## HYPERRAISING IN JORDANIAN ARABIC

By

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#### ABSTRACT

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This thesis addresses the phenomenon of hyperraising (HR) in Jordanian Arabic where the embedded subject escapes its CP boundary by raising to the matrix subject position. Earlier proposals on Brazilian Portuguese (BP) (Fong, 2018, 2017; Martins and Nunes, 2010; Nunes, 2008) support the analysis of an A-movement of the subject NP to the matrix clause of the raising predicate *parecer* 'seem' crossing the head C *que* 'that'. Jordanian Arabic seems to adopt the same strategy by showing sensitivity to syntactic factors of intervention and islands that support an analysis of raising. Agreement plays a critical role in the analysis as different agreement patterns are useful cues for identifying distinct structures (unraised vs. raised or raised vs. left-dislocation). The targeted raising predicate is *shikil* and it seems to have a nominal value '+N', contrary to its usual verbal status in other languages. Hyper-raising of subject to subject (e.g. Brazilian Portuguese, Maithili) seems to be the counterpart of infinitival subject raising (e.g. English, Spanish) and its existence raises critical questions about the syntax of raising more generally.

Copyright by TARIQ MOHAMMED FARGHAL 2020 This thesis is dedicated to my father Professor Mohammed Farghal and my mother Eman Okour

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# **KEY TO ABBREVIATIONS**

AAE	Anti-Agreement Effect
ACC	Accusative
AP	Adjective Phrase
BP	Brazilian Portuguese
СОМР	Complementizer
CR	Copy Raising
EA	Egyptian Arabic
ECM	Exceptional Case Marking
Gen	Genitive
HR	Hyperraising
INFN	Infinitive
JA	Jordanian Arabic
MA	Maltese Arabic
MSA	Modern Standard Arabic
NIC	Nominative Island Condition
Nom	Nominative
PART	Participle
Pres	Present
POSS	Possessive
PROG	Progressive
SUBJ	Subjunctive
1st	First Singular
1PL	First Plural
2SM	Second Singular Masculine
2SF	Second Singular Feminine
2MPL	Second Masculine Plural
2FPL	Second Feminine Plural
3SM	Third Singular Masculine
3SF	Third Singular Feminine
3MPL	Third Masculine Plural
3FPL	Third Feminine Plural

### **CHAPTER 1**

#### HYPERRAISING IN JORDANIAN ARABIC

## 1.1 Introduction

#### 1.1.1 What is hyperraising

Hyperraising is a phenomenon in which an NP raises out of a finite clause. This type of raising escapes the CP domain that is known to constrain A-movement in English-type languages (Nunes, 2019; Fong, 2018, 2017; Ademola, 2011; Carstens and Diercks, 2009; Nunes, 2008; Yadava, 2007; Ura, 1994). For instance, we know that raising a subject NP out of a finite clause is impossible in English:

- (1) a. \* John seems that t likes ice-cream
  - b. \* John is likely that *t* arrives early

In English, the complement of the raising predicate must be non-finite, so English in this sense appears as an infinitival raising language.

(2) a. John seems to *t* like ice-creamb. John is likely to *t* arrive early

However, the case in Arabic seems to be the other way around. The target of *SEEM*-raising extracts the NP out of a tensed clause whereas raising out of a tenseless clause is disallowed.

- (3) Fatma ∫ikil-ha (inn-u) bitħib il-bu:za
   Fatma appearance-3SF (C-3SM) likes-3SF the-ice-cream
   'Fatma seems that likes the ice-cream'.
   Int.: It seems that Fatma likes the ice-cream (JA)
- (4) \* Fatma ∫ikil-ha (inn-u) tħib il-bu:za Fatma appearance-3SF (C-3SM) like-SUBJ il-bu:za 'Fatma seems to like the ice-cream'.

On the one hand, it would be intuitive to assume that there is some feature or principle in Arabic that makes its *SEEM*-type raising hyperraising 'HR' rather than English-type non-finite raising. On the other hand, it can be claimed that Arabic is not a raising language at all (Soltan, 2007; Mohammad, 2000) and that those structures can be explained by some principle of NP dislocation that associates the agreement features of the dislocated NP with whatever item (predicate, embedded verb, etc.) falls within its domain. Therefore, there is no active computation of syntactic raising. This theoretical opposition should lead us to investigate what the nature of the gap is that is left behind by hyperraised NP. Since Arabic is a *pro*-drop language and the verbal inflection is always associated with some pro that carries agreement, *pro* is a candidate for the gap as it agrees with the fronted NP. However, this thesis argues for raising and I will show that the gap is actually a trace not a *pro*. The analysis of the gap is significant as it plays a key role in understanding the nature of the structure we are dealing with. Consider the following underlying structures:

The theoretical consequence of each analysis is different. Our target is to motivate the trace analysis where the NP is assumed to hyperraise from its base position through some syntactic mechanism. First, the assumption that the NP has a base position in the embedded clause is partially motivated by the existence of an expletive structure that shows the position of an NP in a non-hyperraising structure. The agreement suffix of the raising predicate *shikil* shows default agreement features (3SM), which indicates the existence of a null expletive in the underlying structure whereas the NP lies in the base position:

 (6) ∫ikl-u Fatma bitħib il-bu:za appearance-3SM Fatma likes-3SF the-ice-cream 'It seems that Fatma likes the ice-cream'.

(JA)

Once the NP is hyperraised as in (5a), it enters into full agreement with the raising predicate *shikil* implying intuitively that movement occurs from the base subject position to the matrix subject position of the clause resembling in some fashion infinitival raising of English. However, this movement out of a CP seems to violate Case theory on the one hand as the NP ends up being assigned case twice from the local T and the matrix T. On the other hand, it also seems to violate the Nominative Island Condition (NIC), Chomsky (1981), that constrains the NP-movement out of a tensed clause. Nonetheless, the literature on hyperraising has shown that this movement adheres to the different diagnoses of raising including reconstruction, locality, and movement of idiom chunks. Those diagnostic tests apply in the case of hyperraising in JA. Thus, (7a) shows that the intermediate CP violates the locality principle between the moved NP and the subject, (7b) shows that the NP can be reconstructed in the embedded clause (interpreted in the lower position), and (7c) is an example of an idiom chunk movement.

- (7) a. \* Fatma ſikil-ha (inn-u) Mariam fakkart inn-ha bitħib il-bu:za Fatma appearance-3SF (C-3SM) Mariam think-3SF C-3SF likes-3SF the-ice-cream 'It seems that Mariam thought that Fatma likes ice-cream'.
  - b. fi na:s<sub>i</sub> fikil-hum (inn-u) ma:t-u  $t_i$ In people<sub>i</sub> appearance-3MPL C-3SM died-3MPL  $t_i$ 'There are people seem to have died'.
  - c. i:d waħdi jikil-ha ma bts<sup>7</sup>affig one hand appearance-3SF not clap 'One hand does not clap'.

