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A Minimalist Account of Free Relative Clauses in Zahrani Spoken Arabic

Issa AlQurashi[1] & Salih Alzahrani[1]

[1] Taif University, Saudi Arabia

Correspondence: Salih Alzahrani, Taif University, Saudi Arabia.

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Abstract

This paper explores the syntax of free relative clauses in Zahrani Spoken Arabic (henceforth ZSA). The paper shows that ZSA possesses two types of free relative clauses, viz., nominal free relative clauses and adverbial free relative clauses. The focus of the paper is on nominal free relative clauses. It is shown that nominal free relative clauses can appear in a subject position and a direct object position, and the range of relativization involves subject, direct object, indirect object, prepositional object and possessor relativization. The derivation of free relatives in ZSA involves resumption relativization strategy only where gaps are treated as null resumptive pronouns. As for distribution of null and overt resumptive clitics, there is an alternation between the use of null and overt resumptive pronouns/clitics in subject and direct object position. However, the utilization of overt resumptive pronouns/clitics is mandatory in indirect object, prepositional object and possessor position. It is argued that the free relative markers *illi:* and *mi:n* are complementizers. Furthermore, as null and overt resumptive clitics exhibit a big resemblance with respect to their behaviour in the coordinate structures and parasitic gaps, both free relatives with null or resumptive pronouns/clitics involve a null operator movement (in non-island contexts) from inside the free relative clause to the specifier of a complementizer phrase (spec CP). The CP is adjoined to a null antecedent occupying the head of a noun phrase (NP) which is a complement of a determiner phrase (DP) with an empty D.

Keywords: free, relativizer, relative complementizer, Zahrani Spoken Arabic, gaps, resumption, operator movement

1. Introduction

The free relative construction, also known as headless relatives, is a crosslinguistic phenomenon (Caponigro, 2003; van Riemsdijk, 2006), and has received ample attention in syntactic theory (e.g., Chomsky, 1973; Bresnan & Grimshaw, 1978; Groos & van Riemsdijk, 1981; Harbert, 1983; Suñer, 1983, 1984; Borer, 1984; Larson, 1987, 1998; Kayne, 1994; Grosu & Landmin, 1998; Müller, 1999; Citko, 2000, 2002; Kim, 2001; Lee, 2001; Grosu, 2003; Kubota, 2003; Wright & Kathol, 2003; Taghvaipour, 2005; Citko, 2008; Ott, 2011; Borsley, 2013; Caponigro & Anamaria, 2017; Caponigro, 2019) (Note 1). In addition, there are a number of studies of free relatives in Standard Arabic (henceforth SA) conducted by Fassi Fehri (1978), Alsayed (1998), Ali (2004), Galal (2004) and Alqurashi (2013). As far as we know, there is a lack of research carried out about free relatives in Saudi Arabic dialects. Therefore, this paper is an attempt to investigate the syntax of free relative clauses in Zahrani Spoken Arabic (henceforth ZSA), a dialect spoken in an area located on the East of Saudi Arabia. There are two types of free relative clauses in ZSA, namely nominal free relatives and adverbial free relatives. However, our discussion will mainly be restricted to nominal free relatives. The adverbial free relatives will be discussed very briefly but will not receive any theoretical analysis. The analysis will adopt Chomsky's (2000, 2008) prob-goal relation and the Edge Feature (EF), and it will be along the lines of Alsayed (1998), Galal (2004) and Alqurashi's (2013) analyses. In the next section, we will present the previous studies of free relative clauses in general and the ones related to Arabic.

2. Review of Literature

2.1 Competing Analyses of Free Relative Clauses

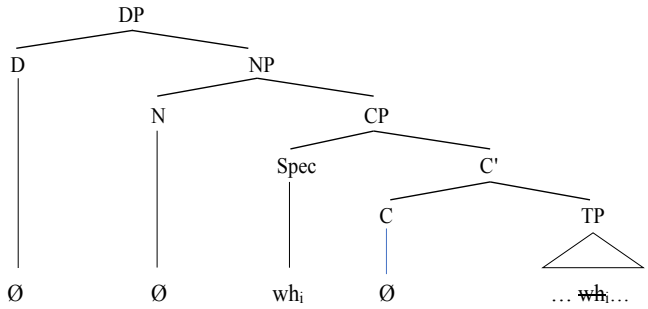
There have been a number of competing views in the literature on the analysis of free relative clauses, namely the Head Hypothesis (Bresnan & Grimshaw, 1978; Larson, 1987, 1998; Citko, 2000, 2002), the Comp

Hypothesis (Chomsky, 1973; Groos & van Riemsdijk, 1981; Harbert, 1983; Suñer, 1983, 1984; Borer, 1984; Grosu & Landmin, 1998; Grosu, 2003), the Complementation Hypothesis (Kayne, 1994), and the Project Goal Approach (Citko, 2008). Bresnan and Grimshaw's (1978) analysis will not be reviewed as it is outdated.

2.1.1 The Comp Hypothsis

Groos and Riemsdijk (1981) made the proposal, adopting Abney's (1987) DP hypothesis, that free relatives are CPs within a DP projection. They also propose that a free relative contains an abstract head in D. In addition, the free relative is a complement of a phonologically null N. It is also assumed that the *wh*-phrase is base-generated within the free relative and then internally merges in Spec-CP giving the representation in (1) below:

(1)



Groos and Riemsdijk (1981) proposed that the matching effects can be explained by assuming that Spec CP could be accessed and potentially selected from outside according to their suggested Comp Accessibility Principle (Note 2). The principle allows the *wh*-phrase to fulfill the subcategorization requirements of the verb of the matrix clause. According to this analysis, the *wh*-phrase '*what*' in '*I did not understand*' [*what John said*] is a DP and consequently it does not violate the subcategorization requirements of the matrix verb '*understand*'. However, such an analysis runs counter the standard assumptions on thematic restrictions since a single argument, the *wh*-phrase, would have to be connected to two different predicates, in our case the verb '*said*' and '*understand*'. To circumvent such a problem, some proposed analyses have avoided approaching the accessibility of the *wh*-phrase in terms of selection into CP, but in terms of connecting the CP and the matrix predicate via the *wh*-phrase. For instance, van Riemsdijk (2006) suggested a structure in which the relative CP and the matrix predicate shares the *wh*-phrase. Citko (2011) adopted this account, proposing that Merge operation is further involved in the structure where the *wh*-element finally is located in a CP external position.

