ungrammaticality of (21) above is because Arabic free relatives do not allow pied-piping.

3.3.2. *Is the relative element a determiner?*

Considering *allaḍi*, *allati*, etc. as determiners as assumed in Aoun and Choueiri (1997) is also doubtful. Their assumption as indicated in Ouhalla (2004) is based on the fact that these pronouns are used in the definite headed relatives but not in the indefinite ones. Accordingly, they claimed that *ʔallaḍi*, for example, is





composed of *ʔal-* (the), the known Arabic clitic determiner, in addition to number and gender affixation. This is however is doubtful since *ʔal-* is always cliticized to nouns and never carries agreement markers. It is also already shown that *ʔallaḏi* and the other pronouns are used in free relatives which do not have neither definite nor indefinite heads.

The researcher proposes that *ʔallaḏi*, *ʔallati*, etc. are, in fact, non-wh-pronouns. This assumption is supported by the fact that SA has different sentential complementizers; namely *ʔanna*, *ʔinna*, *ʔan* as shown in the examples below.

22. qala zaidun ʔinna majdan faza bi-l-jaʔizati
said.3sm Zaid.nom that Majd.acc won.3sm with-the-prize
'Zaid said that Majd won the prize.'

23. ʔalimatu ʔanna majdan faza bi-l-jaʔizati
knew.1s that Majd.acc won.3sm with-the-prize
'I knew that Majd won the prize.'

24. ʔalimatu ʔan faza majdun bi-l-jaʔizati
knew.1s that won.3sm Majd.acc with-the-prize
'I knew that Majd won the prize.'

It is no wonder that *ʔallaḏi* and the set show agreement in number and gender which is a different case if we compared them to wh-relative pronouns. We know that Arabic has a rich agreement system. Even Arabic demonstrative pronouns show that kind of agreement. Accordingly, agreement is another argument in favor of *allaḏi* being a pronoun since complementizers in Arabic do not inflect.

3.4. Agreement

Agreement is defined by Crystal (2008) as "a traditional term used in





grammatical theory and description to refer to a formal relationship between elements, whereby a form of one word requires a corresponding form of another (i.e. the forms agree)" (p. 18). Arabic is known of having a rich agreement morphology. It exhibits various cases of agreement such as subject-verb agreement where the verbs usually exhibit agreement with their corresponding subjects in person, number and gender and agreement between the noun and its modifying adjective in person, number, gender and definiteness. English, however, shows few cases in which the subject agrees with the verb in number and it does not show noun-adjective agreement.

It has been mentioned earlier that Arabic free relatives are formed with the use of either wh-relative non-wh-relative pronouns. In the case of relative pronouns, the use of a certain relative pronoun in Arabic depends on whether the relative construction refers to an animate entity or an inanimate entity. The wh-relative pronoun *man* (equivalent to English *who*) is used when the relative construction refers to an animate entity. On the other hand, the other wh-relative pronoun *maa* (equivalent to English *which*) is used when referring to an inanimate entity. However, when a non-wh-relative pronoun is used in a free relative construction, it agrees with the verb in number and gender. This kind agreement, of course, applies when the as the subject of the embedded clause, and, in that case, it agrees with the embedded subject. Such agreement also applies when the free relative is the subject of, let us say, the matrix clause or a bigger embedded clause, and in that case the verb of the clause that contains the free relative exhibits the agreement with the relative pronoun. Let us examine the agreement pattern in Arabic free relatives using the following examples.

25. qabaltu allati ḥaṣalat ʕala al-jaʕizati
met.1sg that.sg.f got.3sg.f on the-prize

'I met (the one female) who got the prize.'





26. qabaltu allaḏaini ḥaSalaa ʕala al-jaʕizati
met.1sg that.dual.m got.3dual.m on the-prize

‘I met (the two males) who got the prize.’

27. qabaltu allaḏiina ḥaSaluu ʕala al-jaʕizati
met.1sg that.pl.m got.3pl.m on the-prize

‘I met (the males) who got the prize.’

It is clearly noticed from the examples above that the relative complementizers and the verbs in the free relative constructions agree in number and gender. In (25), the complementizer *allati* and the verb *ḥaSalat* are singular in number and they have a feminine marker. The same apply to (26) where the complementizer *allaḏaani* and the verb *ḥaSalaa* are both dual and masculine, and to (27) where the complementizer *allaḏiina* and the verb *ḥaSaluu* are both plural and masculine.

Now, let us examine the following examples.

28. allaḏani qadamaa ʔal-mashruuʕ najaha

who.d.m.nom submitted.3d the-project succeeded.3dual

The two male persons who submitted the project succeeded.

29. najaha allaḏani qadamaa ʔal-mashruuʕ

succeeded.3sm who.d.m.nom submitted.3d the-project

The two male persons who submitted the project succeeded.