If the gap were a *pro*, the diagnoses would appear contradictory to such an analysis. For instance, *pro* might not be so sensitive to locality as traces are and *pro* also shows a predicational relation with its antecedent without reconstruction effects. This non-raising behavior of *pro* could be recognized in the copy-raising (CR) construction (Asudeh and Toivonen, 2012; Landau, 2009; Rogers, 1972, 1971) where the subject appears to have a copy (e.g. *pro* in Arabic) in the embedded clause, and the structure does not show the effects of a trace analysis. For instance, (8a) is fine although there is an intervening intermediate CP because the CR construction allows mapping the subject to a deeply embedded *pro* (not adhering to A-movement locality). (8b) shows that the subject must be base-generated and cannot reconstruct in the embedded clause. Also, looking at

(8c), the idiom chunk movement fails with copy raising, and it distorts meaning. This is expected of a base-generated structure.

(8)	a.	Fatma ∫ikil-ha ka-inn-u Mariam fakkart inn-ha bitħib
		Fatma appearance-3SF as-if-3SM Mariam thought-3SF C-3SF likes-3SF
		il-bu:za
		the-ice-cream
		'Fatma seems like Mariam thought that she likes ice-cream'.
	b.	fi na:s shikil-hum ka-in-hum ma:t-u
		in people appearance-3MPL like-C-3MPL died-3MPL
	'There are some people seem like they have died'.	
	c.	*i:d waħdi ∫ikil-ha ka-inn-u ma bts²afig
		one hand appearance-3SF like-C-3SM not clap
		'One hand does not clap'.

This contrast of hyperraising (*shikil* 'appearance') vs. copy raising (*shikil ka-inn-u* 'appearance like') reminds us of the contrast found in English between infinitival raising (*seem*) and copy raising (*seem like*):

(9) a. John seems to like ice-creamb. John seems like that he likes ice-cream

Therefore, if we tease these two structures apart as well in Arabic, we could conceptualize the gap differently even though *pro* would carry the agreement of the embedded clause of both structures. If the structure is hyperraising, then we want to believe that the base position is a trace, and if the structure is a copy raising construction, then we end up with a base-generated DP that has a *pro* position in the embedded clause.

#### 1.1.2 Theta Theory of HR

The core notion of syntactic raising is that the raising predicate (*seem*-type) does not assign a theta-role to the subject and the subject is raised from its base position in the embedded clause. In terms of theta-assignment, this applies to hyperraising in JA. There is sufficient evidence to propose that *shikil* behaves as a raising predicate. For example, this raising noun can host ex-

pletive subjects such as *fi* 'in' or *hunaak* 'there', while we know that control verbs fail to host non-thematic subjects.

- (10) fi/huna:k ∫ikl-u ∫ayab bi-∫a:ri?
   in/there appearance-3SM riot in-street
   'There seems to be riot in the street'.
- (11) \* fi/hunaak qarrar juku:n fi ʃaɣab bi-ʃa:ri? in/there decide-PAST-3SM be-/INF in riot in-street 'There decided to be a riot in the street'.

Also, *shikil* can appear with weather verbs, which is characteristic of raising verbs, but not control ones.

- (12) a. ∫ikil-ha bit∫atti appearance-3SF rains-PRES-3SF 'It seems to rain'.
  - b. \* qarrar-at t∫atti decided-3SF rains-IFN 'It decided to rain'.

Also, reconstruction is possible with *shikil*, which makes the structure ambiguous between the narrow scope reading and the wide scope reading of the subject NP. Control verbs only allow the wide scope interpretation. The DP *mara* 'a woman' can be interpreted within the embedded clause in (13a), which implicates the raising status of the structure:

- (13) a. fi mara min Amman jikil-ha saww-at there woman from Amman appearance-3SF make-PAST-3SF ihtifa:l bil ha:ra celebration in the neighbourhood.
  'there is a woman from Amman who seems to have made a celebration in the neighbourhood'
  i. Wide scope: DP *mara* has scope over the raising noun *fikil*ii. Narrow scope: *fikil* has scope over mara. This interpretation solely applies to the
  - b. ſikl-u fi mara min Amman saww-at appearance-3SF there woman from Amman make-PRES-3SF

expletive (non-raising structure in Arabic).

iħtifa:l bil ħa:ra
celebration in the neighbourhood.
'It seems that there is a woman who seems to have made a celebration in the neighbourhood.'
(Only the narrow scope: *fikl-u* is over the DP *mara*).

 c. fi mara qarrar-at/ħawal-at tsaww-i iħitifal bi l-ħa:ra there woman decide-3SF/try-3SF make-INF-3SF celebration in the-neighbourhood 'there is a woman who decided/tried to make a celebration in the neighbourhood' (Only wide scope interpretation: the DP *mara* always has higher scope than the control verb.)

The above data shows that the Arabic raising noun *fikil* does not assign a thematic role to its subject just like raising verbs, which lines up with its compatibility with expletive subjects, weather subjects, and narrow scope readings.

Based on thematicity, agreement, and the syntax of hyperraising, it is legitimate to consider the phenomenon in Jordanian Arabic. However, there remains the puzzle of how the NP is moved out of a CP in JA and cross-linguistically (VanUrk, 2015; Nunes, 2008; Yadava, 2007; Ura, 1994; Jake and Odden, 1979). The intuition is that there may be some UG principle that licenses HR across those different languages.

This chapter looks into the main elements of the hyperraising structure: the actual nature of the raising predicate *fikil*, T's carrier, and the diagnosis of the structure as a whole. The multiple syntactic diagnoses show that hyperraising involves a raising behavior between the raised DP and the trace. Chapter two has two parts: the first outlines the literature of hyperraising and its different types across languages and the other investigates hyperraising in JA under phase-based computations and concepts. Chapter three emphasizes the difference between the trace analysis of hyperraising and the copy analysis of copy raising constructions. It proceeds to show that copy raising is strictly perceptual in nature whereas hyperraising is eventual in the sense of infinitival raising. Finally, Chapter four aims at refuting den Dikken's counterargument of hyperraising and copy raising and suggests parallel analysis of raising adjectives between JA and Hungarian.