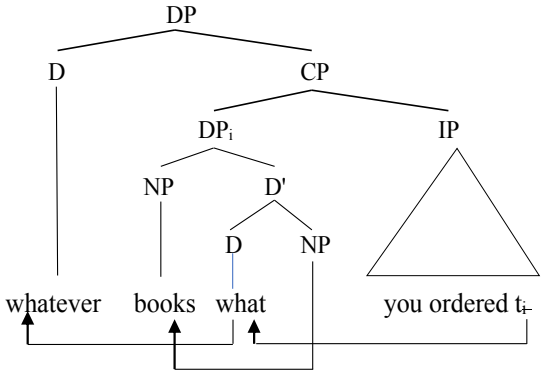
Other researchers attended to the direct contribution of the *wh*-phrase to the ultimate interpretation of the relative CP as a nominal. Donati (2006), for example, argued that the *wh*-phrase internally merges in C to check the *wh*-feature on C,and thus the clause is endowed with the D-feature which is responsible for the nominal interpretation. Ott (2011) adopted Chomsky's (2001) phase theory where the latter argued that the structure is transferred from the derivational workspace to the interface components cyclically, "by phase" (p. 184). Ott (2011) argued that the *wh*-phrase is accountable for relabeling the free relative into a nominal category as a consequence of the cyclic transfer of the syntactic structure. In her proposal, the *wh*-phrase moves to Spec CP whose head C does not carry any interpretable features, but only uninterpretable ones, i.e. agreement features which will be inherited by T. At the point of transfer to the phonological component, uninterpretable features of lexical items should be removed in order for the remaining syntactic object to satisfy the Full Interpretation Principle. This principle stipulates that only interpretable symbols are included at the semantic interface (Chomsky, 1995). This forces the head C and its complement to be transferred to the interface components leaving behind the *wh*-phrase as the only visible constituent at the next phase. In this analysis, the *wh*-phrase is ensured to be selected by two different predicates at different phases to circumvent the conflict with the thematic-criterion indicated above. However, Ott's analysis does not work well for Arabic. It has been argued that the relative marker '*ʔallaðii*' '*that*' in restrictive relative clauses in Modern Standard Arabic (MSA) (see e.g., Alsayed, 2004) and '*illi:*' "*that*" in the Arabic spoken dialects such as Zahrani Spoken Arabic (ZSA) (see AlQurashi & Alzahrani, 2023) are relative complementizers occupying the head C. The same argument will be maintained in analyzing ZSA free relatives in this paper. If Ott's account is adopted in which the head C and its complement are transferred, the entire free relative will be invisible at the next phase (or at the matrix cycle), thus the nominal distribution and interpretation cannot be obtained.

2.1.2 The Complementation Hypothesis

Kayne (1994) proposed an approach to free relatives which shares with the aforementioned hypotheses the idea that all relative clauses are CPs occupying the complement position of the external D. For English free relatives, he assumed that the word 'ever' is analyzed as D in the external D position to which the *wh*-phrase adjoins. Kayne (1994, p. 125) gave the following example in (2a) which has the structure in (2b) with irrelevant details omitted.

(2) a. I bought [whatever books you ordered]

b.



According to the structure in (2b), the *wh*-constituent neither originates in Spec CP as in the Comp hypothesis nor occupies the NP head position as in the Head hypothesis. It rather moves from the complement position in the embedded clause then gets adjoined to the internal head D position within CP. After that, it moves to get incorporated into the external D. This kind of movement violates the Chain Uniformity Condition, a UG condition on movement chains:

(3) Chain Uniformity Condition

'A chain is uniform with regard to phrase structure status' (Chomsky 1995, p. 253)

This condition specifies that all the links in a movement chain must be mximal projections (phrasal projections). In Kayne's (1994) analysis, the *wh*-phrase moves from a maximal projection to a minimal projection (a head position). Another problem with Kayne's approach is that the CP seems not to have a head of its kind which is a clear violation of the Headedness Principle, a UG constituent structure principle:

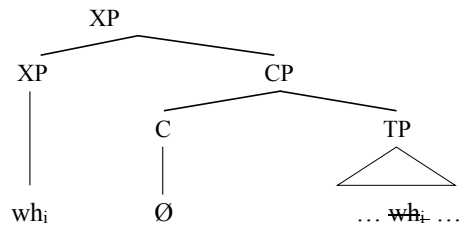
(4) Headedness Principle

'Every nonterminal node in a syntactic structure is a projection of a head word' (Radford, 2009, p. 42)

2.1.3 The Project Goal Approach

Citko (2008) suggested an analysis to free relatives which he called Project Goal (Note 3). Her approach combines the insights of both the Head and the Comp Hypotheses. In other words, it is assumed that the initial *wh*-phrase is a head and a filler. It is viewed as a filler since it moves from the gap position inside the relative clause to Spec CP. It is treated as as a head since it projects after it moves, therefore explaining the matching effects, i.e., it should satisfy the selectional restrictions of both the matrix and the embedded predicates in the sentence. In other words, the syntactic distribution of free relatives depends on the nature of the initial *wh*-element. For example, if the initial *wh*-phrase is nominal, the free relative will appear in nominal positions and if it is a locative *wh*-phrase, the free relative will appear where locative PPs appear. The Project Goal approach is represented in (5):

(5)



Citko's analysis offers an account for the distribution and the matching effects of free relatives as well as the similarity between *wh*-interrogatives and free relatives. Thus, the movement of the *wh*-phrase is motivated by the Edge feature on C, just like *wh*-interrogatives. The matching effects are explained in terms of the idea that the moved element projects. However, it is not clear what ensures that the *wh*-phrase projects in a free relative and not the CP. In *wh*-questions. It is the CP that projects and not the moved *wh*-phrase.

2.2 Previous Studies on Arabic Free Relatives

A few researchers have studied the syntax of Arabic free relatives (Fassi Fehri, 1978; Suaieh, 1980; Alsayed, 1998). Fassi Fehri (1978) analyzed free relatives in MSA and Spoken Moroccan Arabic (SMA) while Suaieh (1980) and Alsayed (1998) analyzed them only in MSA.

2.2.1 Fassi Fehri (1978)

Fassi Fehri (1978) divided Arabic free relatives into two types. The first type which he dubbed 'm-type' comprises '*mi:n*', '*maa*' and adverbials like e.g. '*ʔaynamaa*': 'wherever'. The second type which he called 'l-type' comprises '*ʔallaðii*': 'that', which he believed is a sort of determiner inflected for number, gender and case. SMA has the relative marker '*illi:*: "that" which is the counterpart of '*ʔallaðii*' in MSA. The difference between them is that the former is invariable (i.e., cannot inflect for number, gender and case). AlQurashi and Alzahrani (2023) argued that the relative marker '*illi:*' in ZSA, which is similar to the relative marker in SMA, is a complementizer rather than a determiner. Fassi Fehri (1978), when he compared between MSA and SMA, noticed two differences between the free relatives in MSA and SMA. The first difference is that MSA is subject to the matching effects whereas SMA is not. The second difference is related to the fact that SMA allows the appearance of two relative markers, '*illi:*' and '*mi:n*' respectively, inside a free relative clause whearas MSA does not allow it.

In view of the aforementioned differences, Fassi Fehri (1978) suggested that in SMA the l-type ('*illi:*') free relative marker is best viewed to occupy the head N position, and the m-type (*mi:n*, *ma:*, *ʔaynama:*) free relative markers are best viewed to occupy the Spec CP position. In this analysis, he combined between the Head Hypothesis and the Comp Hypothesis introduced in section 2.1 above.

Regarding the free relatives in MSA, Fassi Fehri (1978) argued that they are derived similarly to SMA. Since free relatives in MSA are subject to the matching effects, he adopted the Comp Hypothesis rather than the Head Hypothesis to account for them. However, Fassi Fehri's (1978) analysis cannot be adopted here because he viewed the relative markers as determiners and his analysis is conducted within an old version of transformational syntax.