In the examples above, the free relatives occur in the subject position. In (28), the relative pronoun *allaḏani* shows an agreement in number and gender with both the main verb *najaha* and the embedded verb *qadamaa* where they are all dual and masculine. In (29), however, the relative pronoun *allaḏani* shows an agreement in number and gender with the embedded verb *qadamaa* where they are both dual and masculine. However, the pronoun agrees with the main verb *najaha* in gender and





not in number since the verb seems to show the singular agreement marker. That is because the subject of the main verb (the free relative pronoun here) appears in a post verbal position. This is, in fact, exhibits the default agreement pattern between a subject and a verb in Arabic. The SV (preverbal) structure shows complete agreement in number, person and gender as in (28). However, in the VS (postverbal) structure as in (29), Arabic verbs always show partial agreement with their subjects.

4. The Proposal

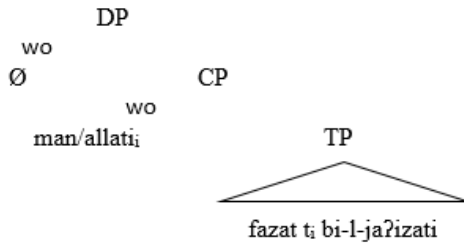
Since free relatives in SA has a nominal distribution, the researcher here follows the Head Account. According to their proposal, free relatives are CPs that are headed by an empty category (referred here to as the empty D). However, following Rouveret (2008), I assume here that the CP has a [Rel] feature rather than a [wh] feature as assumed in Groos and van Riemsdijk and the others. This feature triggers the movement of the relative pronoun. The proposed analysis of the free relative in (30) is presented in (31) below.

30. man/allati fazat ti bi-l-jaʔizati

who/who.f.sg won. f.sg with-the-prize

‘who won the prize’

31.



This analysis above assumes that the relative pronoun *man/allati* moves from its base generation position to the Spec-CP of the embedded clause. The embedded clause is, then, adjoined to the empty D, and accordingly the entire constit-



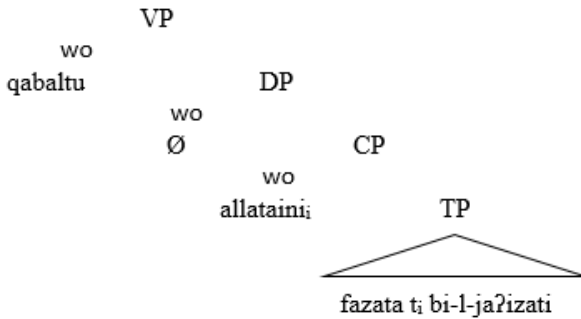


uent is merged in a default DP position.

Following Himmelreich (2017), the proposal for case matching here is that since the empty D c-commands the relative pronoun, they enter into an Agree relation. An Agree-Link is established between the empty D and the relative pronoun and that why the relative pronoun in (32) seems to exhibit a genitive case marker rather than a nominative one.

32. taḥadathtu maʕa allataini fazata bi-l-jaʕizati
 talked.1sg with who.f.dual.gen won. f.dual with-the-prize
 ‘I talked with who won the prize.’

33.



In (33) above, the relative pronoun *allataini* is base-generated in the relative clause where it is the subject of the embedded verb *fazata* and it receives a nominative case from T in the embedded clause. Having a [Rel] feature, it moves to Spec-CP to check its [Rel]feature. The c-commanding empty head D, however, receives an accusative case from the matrix *v*. The accusative case is realized on the relative pronoun via a post syntactic Agree-Copy.

It can be noted then that, in Arabic, the free relative pronoun seems to carry the case that is assigned by the matrix clause and not the one assigned by the em-





bedded clause. This means that there is no availability of case hierarchy restrictions Arabic free relatives and that they allow case mismatches. According to Himmelreich (2017), such pattern occurs if the overt free relative pronoun is the case probe and the D head is not. Therefore, in an Arabic free relative, the case feature of the embedded T head is checked against the unvalued case feature of the relative pronoun. The pronoun is then valued by T. Next it is checked by the empty D which receives case from the matrix v later. And even, if v checks its case feature at the end, no conflict arises. Thus, case mismatches are allowed in Arabic free relatives.

5. Conclusion

This paper has examined the general structural characteristics of free relative constructions in Standard Arabic. It has identified how free relative constructions differ from headed relative constructions presenting some of the differences between free and headed relative constructions such as the use of relative elements and the presence of relative heads. It has also talked about the nominal nature of free relatives. It has also examined the word order and agreement patterns in the concerned construction. The study has also investigated the nature of the relative element in SA free relatives and argued that Arabic free relatives use both wh-pronouns and non-wh-pronouns. The study provides an analysis proposing the availability of an empty D as the head of the free relative. Such analysis provides a direct account for case matching in Standard Arabic.





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