## **1.2** The predicate *jikil*

#### 1.2.1 Agreement

The raising predicate *fikil* 'appearance' seems to have nominal properties as it hosts possessive clitics and carries no tense at all. Also, the predicate is the same form of the lexical predicate *appearance*. Arabic nouns host possessive pronouns as clitic suffixes and this morphological paradigm also applies to the raising predicate:

(14)		
(14)	Form	Features
	∫ikl-u	3SM
	∫ikil-ha	3SF
	∫ikil-hum	3MPL
	∫ikil-hin	3FPL
	∫ikl-ak	2SM
	∫ikil-um	2MP
	5	

Tense is carried by the copula *kaan* that links the subject with the raising predicate. The following structure shows a typical linear order where the subject precedes the copula and the copula precedes the raising predicate:

(15) Eman ka:n-at ∫ikil-ha (inn-u) ħabb-at il-bu:za
 Eman be-3SF appearance-3SF (C-3SM) like-3SF the-ice-cream
 'Eman was appearance that liked ice-cream'.
 Int.: Eman seemed to like ice-cream.

The predicate *fikil* has two distinct meanings as a raising predicate and as a non-raising lexical predicate. The pattern of agreement can manifest this distinction in JA. To explain the pattern, we can manipulate the agreement of each: the copula, the raising predicate, and the embedded predicate (e.g. adjective). In examples (16a) and (16b), the embedded clause is the predicative adjective *mrattab* 'nice'. Arabic predicative adjectives always agree with their subjects (or as modifiers with their modified noun phrases). The predicate *fikil* is primarily a masculine noun. The adjective has masculine features agreeing with the masculine features of the predicate *shikil* rather than with the feminine subject DP, thus (16a)'s interpretation must be addressing Fatma's actual physical appearance as being neat. Example (16b) shows the opposite: the adjective shows feminine agreement with the subject DP (Fatma) and (16b)'s interpretation must be the raising interpretation (*Eman seems neat*). This data shows there is an actual raising version of the predicate *fikil* as in (16b).

- (16) a. Eman ∫ikil-ha mrattab
   Eman appearance-3SM nice-3SM
   'Eman, her appearance is neat'.
  - b. Eman ∫ikil-ha mrattab-i
     Eman appearance-3SM nice-3SF
     'Eman appears neat'.

However, this typical agreement can be manipulated by two factors: the lexical ambiguity of the raising noun and the flexible Arabic order. First, we see how the agreement pattern of the adjective can resolve the ambiguity of the raising predicate. Second, since the copula *jaku:n* can show agreement as well, we can have the same distinguishing pattern of agreement where the past *ka:n* either agrees with the adjective, which yields the lexical meaning as in (17a) or agrees with the hyperraised subject Eman, which yields the raising meaning as in (17b)

- (17) a. Eman kaan ∫ikil-ha ma?addab Eman was appearance-3SF polite-3SM 'Eman, her appearance was polite'.
  - b. Eman kan-at ∫ikil-ha ma?addab-i
     Eman was-3SF appearance-3SF polite-3SF
     'Eman seemed polite'.

Therefore, the pattern of agreement is systematic. Sometimes, agreement can be optional in certain contexts; yet, this optionality is predicted in light of some other factors. ElSadek et al. (2015) show that this optionality is found in agreement between the raising *fakl* (which has the same function of the Jordanian raising predicate *fikil*) and the copula in Egyptian Arabic, but they do not explain this optionality. This is the case where word order affects agreement. For instance, if the copula follows the subject, it must show only full agreement features as in (18a), which is typical of subject-verb agreement in general. If the copula is in initial position (meaning it precedes the raising noun and there is no overt subject), the agreement of this copula could either be full or default as in (18b). The optionality of (18b) might shed some doubt on the consistency of the pattern of the agreement of an item such as the copula. However, the deviation in (18b) seems predictable if we consider the effect of word orders on Null-copula-predicate vs. Overt-copula-predicate.

- (18) a. Eman ka:n-at/\*ka:n ∫ikil-ha ħazi:n-i Eman was-3SF/\*was-3SM appearance-3SF sad-3SF 'Eman seemed to be sad'.
  - b. ka:n-at/ka:n ∫ikil-ha ħazi:n-i was-3SF/was-3SM appearance-3SF sad-3SF 'she seemed to be sad'.

It cannot be that the masculine features of the copula agree with the lexical meaning of the raising noun because the embedded clause (the adjectival phrase) carries feminine features in (18b). Therefore, the structures in (18a) and (18b) are hyperraising whether the copula is masculine or feminine. This anti-agreement should be attributed to the anti-agreement effect (AAE) (Ouhalla, 1993) on the V-predicate word order (where the subject is not in initial position or is null). This non-agreement pattern obtains by moving the verb in initial position as V-predicate which might parallel the anti-agreement of VS word order in other contexts. Consider the following contrast where (19a) shows full agreement of SVO order and (19b) shows optionality of agreement (similar to what we have seen earlier with the copula):

- (19) a. il-bana:t ∫a:f-in il-ħara:mi the-girls saw-3FPL the-thief 'the girls saw the thief'.
  - b. fa:f/faf-in il-ħara:mi il-bana:t saw-3SM/saw-3FPL the-thief the-girls 'saw the thief, the girls'.

Based on this agreement pattern, we end up with a copular verb in the matrix clause that adheres to the pattern of subject-verb agreement. If the copula appears after *fikil* and the subject is null, we end up with full agreement and if the copula appears before *fikil* and the subject is null, agreement becomes optional and the prediction about agreement is borne out. The case of anti-agreement we had above is triggered when the subject is null and the copula is in initial position.

However, when the copula is in initial position and the overt subject in a post-verbal position, full agreement obtains the same as it does with SVO word order. Contrary to what is known about Modern Standard Arabic (MSA) in the literature that VSO order triggers an anti-agreement effect (Ouhalla, 1993), JA and most Arabic dialects (Fehri, 2013) must show full agreement in SVO and VSO order as well.

(20) \* ∫a:f/∫a:f-u il-wla:d il-ħara:m-i saw-3SM/saw-3MPL the-boys the-thief 'the boys saw the thief'.

The same pattern applies to the copula with respect to the subject in a hyperraising structure. (and the subject is an overt DP in a post-verbal position). Thus, default agreement is ruled out.

(21) \* ka:n/ka:n-u il-faba:b fikil-hum ħabb-u il-bu:za was-3SM/was-3MPL the-boys appearance-3MPL like-3MPL the-ice-cream 'the boys seemed that liked the ice-cream'.
 Int.: it seemed that the boys liked the ice-cream.

So far, we have three patterns of agreement with respect to word order in a hyperriaisng structure:

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(22)
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Form	Agreement pattern
S-copula- <i>∫ikil</i>	full agreement
copula-S- <i>∫ikil</i>	full agreement
Null S-copula- <i>∫ikil</i>	optional

The alternation of the pattern of agreement mentioned so far manifests the distinction between the non-thematic raising meaning and the lexical meaning of the predicate *fikil*. We have also seen that the pattern of agreement can be consistent with respect to word order in a hyperraising structure.