2.2.2 Suaieh (1980)

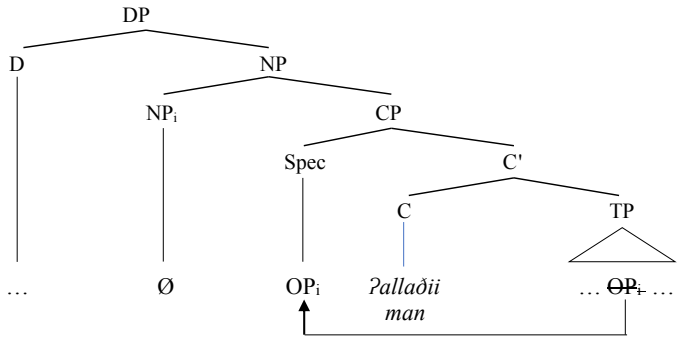
Suaieh (1980) preferred the Head Hypothesis over the Comp Hypothesis, and he argued against Fassi Fehri's (1978) Comp account of *m*-free relatives (*mi:n* and *ma:*). Suaieh (1980) shared with Fassi Fehri (1978) the assumption that the free relative markers (*mi:n* and *ma:*) are *wh*-pronouns whearas he differed from Fassi Fehri (1978) in that he assumed that '*ʔallaðii*' is a complementizer. Consequently, Suaieh (1980) suggested that *ʔallaðii* free relatives will have the same derivation as that of restrictive relatives but with a null antecedent. For the *m*-free relative introduced by *mi:n* and *ma:*, Suaieh (1980) assumed that '*mi:n*' and '*maa*' occupy the head position, just like *ʔallaðii*, and that spec CP is null. As '*mi:n*' and '*ma:*' are employed in both free relatives and interrogatives, he argued that the derivation of free relatives does not resemble the derivation of interrogatives. This is owing to the fact that free relatives allow resumptive pronouns and gaps (in certain cases) but interrogatives never allow resumptive pronouns. For Suaieh (1980), if the Comp Hypothesis is adopted where the *wh*-phrase '*mi:n*' and '*ma:*' are placed under the Comp position (i.e. Spec CP) like interrogative *wh*-phrases, confusion arises between a free relative reading and an interrogative reading in case where the gap strategy is

utilized. Suaieh (1980) argued that if the *wh*-phrase '*mi:n*' and '*ma:*' are inserted in the head position (Head Hypothesis), no confusion is created. To account for the gap within the free relatives, he assumed that an underlying resumptive pronoun occupies the gap position and then gets deleted by a deletion rule based on the Controlled Pro-deletion rule. This rule is not required when the resumptive strategy is employed with free relatives, but rather the head coindexes with the resumptive pronoun. Suaieh's argument regarding the created confusion between the two constructions is not robust enough. The confusion issue can be resolved by positing that C's have different features in the two constructions. Another weak point about his analysis is that controlled pro-deletion is no longer assumed within transformational grammar. For these reasons, his analysis will not be pursued here in this paper.

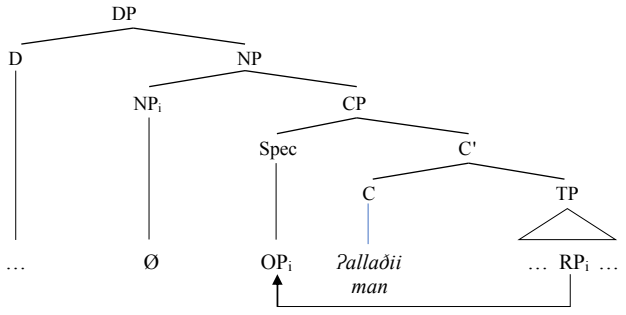
2.2.3 Alsayed (1998)

Alsayed (1998) adopted the Comp Hypothesis rather than the Head Hypothesis because free relatives, with the Head Hypothesis, are projected as IP/TP but not as CPs. One of the facts of free relatives in MSA is that they are sometimes introduced with the relative marker *ʔallaðii* which Alsayed (1998) viewed as a complementizer. For him, if the Head Hypothesis is adopted, there will be no structural position available for the complementizer *ʔallaðii*. As for the free relatives introduced with '*mi:n*' and '*ma:*', he treated them differently in that he viewed the *m*-free relative marker '*mi:n*' as a complementizer merging in C position, but the *m*-free relative marker '*ma:*' is considered as a *wh*-phrase occupying its canonical position which is Comp position (Spec CP) as it behaves like a *wh*-interrogative in that it can appear as a complement of a preposition which is a property of *wh*-pronouns/interrogatives. Alsayed (1998) proposed the structures in (6) below for free relatives introduced by the the complementizer *ʔallaðii* and *mi:n* where they are base-generated in C position. He further suggested that an empty operator is moved from inside the free relative clause to Spec CP if the gap strategy is used as in (6a) below. However, if the resumptive strategy is utilized, the resumptive pronoun is base-generated inside the free relative clause as in (6b).

(6) a. gap strategy

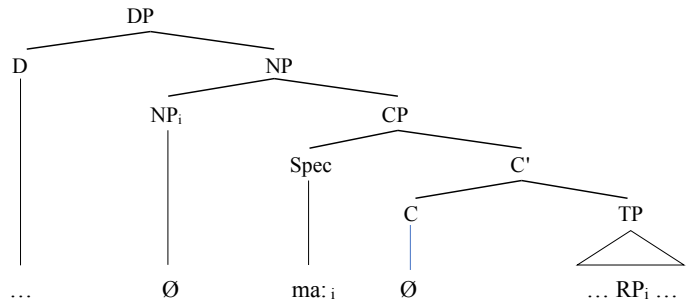


b. resumptive strategy

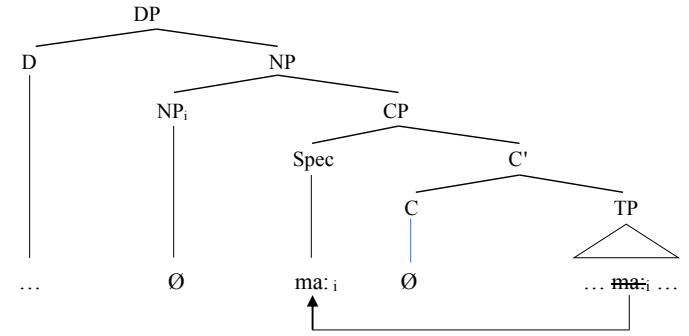


For the *ma:*-free relative clause, Alsayed (1998) proposed that '*ma:*' is merged in Comp position (Spec CP) when the resumptive strategy is employed as in (7a), or it involves *wh*-movement when the gap strategy is utilized as in (7b) below.

(7) a. resumptive strategy



b. gap strategy



Alsayed's (1998) analysis is not entirely satisfactory as he did not provide a unified approach for free relatives in MSA. He treated the free relatives introduced with '*ma:*' and '*mi:n*' quite differently where the former is a *wh*-phrase and the latter is a complementizer. Moreover, there is a distinction in the derivation between free relative clauses involving gapping and those involving resumption. The movement of a null operator is only proposed when the gap strategy is used. Also, a modern version of the Head Hypothesis in which free relatives are projected as CPs can be adopted, and in this case there is an alternative to the Comp Hypothesis. In the analysis section in 5 below, a unified approach will be suggested for free relatives in ZSA, just like what is proposed for ZSA restrictive clauses in AlQurashi and alzahrani (2023) except for that there is a null antecedent in free relatives and gaps are described as null resumptive pronouns. The following sections present the free relative clauses facts in ZSA.

3. The Basic Data

3.1 Overview

Free relatives differ from ordinary relative clauses in that the latter have an antecedent whereas the former lack an overt nominal antecedent. Therefore, they are also called headless relative clauses because they look rather like ordinary relative clauses but without a head (an antecedent). This type of relative exists in Arabic as well as in many other languages. ZSA is one of the Arabic dialects that possesses such type of relatives clauses. Restrictive relative clauses in ZSA are discussed in AlQurashi and Alzahrani (2023). The examples in (8) and (9) illustrate the difference between headed and headless relative clauses in ZSA.

Headed relative clause:

(8)	ga:bal-t	**s**-sufa:n	illi:	haba tˁ-u:	s-su:g
	meet-1SGM/F.PFV (Note 4)	DEF-boy.PLM	COMP	go-3PLM.PFV	DEF-market.SGM

'I met the boys that went to the market.'

The headed relative clause in (8) contains an antecedent (a head noun) '*s-sufa:n*' preceding the relativizer *illi:*.

Headless (Free) relative clause:

(9) a.	ga:bal-t	illi:	haba tˁ-u:	s-su:g
	meet-1SGM/F.PFV	COMP	go-3PLM.PFV	DEF-market.SGM

Literally 'I met that went to the market'

'I met that went to the market.'

The free relative in (9) occurs without the antecedent '*s-sufa:n*' which marks the distinction between the two types in ZSA.

Types of Standard Arabic free relatives discussed in the literature (Fassi Fehri, 1978; Alsayed, 1998; Suaieh, 1980) are introduced by the relative markers: *ʔallaði*:, *ʔallaði:n*, *ʔallati:*, *man*, *ma:*, *ʔaynama: "wherever" and mata: ma: "whenever"*. The relative markers which are employed in ZSA are *illi: 'that'*, *mi:n 'who'*, *we:nma:* "*wherever*" and *mata ma:* "*whenever*". We classify free relative constructions in ZSA into two types, viz, nominal free relatives and adverbial free relatives. The former type is introduced with the relative markers *illi: 'that', mi:n 'who'*, and the latter type is initiated by the relative markers *we:nma:* "*wherever*", *mata ma:* "*whenever*". The relative marker *ma:"what*" is not used in ZSA. The free relative complementizer *illi:* will be glossed COMP as it has been argued by AlQurashi and Alzahrani (2023) that it is a complementizer. The relative marker *mi:n 'who'* will be glossed as free relative marker (FRM) until it is argued that it is a complementizer in section 4. Let us begin with nominal free relatives. The adverbial free relatives will be presented very briefly in section 3.3.

3.2 Nominal Free Relatives

This type of free relatives looks similar to ordinary relative clauses (definite relatives) except for the absence of the antecedent (i.e., the head). Consider the following examples:

(10) a. ga:bal-t illi: habatˁ-u: s-su:g
meet-1SGM/F.PFV COMP go-3PLM.PFV DEF-market.SGM
'I met that went to the market.'

b. ʃuf-t mi:n Harab
see-1SGM/F.PFV FRM run away.3SGM.PFV
'I saw that escaped.'

c. ħaðˁar mi:n ʕazam-ah Ali
come-3SGM.PFV FRM invite.3SGM.PFV-3SGM.OBJ Ali
'Whom Ali invited came.'

d. ʃuf-t (*ma:) ħasˁal
see-1SGM/F.PFV FRM happen-3SGM.PFV
'I saw what happened.'

e ʃuf-t illi: ħasˁal
see-1SGM/F.PFV COMP happen-3SGM.PFV
'I saw what happened.'

It appears from the above examples in (10) that these free relative types differ from each other according to the type of entity the free relative refers to. Free relative clauses introduced by *illi:* refer to both animate and inanimate entities as in (10a&e) whereas free relative clauses introduced by *mi:n* refer only to animate entities as (10b&c) in subject and object positions. The ungrammaticality of the sentence in (10d) shows that *ma:* is not used at all in a free relative to refer to inanimate entities, but instead the complementizer *illi:* must be utilized in order to refer to an inanimate entity as in (10e).

Another difference between *illi:* and *mi:n* is that the free relative marker *illi:* appear in ordinary relative clauses modifying a definite antecedent as seen in (8) above, repeated in (11a) for convenience. As for the free relative marker *mi:n*, it does not appear in ordinary relative clauses as illustrated in (11b) below.

(11) a. ga:bal-t s-sufa:n illi: haba tˁ-u: s-su:g
meet-1SGM/F.PFV DEF-boy.PLM COMP go-3PLM.PFV DEF-market.SGM
'I met the boys that went to the market.'

b. *ga:bal-t s-sufa:n mi:n haba tˁ-u: s-su:g
meet-1SGM/F.PFV DEF-boy.PLM FRM go-3PLM.PFV DEF-market.SGM

'I met the boys who went to the market.'

Sentence (11b) is ungrammatical because the free relative marker *mi:n* in ZSA cannot be used in headed definite relative clauses.

3.2.1 Syntactic Positions of *illi:*-nominal Free Relatives

illi:-nominal free relatives can appear in Determiner Phrase (DP) (Note 5) positions such as subject position as in (12a & b) and object position as in (12c).

(12) a. ʁizil illi: baʕ ad-da:r
go crazy.3SGM.PFV COMP sell.3SGM.PFV DEF-house.SGF
'That sold the house went crazy.'

b. illi: baʕ ad-da:r ʁizil
COMP sell.3SGM.PFV DEF-house.SGF go crazy.3SGM.PFV
'That sold the house went crazy.'

c. habad illi: baʕ ad-da:r
hit-3SGM.PFV COMP sell.3SGM.PFV DEF-house.SGF
'He hit that sold the house.'

If ZSA has (overt) case system, we anticipate the case to reflect the position of the free relative clause. The complementizer *illi:* introducing a free relative in the subject position would have the nominative form, and the one introducing a free relative in the object position would have the accusative form. The one following the preposition will appear in the genitive form. However, ZSA does not have a case system. If the complementizer *illi:* in ZSA is variable, we would expect the verb of the main clause to agree with it in person, number and gender as is the case in SA.

Furthermore, *illi:* free relatives can appear within *wh*-interrogative clauses (Alzahrani, 2015), as illustrated by the following example:

(13) mi:n illi: habad s-sufa:n?
who COMP hit-3SGM.PFV DEF-boy.PLM
'Who is the one that hits the boys?' 'Who hits the boys?'

3.2.2 Relativisation Positions in Nominal Free Relatives

Various DP positions can be relativized in free relative clauses in ZSA like ordinary relatives (See AlQurashi & Alzahrani, 2023). The relativized constituents can be in a subject position as in (14), a direct object position (15), an indirect object position (16), a prepositional complement position (17) and a possessor position (18). In the subject relativization, the entity that the free relative clause is referring to is the subject of the verb inside the free relative clause. Consider the following example:

(14) ga:bal-t illi: baʕ ad-da:r
meet-1SGM/F.PFV COMP sell.3SGM.PFV DEF-house.SGF
'I met that sold the house.'

In the relativization of the direct object, the referent of the the free relative clause is the direct object of the verb *ʔabʁa* '*look for*' within the free relative clause, as shown below in (15):

(15) ga:bal-t illi: ʔabʁa-**h**
meet-1SGM/F.PFV COMP want.1SGM.PFV-3SGM.OBJ
'I met that I was looking for.'

In the indirect object relativization, the inner object in a double object construction of the form [V NP NP] is relativized where the free relative clause refers to the entity that is interpreted as the indirect object of the verb *ʔaʕtˤa* 'give', as illustrated below:

(16) ga:bal-t illi: ʔaʕtˤa-**h** al-gaħam ad-da:r
meet-1SGM/F.PFV COMP give-3SGM.PFV-OBJ DEF-elderly man.SGM.SBJ DEF-house.SGF

'I met that the elderly man gave the house.'

In the prepositional object relativization, the DP following the preposition *maʕ* is relativized where it is understood to be the object of the preposition, as shown below:

(17)

ga:bal-t	illi:	sa:far	Ali maʕ-**ah**	
meet-1SGM/F.PFV	COMP	Travel.3SGM.PFV-SBJ	Ali with-3SGM	

'I met that Ali traveled with.'