### 1.2.2 Construct Phrase

Before going into the mechanism of hyperraising, it is useful to recognize the syntactic category of the raising predicate *shikil* and the phrase it is contained within. Unlike English raising predicates, this Arabic predicate seems to be a noun and it constitutes a phrase with its clitic. Now,

the pattern of noun + possessive clitic is often associated with *construct* phrases as it is the case in Hebrew and most, if not all, varieties of Arabic. Primarily, the construct phrase consists of a DP phrase and a dependent noun. In the case of clitics, they appear inflectionally as dependent suffixes. Consider the parallel between the DP-noun phrase and the DP-clitic phrase:

- (23) a. kita:b Omar book Omar 'Omar's book'.
  - b. kita:b-u/kita:b-ha/kita:b-hum
     book-3SM/book-3SF/book-3MPL
     'his book/her book/their book'.

It is plausible to assume that the raising predicate plus the clitic as *shikl-u* is actually a construct phrase. Research on construct phrases (Fehri, 2013; Benmamoun, 2000; Shlonsky, 2004) mainly theorize that the construct head (e.g. *kita:b* 'book' as in (23a)) has moved to a position higher than the dependent noun (e.g. *Omar*) and the dependent noun is the specifier of the phrase.

(24)  $[_{DP} [_{D} D \text{ kita:b}_{i}] [_{DP} [_{NP} Omar ] t_{i}]]$ 

This structural analysis can be applied to DP-clitic phrase where the underlying structure can be an overt pronoun, and then the predicate *shikil* is in its base position.

(25)  $[_{NP} [_{DP} huwwa]$  jikil] (he appearance)

Now, the movement rule applies, the predicate incorporates the silent D and the overt pronoun ends up as a suffix on the moved NP, whose morphological character shows how the pronoun is positioned in the structure with respect to nouns in general.

(26)  $\left[ DP \left[ D D \int ikil_i \right] \left[ NP \left[ DP - u - 3SM \right] t_i \right] \right]$ 

This seems to apply in the case of the phrase *shikl-u*. This movement analysis emphasizes that a key property of constructs, namely that the DP inherits definiteness from the dependent noun. Therefore, the DP must have a silent D,in other words, for it to have an overt D is actually illegal.

(27) (\*il) kita:b il-walad (the) book the-boy 'the boy's book'

This applies to the case of the DP-clitic phrase of *fikl-u*, which shows that the pronominal suffix seems to fill the position of a specifier that inherits definiteness to the nominal predicate.

(28) (\*il)-∫ikl-u the-appearance-3SM

The lexical version of the predicate  $\int ikil$  is also a constituent, which is characteristic of construct phrases in general. We can replace the lexical phrase  $\int ikl-u$  (his actual physical look) with a null pronoun or a wh-particle showing constituency.

- (29) a. ∫ikl-u ka:n mkarkab appearance-3SM be-3SM-PAST messy 'His look was messy'
  - b. ka:n mkarakb-3SM be-3SM-PAST 'was messy'
  - c. ∫u: ka:n mkarkab?
    what was-3SM messy?
    'What was messy?'
    Answer: *shikl-u* 'his appearance'

Therefore, we believe that the raising noun-clitic phrase is as the construct phrase in its morphological make-up (DP-clitic) and its DP inherits definiteness from the specifier as a construct. Yet, it behaves as a raising noun, so it will be different from ordinary noun-clitic phrases. A key distinguishing property is the fact that this raising noun *fikl-u* cannot form a constituent with the preceding NP as most lexical DPs do. If we assume that this nominal predicate is actually raising, it should not be able to form a constituent with a preceding NP, because it would be its subject and subjects and predicates (without a complement) cannot form a constituent. This difference can be observed more clearly if we compare hyperraising structures to what is called by Cinque (1999) as *broad subject constructions*. Broad subject constructions seem to have two subjects: broad and narrow. The broad subject lies in the left-periphery of the structure and follows the embedded clause containing the narrow subject with its predicate. The narrow subject appears as a DP-clitic construct phrase where the clitic refers back to the preceding NP (the broad subject) and the predicate agrees with the narrow not the broad subject. The following example shows the clitic of the narrow subject *balcony-3SM* refers to the house and the adjective of the small clause agrees with its narrow subject *barande* 'balcony' and not *be:t* 'the house'.

(30) il-be:t barandi-tu mrattab-i the-house balcony-3SM nice-3SF 'The house, its balcony is neat'.

This structure is much like the structure of hyperraising since they both begin with an initial DP, followed by a DP-clitic phrase that shows agreement and selects a complement. As mentioned earlier, constituency fails in a hyperraising structure between the DP and the raising noun. This applies in the case of the lexical DP in the structure of a Broad Subject Construction:

(31) barandit il-be:t mrattab-i balcony the-house nice-3SF 'The balcony of the house is nice'

Presumably, following the movement analysis, the DP *barandit* moves to a position higher than the specifier *be:t*. Note that the specifier does not need a clitic any longer.

If we apply this movement to the hyperraising structure, the sentence crashes. The only way for the construct phrase *fikl-u* to move to a DP position containing the specifier is to be lexical in meaning but not raising, which is incompatible with the hyperraising complement. Example (32a) is a legal raising structure, but the predicate in (32b) fails to move to a DP position to form a construct with *Eman*. The movement yields the phrasal meaning of Eman's actual appearance as the subject, which cannot select the raising complement *fa:zat* because the interpretation will be that Eman's (physical) appearance won, in other words, the lexical usage of *fikil* is contradictory with the finite complement and the meaning is distorted.

- (32) a. Eman ∫ikil-ha fa:z-at Eman appearance-3SF win-3SF-PAST 'Eman seems to have won'.
  - b. \*∫ikil Eman fa:zat appearance Eman win-3SF-PAST '\*Eman's appearance won'.

The movement of the construct phrase applies if we employ the lexical meaning of *shikil* and choose the compatible complement. Example (33a) shows how the lexical version of the predicate appears in broad subject construction and looks parallel in surface to a raising structure as a  $DP_1$ - $DP_2$ -clitic-complement. Example (33b) shows that unlike the raising meaning, the lexical *shikil* can form a construct phrase with the initial NP.

- (33) a. Eman ∫ikil-ha mkarkab-3SM
   Eman appearance-3SF messy
   'Eman, her look is messy'.
  - b. ∫ikil Eman makrakb
     appearance Eman messy-3SM
     'Eman's look is messy'.