Furthermore, relativization of DPs in the construct state/possessive construction is possible in ZSA free relatives in which the relativized nominal is a possessor, as illustrated in (18) below.

(18)

ga:bal-t	illi:	ðˤa:ʕa-t	guruʃ-ah
meet-1SGM/F.PFV	COMP	lose-3SGF.PFV	money-3SGM.POSS

' I met whose money was lost .'

The relativized possessor is realized as a clitic attached to the noun '*guruʃ*' '*money*'.

3.2.3 Relativization Strategy

The common relativization strategies for the derivation of relative clauses in Arabic discussed in the literature (Alsayed, 1998; Galal, 2004; Alqurashi, 2013; AlQurashi & Alzahrani, 2023) are gapping and resumption. However, we will suggest that resumption is the sole strategy utilized for deriving free relative clauses in ZSA as we suggest that gaps in relative clauses are not genuine gaps. Consequently, they will be treated as positions filled with null resumptive pronouns and thus a unified analysis is proposed for ZSA free relative clauses. Having such an analysis rather than having two derivational strategies for the same structure is in compliance with the spirit of Minimalism. An argument in favour of this analysis will be put forward in section 3.2.6.2 below where the null and overt resumptive pronouns/clitics exhibit similar behaviour with respect to coordinate structures and parasitic gaps.

3.2.3.1 Resumptive and Null Resumptive Clitics/Pronouns in Nominal Free Relatives

Like restrictive headed relative clauses in ZSA, resumptive clitics in free relatives behave in the same way. They may occupy a subject position, a direct object position, an indirect object position of a verb, an object position of a preposition and a possessor position. Both resumptive and null resumptive pronouns/clitics are allowed to appear in subject position in ZSA in which the former is optionally utilized. Consider the following examples for the subject position:

(19)

a.

ga:bal-t	illi:	**(hu)**	baʕ	ad-da:r
meet-1SGM/F.PFV	COMP	he.3SGM	sell.3SGM.PFV	DEF-house.SGF

'I met that (he) sold the house.'

b.

ga:bal-t	illi:	**(hi:)**	baʕ-at	ad-da:r
meet-1SGM/F.PFV	COMP	she.3SGF	sell-3SGF.PFV	DEF-house.SGF

'I met that (she) sold the house.'

c.

* ga:bal-t	illi:	baʕ	**hu:**	ad-da:r
meet-1SGM/F.PFV	COMP	sell.3SGM.PFV	he.3SGM	DEF-house.SGF

'I met that (he) sold the house.'

d.

* ga:bal-t	illi:	baʕa-t	**hi:**	ad-da:r
meet-1SGM/F.PFV	COMP	sell-3SGF.PFV	she.3SGF	DEF-house.SGF

'I met the one that (she) sold the house.'

The examples in (19 c & d) are ungrammatical owing to the occurrence of the resumptive pronoun after the verb in the nominal free relative clause. The wellformedness is obtained when the resumptive pronoun appears before the verb in the free relative clause as in (19 a & b). Perhaps the reason is that ZSA allows SVO word order only

in embedded clauses. It is a matter of word order which will not be considered here.

A null or overt resumptive pronoun/clitic is also possible in a direct object position inside free relative clauses, as shown in the following examples:

(20) a. tˤabaχ-t illi: ʔaʃtah-i:-**Ø**
cook-1SGM/F.PFV COMP want.1SGM.PFV
'I cooked that I love.'

b. tˤabaχ-t illi: ʔaʃtah-i:-**h**
cook-1SGM/F.PFV COMP want.1SGM.PFV-3SGM.OBJ
'I cooked that I love.'

Also, ZSA shows that *illi:*-free relatives cannot permit null resumptive pronouns in an indirect object position (21a), in a prepositional object position (21b) and in a possessor position (21c). Null resumptive pronouns in these positions render clauses to be ungrammatical. Consider the following examples:

(21) a. *ga:bal-t illi: ʔaʕtˤa-**Ø** Ali da:r
meet-1SGM/F.PFV COMP give.3SGM.PFV Ali house.SGF.INDEF
'I met that Ali gave a house.'

b. *ga:bal-t illi: kunt **ʔ**a-dawir ʕala-**Ø**
meet-1SGM/F.PFV COMP was 1SGM/F-look.IPFV (Note 6) for
'I met that I was looking for.'

c. *ga:bal-t illi: ðˤa:ʕa-t guruʃ-**Ø**
meet-1SGM/F.PFV COMP lose-3SGF.PFV money.3SGF
'I met whose money was lost.'

3.2.4 Sensitivity of Free Relatives with Null Resumptive Pronouns to Island Constraints

AlQurashi and Alzahrani (2023) showed that restrictive definite clauses are sensitive to island constraints. Free relative clasues with null resumptive pronouns in ZSA are also sensitive to adjunct island (22), complex-NP island (23) and wh-island (24). Relativization within an an adjunct island, a complex-NP island and a wh-island in ZSA is not allowed with the use of null resumptive pronouns. Thus, resumptive clitics are obligatorily used. Consider the following examples:

(22) a. *ʔiʃtre:t illi: ʔaχað-t-**ah** yo:m ʃuf-t-**Ø**
buy.1SGM/F.PFV COMP take-2SGM.PFV-3SGM.OBJ when see-2SGM.PFV
'*I bought that you took when you saw.'

b. ʔiʃtre:t illi: ʔaχað-t-**ah** yo:m ʃuf-t-**ah**
buy.1SGM/F.PFV COMP take-2SGM.PFV-3SGM.OBJ when see-2SGM.PFV-3SGM.OBJ
'I bought that you took when you saw.'

(23) a. *ga:bal-t illi: ga:l-u: inn Ali illi: ʕaladʒ-**Ø**
meet-1SGM/F.PFV COMP say-3PLM.PFV that Ali COMP treat.3SGM.PFV
Intended: '*I met that they said Ali who treated.'

b. ga:bal-t illi: ga:l-u: inn Ali illi: ʕaladʒ-**ah**
meet-1SGM/F.PFV COMP say-3PLM.PFV COMP Ali COMP treat-3SGM.PFV-3SGM.OBJ
Intended: '*I met that they said Ali who treated.'

(24) a. *ga:bal-t illi: ga:l-u: mi:n ʕazam-**Ø**
meet-1SGM/F.PFV COMP say-3PLM.PFV who invite.3SGM.PFV-
'*I met that they said who invited.'

b. ga:bal-t illi: ga:l-u: mi:n ʕazam-**ah**

meet-1SGM/F.PFV COMP say-3PLM.PFV who invite.3SGM.PFV-3SGM.OBJ
'*I met that they said who invited him.'

Having discussed the nominal free relative marker /*illi:*/, it is now time to talk about the free relative marker *mi:n* which can be used in nominal free relatives. Let us begin with their syntactic distributions.

3.2.5 Syntactic Positions of *mi:n*-Free Relative Clauses

The marker *mi:n* in ZSA is invariable (Note 7) just like *illi:*, and it does not show agreement with the verb of the main clause, as shown in the examples in (25) below. Moreover, it is associated with animate entities only, as mentioned in section 3.2 above. As for their distributions, they can appear in subject position, as in (25a) and in object position, as in (25b).

(25) a. ħaðˤar-u: mi:n ʕazam-**hum** Ali
come.3SGM.PFV-3PLM FRM invite.3SGM.PFV-3PLM.OBJ Ali
'Whom Ali invited came.'

b. ʃuf-t mi:n harab-u:
see-1SGM/F.PFV FRM run away-3PLM.PFV
'I saw that escaped.'