The distinguishing behavior of the raising *fikil* from the ordinary nominal construct phrases including the lexical version of *fikil* itself is strong evidence that it is actually a non-thematic raising noun. The agreement shown by the clitic of the raising predicate *fikil* is a reflex of the subject-verb agreement whereas the agreement on the clitic of a non-raising lexical predicate is a reflex of dislocation agreement found in so-called Broad Subject Constructions. We can push this DP-clitic phrase to be clausal in the sense it can host a CP complement parallel to a hyperraising structure. However, the distinction persists. The clausal construct predicate with its CP complement will constitute the subject phrase rather than T' phrase as in the raising structure. For instance, factual nominal predicates such as *iddifa:?* 'the claim' might show similarity with the usage of the raising predicate *shikil*; yet, they are different structures. The following example shows how the nominal predicate *iddifa:?* can host a clitic suffix that shows agreement with the subject and host a complement.

(34) Eman iddi<sup>°</sup>a:?-ha inn-u fa:z-at mish mazbu:t<sup>?</sup> Eman claim-3SF C-3SM win-PAST-3SF not right <sup>°</sup>Eman, her claim that she won is false<sup>°</sup>.

This structure is different from hyperraising in two respects. First, unlike raising predicates, such factual nominal predicates cannot link syntactically a subject with the main complement. Instead, they constitute with their complement a narrow subject to the broad subject *Eman*. This explains

why the predicate *mazbu:? 'right'* has masculine features, which indicates its agreement with the narrow subject *iddifa:?* rather than the broad subject *Eman*. Therefore, the following sentence is not complete since the predicate is still missing:

(35) \* Eman iddiSa:?-ha inn-u fa:z-at bil mubara Eman claim-3SF C-3SF win-PAST-3SF in-the game 'Eman, her claim that she won the match'.

Second, the syntactic relation between the DP *Eman* and this nominal predicate is different from a raising structure. The broad subject DP can be the specifier of the factual predicate*iddifa:?* by adopting a construct phrase, which is characteristic of lexical nouns as we have seen before.

(36) iddi?a:? Eman inn-u fa:z-at mish mazbu:? claim Eman C-3SM win-PAST-3SF not right 'Eman's claim that she won is not right'.

This shows that the hyperraising structure seems to look like a broad subject construction and the raising predicate *fikil* seems to behave as a construct phrase. However, this surface similarity weigh less in theory since the deep raising syntax of hyperraising shows distinguishing properties from ordinary lexical items (whether they select clauses or not). We can theorize that the agreement shown on the raising predicate is a reflex of the subject-predicate agreement resulting from the DP raising. While the agreement shown on non-raising clausual predicates such as the factual predicates is the actual thematic specifier that entails its construct relation with the subject constituting what is known as broad subject constructions. Thus, the predicate is *fikil* a genuine raising noun.

## 1.3 The copula *jaku:n*

As mentioned before, T is carried by the copula *jaku:n*. This copula is absent in present tensed clauses, but appears elsewhere (past, future, modality, conditionality. etc.). (Al-Balushi, 2012; Soltan, 2007; Henkin, 1993; Marshad and Suleiman, 1991; Farghal, 1988)

(37) Eman mabsu:t<sup>2</sup>a Eman happy 'Eman is happy'. (38) Eman ka:n-at/ra:ħ tku:n/mumkin tku:n mabsu:t<sup>2</sup>a Eman was-3SF/will be-SUBJ/might be-SUBJ happy 'Eman was/will be/might be happy'.

Regardless of the many analyses about this absence of the copula in the present tense, the literature (Benmamoun, 2000; Al-Balushi, 2012; Soltan, 2007; Henkin, 1993) agrees that this copula appearing elsewhere is the element that carries T features including agreement. Furthermore, since the matrix T is carried by the copula *jaku:n*, we end up with two different Ts: the matrix T and the embedded T. The following examples shows the copula appearing in the matrix clause as well as in the embedded clause:

(39) Eman ka:n-at ∫ikil-ha (inn-u) ka:n-at thib il-bu:za Eman be-3SF-PAST appearance-3SF (C-3SM) was-3SF-PAST like-INF-3SF the-ice-cream 'Eman seemed that she used to like the ice-cream'.

The embedded T of the hyperraising construction seems to show local behavior with respect to the matrix T. The matrix T always takes scope temporally over the embedded T in a sense that if the matrix T is past, the embedded T must be past. This temporal dependence of the embed T as a complement of a hyperraising construction can be a key property of the locality of the clause that contains the trace to the higher clause that contains the raised DP. Before going into the character of matrix T's temporal dominance of the embed T, it is essential to recognize how different tenses are realized in JA. The following paradigm illustrate those differences. Morphology including prefixation, infixation, and vowel harmony indicate tense. Aspect is indicated by the copula *jku:n.* The simple present form acquires the prefix *b* with the vowel pattern and the past simple acquires a vowel pattern with no affixes. The past progressive consists of the past copula *ka:n* showing agreement and the verb in the infinitive form with the *ja*-prefixation. The simple future consists of the particle *rah* that shows no agreement, but indicates futurity and appears only before the verb

(40)			
(10)	Form	Gloss	Tense
	bi-lSab	play-3SM	present
	liSib	play	past
	kan ji-l§ab	be-play-INF	progressive past
	raħ ji-lʕab	will play-INF	future

If we follow the rule that the matrix T must have a temporal scope higher than the embedded T, the grammaticality of this relation is predicted. Matrix present clause can host a future, present, or past clause. Matrix past clause cannot host a present or a future clause. This pattern shows a temporal order in a sense that the embedded T cannot have a tense higher than the matrix T following the intuition that the temporal order is linear where past precedes present and present precedes future. This explains why the temporal order in (41b) of the matrix T and the embedded T is not possible. If the matrix T is past tense, and the embedded T is present tense, this will violate the temporal restriction that the matrix tense must always *advance* the embedded tense in the linear temporal order.

- (41) a. [Matrix T [PRESENT] [Embed T [FUTURE/PRESENT/PAST]]]
  - b. \* [Matrix T [PAST] [Embed T [FUTURE/PRESENT]]]
  - c. [Matrix T [PAST] [Embed T [PAST]]]

Since English raising selects tenseless clauses, the temporal restriction of (41c) is not specified. In the following structure, the seeming structure occurs in the past tense. While the tense of liking the ice-cream is not specified.

(42) John seemed to like ice-cream

We can imagine two different temporal situations of the English infinitive clause in the above raising structure:

- 1. John seemed (in the past) to like ice-cream at that past moment, in other words, the seeming occurred in the past and John's liking the ice-cream occurred in the past.
- 2. John seemed (in the past) to like ice-cream in general, in other words, the seeming occurred in the past and John's liking ice-cream is a stative description of John in the present.