3.2.6 The Range of Relativisation Positions in Free Relatives with *mi:n*

In ZSA, *mi:n* "who" shows to contain relativisation positions in free relatives similar to the positions with *illi:*. The positions include subject relativization (26a), direct object relativization (26b&c), indirect object relativization (26d), prepositional object relativization (26e) and possessor relativization (26f).

(26) a. ʃuf-t mi:n harab-u:
see-1SGM/F.PFV FRM run away-3PLM.PFV
'I saw that escaped.'

b. ga:bal-t mi:n ʔabʁa-**Ø**
meet-1SGM/F.PFV FRM want.1SGM.PFV
'I met whom I was looking for.'

c. ga:bal-t mi:n ʔabʁa-**h**
meet-1SGM/F.PFV FRM want.1SGM.PFV-3SGM.OBJ
'I met whom I was looking for.'

d. ga:bal-t mi:n ʔaʕtˤe:-t-**ah** flu:s
meet-1SGM/F.PFV FRM give-1SGM/F.PFV-3SGM.OBJ money.SGM
'I met whom I gave money.'

e. ga:bal-t mi:n taðˤarab Ali maʕ-**ah**
meet-1SGM/F.PFV FRM fight.3SGM.PFV Ali with-3SGM.**OBJ**
'I met whom Ali fought with.'

f. ga:bal-t mi:n tˤaħ-at da:r-**ah**
meet-1SGM/F.PFV FRM fall.3SGM.PFV house.SGM-3SGM.POSS
'I met whose house collapsed.'

3.2.6.1 Null and Overt Resumptive Pronouns/Clitics

In ZSA, resumptive clitics and null resumptive pronouns can be employed with *mi:n*-free relatives as they are used with *illi:*-free relatives. Both null and overt resumptive pronouns/clitics can be used in a subject position (27 a & b) and a direct object position (28 a & b) respectively.

(27) a. ʃuf-t mi:n harab
see-1SGM/F.PFV FRM run away.3SGM.PFV

'I saw who escaped.'

b. ʃuf-t mi:n **(hu)** harab
see-1SGM/F.PFV FRM he.3SGM run away.3SGM.PFV
'*I saw who (he) escaped.'

c. *ʃuf-t mi:n harab **(hu)**
see-1SGM/F.PFV FRM run away.3SGM.PFV he.3SGM
Intended: 'I saw who escaped (he).' 'I saw who escaped.'

(28) a. ʃuf-t mi:n ʔabʁa_
see-1SGM/F.PFV FRM want.1SGM.PFV
'I saw whom I was looking for.'

b. ʃuf-t mi:n ʔabʁ-**ah**
see-1SGM/F.PFV FRM want.1SGM.PFV-3SGM.OBJ
'I saw whom I was looking for .'

The use of null resumptive pronouns in an indirect object position, a prepositional object position and a possessor position is not permitted as this leads to ungrammaticality, as illustrated in (29–30). Thus, resumptive clitics are obligatorily employed.

(29) a. ga:bal-t mi:n ʔaʕtˤe:-t-**ah** flu:s
meet-1SGM/F.PFV FRM give-1SGM/F.PFV-3SGM.OBJ money.SGM
'I met whom I gave money.'

b. *ga:bal-t mi:n ʔaʕtˤe:-t-**Ø** flu:s
meet-1SGM/F.PFV FRM give-1SGM/F.PFV money.SGM
'I met whom I gave money.'

a. ga:bal-t mi:n taðˤarab Ali maʕ-**ah**
meet-1SGM/F.PFV FRM fight.3SGM.PFV Ali with-3SGM.**OBJ**
'I met who Ali fought with '

b. *ga:bal-t mi:n tatˤarab Ali maʕ-**Ø**
meet-1SGM/F.PFV FRM fight.3SGM.PFV Ali with
'I met who Ali fought with.'

(30) a. ga:bal-t mi:n tˤħ-at da:r-**ah**
meet-1SGM/F.PFV FRM fall.3SGF.PFV house.SGF-3SGM.POSS
'I met whose house collapsed.'

b. *ga:bal-t mi:n tˤħ-at da:r-**Ø**
meet-1SGM/F.PFV FRM fall.3SGF.PFV house.SGF
'I met whose house collapsed.'

3.2.6.2 The Behaviour of Null and Overt Resumptive Pronouns/Clitics in *mi:n*-free Relatives (Note 8)

There is a resemblance between gaps and resumptive clitics in free relative clauses regarding the phenomena of Coordinate Structure and Parasitic Gaps. Ross (1967) posits a constraint on coordinate structures dubbed Coordinate Structure Constraint. The constraint states that an unbounded dependency gap cannot occur in one conjunct unless there is an unbounded dependency gap in the other. In our analysis, gaps will be treated as positions filled with null resumptive pronouns, as mentioned above. This entails that a resumptive pronoun has the same effect as a null resumptive pronoun. There are certain coordinated structures in which there is a null resumptive pronoun in the first conjunct and a resumptive clitic in the second or vice versa as demonstrated by the following examples in (31):

(31) a. ga:bal-t mi:n ʔabʁa-**Ø** wa ʕazam-t-**ah**

meet-1SGM/F.PFV FRM want.1SGM.PFV and invite-1SGM/F.PFV-3SGM.OBJ
Intended: 'I met whom I was looking for and I invited him.'

b. ga:bal-t mi:n ʔabʁa-**h** wa ʕazam-t-**Ø**
meet-1SGM/F.PFV FRM want.1SGM.PFV-3SGM.OBJ and invite-1SGM/F.PFV.3SGM.
Intended: 'I met whom I was looking for and I invited him.'

Additionally, there are situations in ZSA free relative clauses where the occurrence of the parasitic gap (a null resumptive pronoun in our analysis) is licensed by a resumptive clitic instead of a true gap, as shown in the following example:

(32) a. ħaðˤar mi:n ʔabʁa-**Ø** bido:n ma ʔaʕzam-**Ø**
come-3SGM.PFV FRM want.1SGM/F.PFV With no invite-1SGM/F.PFV
Intended: ' Whom I was looking for came without inviting.'

b. ħaðˤar mi:n ʔabʁa-**ah** bido:n ma ʔa-ʕzam-**Ø**
come-3SGM.PFV FRM want.1SGM/F.PFV-3SGM.OBJ with no 1SGM/F-invite.PFV
Intended: ' Whom I was looking for came without inviting.'

Due to the above similarities between null and overt resumptive pronouns/clitics in ZSA free relatives, both should be treated similarly.

3.3 Adverbial Free Relatives

Adverbial free relatives are introduced with adverbial particles such as *we:nma:*"wherever" and *mata ma:* "whenever" , as shown in the following examples:

(33) a. ba-ʁdi we:nma: ti-fliħ
will.FUT-go.1SGM/F.IPFV wherever 2SGM/F-go.IPFV
'I will go wherever you go.'

b. ba-ʁdi mata ma: ti-fliħ
will.FUT-go.1SGM/F.IPFV whenever 2SGM/F-go.IPFV
'I will go whenever you go.'

Note that although the adverbial '*we:nma:*' functions as a single word, it is simply formed by attaching the relative particle *ma:* to an interrogative word (i.e. they are composed of two morphemes: X + *ma:*). The adverbial '*mata: ma:*' functions as two words. This type of free relative clauses will not receive any theoretical attention in this paper as indicated in the introduction.

4. The Categorial Status of the Free Relative Markers *illi:* and *mi:n* in ZSA

AlQurashi and Alzahrani (2023) argued that '*illi:*' is a complementizer in restrictive relative clasues. Let us see if '*illi:*' in free relaltives show a similar behaviour. So, if the free relative marker '*illi:*' can occur as part of a larger phrase such as a prepositional phrase, then it is a relative prounon. Nontheless, '*illi:*' cannot be part of a prepsotional phrase, as shown below:

(34) *ga:bal-t [pp maʕ illi: sa:far-t]
meet-1SGM/F.PFV with COMP travel-3SGM.PFV
'I met with whom you travelled'

One might have another interpretation for the ungrammaticality of the example in (34). In other words, it can be suggested that the free relative '*illi:*' is a relative pronoun and thus the sentence is ungrammatical due to the fact that phrasal/prepositional verbs in Arabic, unlike English, cannot be separated from their prepositions (except in questions). However, this reason for the ungrammaticality is undermined by the ungrammatical example in (35) which shows that '*illi:*' in free relatives cannot be possessors within a larger clause-initial NP/DP, as one would expect it to be if it is a pronoun.

(35) *ga:bal-t flu:s-**ah** illi: ðˤaʕ-at
meet-1SGM/F.PFV money.SGF-3SGM.POSS COMP lose.3SGM.PFV
Intended: 'I met whose/ whoever's money was lost.'

As for the free relative marker *mi:n*, it has been viewed as either a noun, a *wh*-pronoun or a complementizer in the literature of Arabic syntax. Suaieh (1980) claimed that *mi:n* in SA is a noun because it appears in the same position as that of the antecedent in restrictive relative clauses. However, *mi:n* in ZSA cannot be a noun because it has an invariant form and does not show any type of inflections. Nouns can have modifiers such as adjectives in their phrasal structures. Nontheless, *mi:n* does not accept any modifiers, as illustrated in (36) below. This suggests that *mi:n* cannot be analysed as a noun.

(36) *ʃuf-t mi:n he:lah ʤa-t

see-1SGM/F.PFV FRM attractive.3SGF come-2SGF.PFV

Intended: 'I saw the attractive one that came.' ZSA uses *mi:n*

as an interrogative word (Alzahrani, 2015). It may occur on its own at the beginning of a question as in (37a) or appear in structures where it is followed by *illi:* (37b), as mentioned in section 3.2.1. Note the following examples:

(37) a. mi:n ʤa:b al-χubzah ?

who.Q bring-3SGM.PFV DEF-bread.SGF

'Who brought the bread?'

b. mi:n illi: ʤa:b al-χubzah ?

who.Q that.3SGM bring-3SGM.PFV DEF-bread.SGF

'Who is the one that brought bread?'

Although we see *mi:n* in these interrogative structures, it is important to state that it is different from *mi:n* occurring in free relative clauses. The interrogative *mi:n* comes as part of a larger clause-initial phrase. It appears as a complement of a preposition (38a) or as a possessor (38b) within a clause-initial NP/DP. This does not apply to the free relative marker *mi:n* as shown in (39a & b) respectively.

(38) a. *ʃuf-t [$_{pp}$maʕ mi:n] ʤi:-t

see-1SGM/F.PFV with FRM come-2SGM.PFV

'I saw the one with whom you came.'

b. *ʃuf-t [$_{NP}$wald mi:n] ʤa

see-1SGM/F.PFV son.3SGM FRM come-3SGM.PFV

'I saw the one whose son came.'

(39) a. [$_{pp}$maʕ mi:n] ʤi:-t?

with FRM come-2SGM.PFV

'With whom did you come?'

b. [$_{NP}$wald mi:n] ʤa?

son.3SGM FRM come-3SGM.PFV

'Whose son came?'

We can see that the free relative marker *mi:n* behaves differently from the *wh*-interrogative. Based on the facts that the free relative markers *illi:* and *mi:n* cannot be part of a prepsotional phrase and cannot be possessors within a larger clause-initial NP/DP, it can be concluded that they are complementizers rather than relative pronouns.

5. Analysis

Prior to presenting the proposed analysis, let us recall some relevant properties of nominal free relative clauses in ZSA. It has been shown that free relatives in ZSA (just like SA) comprises a relative complementizer and a clause involving either a null or a resumptive pronoun/clitic. Nominal free relative clauses are introduced by either the complementizer '*illi:*' or '*mi:n*' depending on the animacy feature of the referent to which the free relative refers, as indicated in section 3.2. Consider the following examples given in section 3.2, repeated in (40) for convenience.

(40) a. ga:bal-t illi: habatˁ-u: s-su:g
meet-1SGM/F.PFV COMP go-3PLM.PFV DEF-market.SGM
'I met that went to the market.'

b. ʃuf-t illi: ħasˁal
see-1SGM/F.PFV COMP happen-3SGM.PFV
'I saw what happened.'

c. ħaðˁar mi:n ʕazam-**ah** Ali
come-3SGM.PFV FRM invite-3SGM.PFV-3SGM.OBJ Ali
'Whom Ali invited came.'

d. ħaðˁar illi: ʕazam-**ah** Ali
come-3SGM.PFV COMP invite-3SGM.PFV-3SGM.OBJ Ali
'The one that Ali invited came.'

The *illi:*-free relative clause can be used to refer to both an animate entity as in (40a) and to an inanimate entity as in (40b). They differ from headed restrictive relative clauses in that there is a missing head noun/antecedent whereas the antecedent has to be overt in a headed restrictive relative clause as shown in section 3.1. The *mi:n*-free relative clause in (40c) refers to an animate entity, and it does not look like a relative clause because it is used only in free relatives and does not modify a nominal constituent.

To have a unified analysis for the derivation of free relative clauses in ZSA, we will propose that their derivation involves resumption only whrere the resumptive pronouns/clitics are either overt or covert. The behaviour of null resumptive and overt resumptive clitics with regard to Coordinate Structure and Parasitic Gaps will be utilized as an argument in favour of the derivational resumption strategy.

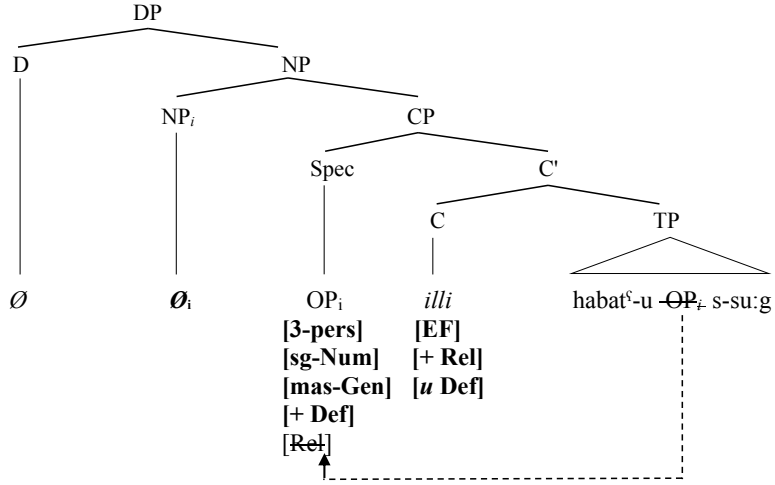
5.1 illi: and mi:n Free Relatives

In section 2.1, different approaches have been discussed for the syntax of free relative clauses, namely the Comp Hypothesis, the Complementation Hypothesis and the Project Goal approach. However, as the facts pertaining to free relatives in ZSA cannot fall under any of these approaches, none of them can be adopted in our analysis except for the Comp Hypothesis assumption that there is a phonologically empty head. In AlQurashi and Alzahrani's (2023) analysis of the restrictive definite relative clauses in ZSA, they suggested that the overt antecedent is base-generated in both types of Arabic relative clauses (definite and indefinte) and that the relative clause is a CP that is adjoined to it. They assumed that relative clauses in ZSA, which are expressed with the complementizer (*illi:*) placed in C, involve movement of a null operator from inside the relative clause to spec CP. This is on a par with the assumption in the literature in the case of English *that*-relatives and Zero relatives that there is a movement of a null relative operator from inside the relative clause to spec CP in both gapped and resumptive relative clauses. Their analysis will be extended to account for ZSA free relatives with the suggestion that the antecedent in free relatives is null and that resumption is the sole derivational strategy in which null or overt resumptive clitics/pronouns are involved. Moreover, the free relatives introduced by either the complementizer '*illi:*' or '*mi:n*' will have similar analysis with a very subtle difference related to the animacy feature associated with the head C occupied by the complementizer '*mi:n*'.