However, this non-specificity of the temporal interpretation of the infinitive clause relative to the matrix clause is expected since infinitive clauses are tenseless in principle. In JA, by contrast, the raising complement is finite showing both tense and agreement. As a result, instead of adopting tenseless clauses in raising contexts, Arabic imposes temporal *linear* restriction of the finite raising complements relative to their matrix clauses. The matrix T in the raising structure is indicated by the copula *jaku:n*. When the matrix T is present, the copula is absent and the matrix clause consists only of the subject and the raising noun. When the matrix T is past, it is indicated by the past copula *ka:n*. If it is future, it is indicated by the particle *raħ*. The following example shows that the matrix T is present since the copula is absent and the embedded T can be future, present, or past.

 (43) Muna ſikil-ha b-tru:ħ/raħ tru:ħ/raħ-at ſa soug Muna appearance-3SM go-3SF-PRES/will go-3SF-IFN/go-3SF-PAST
 'Muna seems to go/have gone/be going to the market'.

Now, if we assign past tense to the matrix T, and assign present tense to the embedded clause, the sentence crashes. The following example shows that the interpretation that Eman seems in the (default) present that she was playing football. It cannot give the interpretation that Eman seemed in the past that she is playing football

- (44) Eman ka:n-at ∫ikil-ha btil\ab kura Eman be-3SF appearance-3SF like-3SF-PRES football
  - a. 'It seems that Eman used to play football'.
  - b. \* 'It seemed that Eman plays football'.

If this is the case, the past copula *ka:n* in the matrix clause cannot address the matrix clause. It must have been moved from a base position belonging to the embedded clause. By this logic, the matrix T ends up being present regardless of the copula dislocation in its clause and the embedded T is interpreted as past by the *jaku:n-IFN* phrase as *ka:n-at btilSab* 'be-3SF-play-IFN'. Therefore, the above example has the same interpretation of a sentence where this dislocated copula is placed in its embedded base position. This prediction is borne out. Both interpretations are equivalent by yielding the interpretation that the seeming is in the present and the playing is in the past and by excluding the interpretation that the seeming is in the past and playing is in the present.

 (45) ∫ikil-ha ka:n-at btilSab kura appearance-3SF be-3SF play-3SF-PRES football 'It seems that she was playing football'.

The embedded copula *ka:n* carries tense and agreement and can be dislocated to the left or to the right of the raising noun in the matrix clause. It can also appear to the right periphery of the structure, and the interpretation remains that the matrix T is present and the embedded T is past.

(46) ∫ikil-ha b-tilSab kura, ka:n-at appearance-3SF play-PRES-3SF football be-3SF 'It seems that Eman was playing football'.

The possible grammatical union of the copula with the present form occurs in the past progressive, which is an aspectual rule in Arabic. The fact that the copula carries agreement seems to make dislocation an option for the copula's movements in different positions. Across these positions, agreement match occurs between the copula and the verb. Movement is viable through agreement. We can push this T's scope dominance further if we look into the behavior of the future particle  $ra\hbar$ . This particle does not show agreement nor does it have any derived forms influenced by tense or any other factors. The prediction will be that it is not viable for movement, which is true. It cannot appear at any position (initial, right periphery) except for being in the immediate position before the addressed verb. This supports a stronger correlation between movement and agreement.

(47) (\*raħ) Omar (raħ) ji-sa:fir (\*raħ)
 (will) Omar (will) travel-3SM-INF (will)
 'Omar will travel'.

Differentiating between *raħ* in the sense of the modal *will* and *rah* in the sense of the modal *would* depends on inserting the past copula as *ka:n-at raħ tsa:fir* 'she would travel'.

 (48) ∫ikil-ha ka:n-at raħ tsa:fir appearance-3SF be-3SF will travel-3SF-INF 'It seems that she would travel'. We can have the past copula dislocated to the left of the raising noun in the matrix and we still get the interpretation that she would travel. It cannot give the interpretation that it seemed in the past that Eman will travel. The past copula in the matrix clause *ka:n* must be interpreted in the embedded clause with the particle  $ra\hbar$ , in order to yield the *would* interpretation. By this logic, following the surface structure, the matrix T would be past hosting an embedded T in future, which violates the temporal hierarchy for past T to be higher than future T. Adopting copula dislocation, we end up with the matrix T as present hosting an embedded T of past future, which is the correct temporal order for this structure.

(49) Eman ka:n-at ∫ikil-ha raħ tsa:fir Eman be-3SF appearance-3SF will travel-3SF-INF 'It seems that Eman would travel'.

We can have a structure where the matrix T is past and it hosts a past embedded T. This is legal where the past copula appearing in the matrix clause and the embedded clause independently indicates past. Now, the embedded T contains a verb indicating simple past by its verb inflection. The copula, in this case, need not be interpreted in the embedded clause because embedded T is assigned simple past tense by its own verb. Therefore, the copula here belongs to the matrix clause which describes the state of seeming occurring in the past. Here, past takes scope over past, and the temporal hierarchy of T's dominance is preserved.

(50) Eman ka:n-at ∫ikil-ha inn-u ziSlat min Ali Eman be-3SF-PAST appearance-3SF C-3SM get mad-3SF-PAST from Ali 'It seemed that Eman got mad from Ali'.

This temporal local behavior of the embedded T is absent in strong phase CPs. For instance, the predicate *ga:l* 'said' can host a strong CP complement. The matrix T can be past and the embedded T can be future or present, e.g. Ahmad said in the past that she travels by car in the present. Unlike embedded T of a hyperraising construction, the embedded T is temporally independent

(51) a. Ahmad ga:l inn-u Mariam btsa:fir bisija:ra Ahmad said C-3SM Mariam travel-3SM-PRES by-car 'Ahmad said that Mariam travels by car'.

This section has shown that the hyperraising matrix T is expressed by the copula *ka:n* since the raising predicate in JA is actually a noun. The argument is that the embedded T in hyperraising construction is temporally dependent on the matrix T. This seems to apply to the data since whenever a past matrix T hosts a present or a future embedded T, the sentence becomes ill-formed. This relation indicates the bi-clausality of the hyperraising construction as well as the temporal dependency between the embed T and the matrix T.

## 1.4 The Structure of Arabic Hyperraising

As we have seen earlier, the target raising predicate is the raising noun *fikil* and the matrix T is indicated by the copula *jaku:n*. JA is distinguished among Arabic dialects for this heavy use of default pronouns in different contexts such as the complementizer *inn* as in *inn-3SM* 'C-3SM', *ka-inn-u* 'like-C-3SM', *la-inn-u* 'because-C-3SM', etc. This default clitic also appears with the raising noun *fikil* as *fikl-3SM*. The overt pronominal realization is significant as it recognizes a minimal contrast between the hyperraising structure (full agreement with the subject) and the expletive structure (default features).