The null antecedent is a base-generated, the complementizer (*illi:*) is merged in C and the null operator originates inside the free relative clause. The nul antecedent of *illi:*-free relatives is associated with φ-features (person, number and gender) . In order for the moved empty operator to be coreferntial with the null antecedent, it needs to match with the null antecedent with respect to the φ-features. The empty operator carries other features such as valued definiteness feature [+ DEF) and an unvalued uninterpretable REL(ATIVE) [*u* Rel] feature that makes the null operator active for other operation. On the other hand, we can assume that the complementizer '*illi:*' has an Edge Feature [EF] (Chomsky, 2007 and 2008) and an interpretable [+REL] feature. As the complementizer '*illi:*' in C does not c-command the null antecedent, the probe-goal agreement relation (Chomsky, 2000, 2001) cannot be sanctioned. Therefore, the agreement relation will be sanctioned between the complementizer and the null operator. Because of the uninterpretable *u*Def feature on C, the complementizer serves as a probe and searches for a c-commanded active goal (the null operator before it moves to Spec CP). It finds the null operator which is active by virtue of having the unvalued uninterpretable [*u* Rel] feature and agrees with it. The agreement will result in valuing the unvalued definiteness feature on the complementizer by the empty operator and then gets deleted. The unvalued [*u* Rel] feature on the empty operator is valued by its valued counterpart on

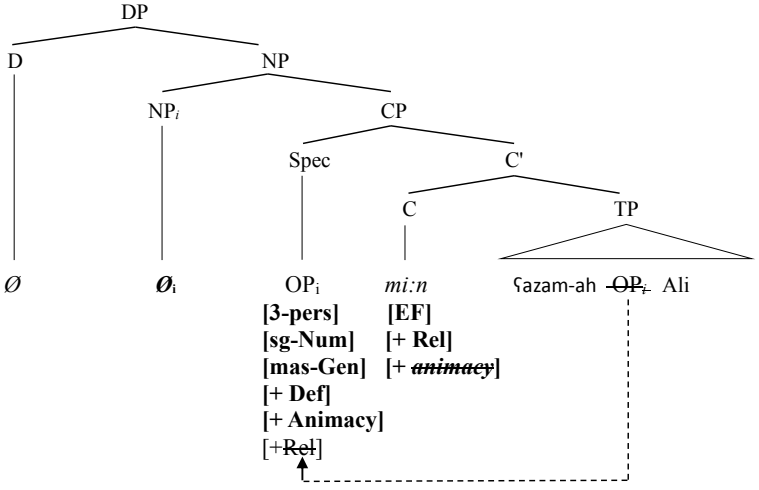
C and then gets deleted. The EF on C triggers the movement of the null operator to Spec CP as illustrated in (41) below for a free relative with a null resumptive pronoun like that in (40a) above. A free relative with a resumptive clitic will have the same derivation and structure except for the presence of the resumptive clitic within the free relative clause instead of the null resumptive pronoun .

(41)



As for the *mi:n*-free relative clauses, it will have the same structure as that of *illi:*-free relatives except for the addition of an extra feature on the null operator and the complementizer which is an [+/- Animacy] feature. This is because the complementizer '*mi:n*' is used to refer to animate entities only, but the complementizer '*illi:*' is used to refer to both animate and inanimate entities. The null operator carries a valued [+ Animacy] feature along with valued φ-features, a valued definiteness feature [+DEF] and an unvalued interpretable [u Rel] feature. On the other hand, the complementizer '*mi:n*' carries an unvalued [*u* Animacy] feature, a valued [+REL] feature and an edge feature [EF]. The null operator will be valued via the prob-goal agreement relation, just like agreement between the '*illi:*' complementizer and the null operator discussed above. This agreement relation is followed by movement of the null operator to Spec CP which is motivated by the EF on C. A *mi:n*-free relative like that in (40c) above will have the structure in (42) below.

(42)



6. Conclusion

This paper has shown that free relative clauses in ZSA resemble headed restrictive relative clauses except for the absence of visible antecedent. It has been found that there are two main types of free relatives in ZSA: nominal free relatives and adverbial free relatives. The focus of the paper has been on nominal free relatives. Two relative markers have been identified in ZSA to introduce nominal free relatives, viz., the relative markers *illi:* and *mi:n*. The former refers to animate and inanimate entities while the latter refers to animate entities only. It has been

argued that none of these markers can be treated as pronouns or nouns and that they are best analyzed as complementizers. The paper has also revealed that free relatives show the same range of relativization and the same distribution of null and overt resumptive pronouns/clitics that restrictive relatives have. Furthermore, it has been shown that the free relatives can occur in a subject position and a direct object position. Unlike restrictive relative clauses, the antecedent (to which the free relative is adjoined) is assumed to be null in free relative clauses. On the basis of the similarities between null and overt resumptive pronouns/clitics with regards to Coordinate Structures and Parasitic Gaps, both free relatives with null resumptive pronouns and resumptive variants are derived by movement of a null operator to spec CP. Under this approach, resumptives inside relative clauses are realized as bound morphemes attached to their hosts and associated with a null argument which is occupied by a null operator.

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Notes

Note 1. Some of these studies are done within transformational syntax, and some are conducted within non-transformational syntax (Head-Driven-Phrase-Structure Grammar, HPSG).

Note 2. Comp Accessibility Principle:

The Comp of a free relative is syntactically accessible to matrix rules such as subcategorization and case marking, and furthermore it is the wh-phrase in COMP, not the empty head, which is relevant for the satisfaction or non satisfaction of the matrix requirements (Groos & van Riemsdijk, 1981, p. 181).

Note 3. Citko (2008) traces this approach back to Larson (1998) who assumed that free relatives involve a derivation in which the Goal rather than the Probe projects. The same view is assumed by Huddleston and Pullum (2002) and Payne et al. (2007).

Note 4. PFV stands for perfective aspect which indicates a completed action.

Note 5. The standard view of a nominal phrase within Minimalism is a DP. For nominal phrases in SA see (e.g. AlQurashi, 2013)

Note 6. ‘IPFV’ stands for imperfective aspect.

Note 7. Traditional Arab grammarians described *man* in SA as *ʔismun mabniyyun* (i.e. monoptote) (see Eid, 1971; Maglistah, 2002; Alnadiri, 1997, among many others). *ʔismun mabniyyun* is a constituent that is invariant in form.

Note 8. AlQurashi and Alzahrani (2023) have shown that gaps and resumptives behave similarly with regard to coordinate structures and parasitic gaps in ZSA restrictive relative clauses introduced with *illi:*. Therefore, we will not argue again whether gaps and resumptives act in the same way regarding the two phenomena in *illi:*-free relatives.