- (52) Eman ∫ikil-ha (inn-u) bitħib il-bu:za Eman appearance-3SF (C-3SM) like-Pres the-ice-cream 'Eman seems that likes ice-cream'.
   Int.: Eman seems to like ice-cream
- (53) ∫ikl-u (inn-u) Eman bitħib il-bu:za appearance-3SM (C-3SM) Eman like-PRES the-ice-cream 'It seems that Eman likes ice-cream'.

We can motivate this expletive-like status of these default features by bringing up the suppressed copula *kaan* in its licensing contexts (e.g. past). The following sentence shows how the copula adopts default masculine features, which agrees with the default masculine features of the null expletive of the raising noun whereas full agreement is not possible since it would target the unraised subject Eman not the expletive: (54) kaan/\*ka-nat ∫ikl-u (inn-u) Eman bitħib il-bu:za was-3SM/\*was-3SF appearance-3SM (C-3SM) Eman like-PRES the-ice-cream 'It seemed that Eman likes ice-cream'.

Based on this agreement contrast, we also can create a minimal contrast between hyperraising and topicalization. Topicalization in Arabic is analyzed either as base-generation or as A-bar movement (Aoun et al., 2010). Regardless of that, the dislocated DP cannot enter into agreement match with the predicate of the matrix clause because this DP will be contained in its own projection, which is higher than the domain of TP. Accordingly, we expect hyperraising to show a full agreement pattern as opposed to topicalized structures where we expect anti-agreement. The prediction is borne out:

(55) Eman fikl-u (inn-u) bitħib il-bu:za Eman appearance-3SM (C-3SM) like-PRES the-ice-cream 'Eman, it seems that she likes ice-cream'.

This is also evident from the fact that objects can also be topicalized in this split agreement structure while leaving a co-indexed resumptive pronoun in the small clause. By contrast, this is impossible with hyperraising because the raising noun targets only subject hyperraising.

- (56) a. Eman ſikl-u Ahmad ſa:f-ha Eman appearance-3SM Ahmad saw-her 'Eman, it seems that Ahmad saw her'.
  - b. \* Eman ſikil-ha Ahmad ſa:f-ha Eman appearance-3SF Ahmad saw-her 'Eman seems that Ahmad saw her'. Int.: It seems that Ahmad saw Eman.

This analysis makes sense since the full agreement pattern targets subject-hood with respect to A-movement whereas the default features behave expletive-like with respect to topicalization.

# 1.5 Syntactic Diagnoses of Hyperraising

So far, we have seen that hyperraising mainly targets, as an A-movement, the extraction of the DP out of a tensed clause to the matrix position. In the case of *fikil*, if the case is actually raising, movement should adhere to the universal properties of raising. A key property is locality

between the raised DP and the trace. Following Chomsky's insight (1981) that traces are locally anaphoric to their antecedents, the hyperraising construction is expected to show a parallel behavior. Therefore, although the finiteness constraint of A-movements does not hold strong in Arabic, locality principle is preserved. This split of locality from finiteness was reported by Moore's analysis of Turkish in a very similar fashion (Moore, 1998). Therefore, we will be looking into the diagnoses that reveal evidence for the raising behavior of the hyperraising construction.

#### 1.5.1 Intervention Effects

First, unlike Brazilian Portuguese (Nunes, 2019), Arabic null subjects are not local to their antecedents. They seem to show referential freedom as pronouns. For example, the null subject of the verb *xisir* 'lost' can refer locally to intermediate A-position *Omar* or can refer to the matrix subject *Ahmad*.

(57) Ahmad<sub>i</sub> ga:l inn-u Omar<sub>k</sub> fakkar inn-u  $pro_{i,k}$  xisir Ahmad say-3SM-PAST C-3SM Omar think-3SM-PAST C-3SM (*he*) loose-3SM-PAST 'Ahmad said that Omar thought that he lost'.

Therefore, embedding successive CPs is a natural phenomenon in JA. However, in a raising context, this embedding of an intermediate CP is entirely illegal.

(58) a. \* Eman ſikil-ha (inn-u) il-mudi:r fakkar inn-u bitdarris ingli:zi
 Eman appearance-3SF (C-3SM) the-principal though C-3SM teaches-3SF English
 'Eman seems that the principal thought that she teaches English'.
 Int.: It seems that the principal thought that Eman teaches English.

(JA)

b. \* il-ʃaba:b ʃikil-hum (inn-u) Sara ʕirfat inn-u raħ jsa:fr-u the-boys appearance-3MPL (C-3SM) Sara knew-3SF C-3SM will be-flying-3MPL il-jo:m the-day
'The boys seem that Sara knew that they are flying today'. Int.: It seems that Sara knew that the boys are flying today.

This is an interesting finding because it shows that hyperraising is sensitive to an intervention effect. As Moore suggested for Turkish (Moore, 1998), it seems that Turkish violates the Nom-inative Island Condition (NIC), which dictates that A-movement only occurs out of non-finite

clauses, but it always shows sensitivity to an intervening intermediate CP. It is clear that intervening CPs always block hyperraising. This also applies to intervening expletive-null structures. The intermediate CP of *muhtamal* 'likely' blocks movement as it hosts a null expletive indicated by the default features of the adjective.

 (59) \* Eman ∫ikil-ha muħtamal inn-u fa:z-at Eman appearance-3SF likely-3SM C-3SM win-3SF-PAST 'Eman seems it is likely to win'. English structure: It seems that Eman is likely to win.

The intervention effect of intermediate CPs also applies to hyperraising in Brazilian Portuguese (Fong, 2017, 2018). The argument is that the left item is a trace which leaves a local relation with its antecedent, and therefore, an intervening CP will distort such a local environment. The intervention effect is a feature of this locality which supports the trace-analysis of hyperraising. This effect seems more evident if we consider non-local structures such as dislocation. The case is that the intervention effect will no longer be effective when it comes to topicalziation. This stands as a fine minimal contrast with hyperraising. Topicalization is a split structure in a sense that the dislocated DP does not enter into agreement match with the raising noun. instead, *fikil* preserves its features as expletive default features. Therefore, there is agreement split between the dislocated DP and the adjacent raising predicate. Consider the following topicalized versions of the previous HR structures where the effect does not apply and the sentences are grammatical.

(60)a. Eman ∫ikil-u (inn-u) il-mudi:r fakkar inn-u bitdarris appearance-3SM (C-3SM) the-principal though C-3SM teaches-3SF Eman inglizi English 'Eman, it seems that the principal thought that she teaches English'. b. il-shaba:b ſikil-u (inn-u) Sara Serfat inn-u rah jsa:fr-u the-boys appearance-3SM (C-3SM) Sara knew-3SF C-3SM will be-flying-3MPL il-jo:m the-day

'the boys, it seems that Sara knew that they are flying today'.

This shows a clear minimal contrast between hyperraising and topicalization with respect

to this domain of locality. Another finding is that it is only intermediate full CPs containing Apositions that are able to show this effect. In the case of intermediate A-bar positions, the case stays legal. Unlike English, Arabic can topicalize or focus a DP out of embedded clauses. In most cases, topicalzied DPs leave resumptive clitics as in (61a) and focused DPs with traces as in (61b) and they are perceived as A-bar positions (Aoun et al., 2010; Cinque, 1990).

(61)	a.	Eman fakkar-at (inn-u) il-mudarris ∫a:fat-u mba:riħ	
		Eman thought-3SF (C-3SM) the-teacher saw-ACC-3SM yesterday	
		'Eman thought that the teacher, she saw him yesterday'.	
		Int.: Emn thougt that she saw the teacher yesterday.	(topicalization)
	b.	Eman fakkar-at (inn-u) il-mudarris ∫a:fat <i>t</i> mba:riħ	
		Eman thought-3SF (C-3SM) the-teacher saw-3SF $t$ yesterday	
		'Eman thought that the teacher she saw yesterday'.	
		Int.: Eman thought that the she saw the teacher yesterday.	(focus)

Since this syntactic context is possible in JA, we can create a context where we have these A-bar moved DPs in intermediate positions relative to the A-movement of hyperraising, and the sentence stays acceptable. This implies that intervention effect is not merely an effect of the existence of some intervening item in the linear order since A-bar intervening items do not induce such an effect. Rather, it is the type of intervention such as the intermediate CPs that can distort the locality between the trace and the raised DP. Example (62a) shows the DP *il-mudarris* 'the teacher' is topicalized out of the embedded clause and leaving an object clitic attached to the verb. This DP stands between the trace and the antecedent *Eman*. Example (62b) shows that the same DP is focused out of the embedded clause leaving a trace in the object position, which stands in-between. Neither the topicalized DP nor the focused DP induces any intervention effect.

- (62) a. Eman<sub>i</sub> jikil-ha (inn-u) il-mudarris-i<sub>k</sub>  $t_i$  ja:fat-ha<sub>k</sub> mba:riħ Eman<sub>i</sub> appearance-3SF (C-3SM) the-teacher-F<sub>k</sub>  $t_i$  saw-3SF-ACC-3SF<sub>k</sub> yesterday 'Eman<sub>i</sub> seems that the teacher<sub>k</sub>  $t_i$  saw-her<sub>k</sub> yesterday'. Int.: It seems that Eman saw the teacher.
  - b. il-Jaba: b<sub>i</sub> Jikil-hum (inn-u) Zeina<sub>k</sub> 3a Kareem<sub>y</sub>  $t_i$ the-boys<sub>i</sub> appearance-3MPL (C-3SM) Zeina<sub>k</sub> to Kareem<sub>y</sub>  $t_i$ introduced-PL-ACC-3SF<sub>k</sub>  $t_y$ Yarrafu:-ha<sub>k</sub>  $t_y$ 'The boys seem that Zeina to Kareem introduced-her'.

Int: It seems that the boys introduced Zeina to Kareem.

It is only intermediate CPs that are able to block A-movement of hyperraising because the trace will no longer contained in its local domain. We can support this locality analysis more if we bring up the minimal contrast between hyperraising structures and copy raising structures. The case of copy raising with respect to locality and other factors will be discussed in more detail in chapter three. Now, let us move on to the second diagnosis, reconstruction.

#### 1.5.2 Reconstruction

Since raising leaves a trace, the raised subject should be able to be interpreted in its high position as well as in its low position in contrast to control constructions where the interpretation must be in its high position (Hornstein, 1999). We can test out this difference if we look into the interpretation of indefinite DPs with respect to quantified DP experiencers. First, JA like English can have an ambiguous reading between the existential interpretation and the universal interpretation. Therefore, JA's quantified expressions seem to parallel in this respect to the English ones. JA does not have an indefinite particle such as the English *some* to address DPs. There might be ambiguity between what indefinite DPs are (e.g. a cat) and what quantified indefinite DPs are (e.g. some cat). However, we can use the modifier *mfajjan* meaning *specific* to show the quantified status of the indefinite DP. This modifier seems to behave as an indefinite quantifier in a similar fashion to the English *some*. Therefore, it is not lexical modification in the complete strict sense. The example below shows the availability of the two readings: (i) *the universal*: there is a different book for every student to read and (ii) *the existential*: there is one specific book that every student reads.

 (63) kul t<sup>2</sup>a:lib bi-gra? kita:b mSajjan every student read-3SM-PRES kita:b specific 'Every student reads some book'.

In the case of raising, we expect to have the ambiguity between the two readings provided that we have the proper environment. This applies if we try to push the reconstruction of indefinite DP subject into an embedded clause that contains a quantifying expression. This reconstruction applies in raising contexts only. (64a) can only have the existential meaning of the DP, which can refer to a specific different student in the context of discourse. This also applies to (64b) with the control verb *qarrar* 'decide' since it is a base-generation structure. The universal interpretation is not tenable in either of them. However, with (64c), the structure ends up being ambiguous, which entails that the DP be in the embedded clause, thus allowing interaction with the quantifying DP *kul kita:b*.

- (64) a. t<sup>2</sup>alib muxtalif ga:l inn-u kul kita:b ka:n mrattab student different-3SM say-3SM-PAST C-3SM every book was-3SM nice-3SM 'A different student said that every book was nice'.
  - i. *muxtalif* has scope over *kul*
  - ii. \* the Q *kul* has scope over *muxtalif*
  - b. t<sup>2</sup>alib muxtalif Garrar jigra' kul kta:b student different-3SM decide-3SM-PAST read-3SM-INF every book 'A different student decided to have read every book'.
    - i. *muxtalif* has scope over *qarrar*
    - ii. \* *qarrar* has scope over *muxtalif*
  - c. t<sup>2</sup>alib muxtalif ∫ikl-u inn-u bigra? kul kta:b student different-3SM appearance-3SM C-3SM student every book 'A different student seems to read every book'.
    - i. *muxtalif* has scope over *kul*
    - ii. *kul* has scope over *muxtalif*

This is a plausible minimal contrast between the hyperraising structure and non-raising structures with respect to universal vs. existential readings. We can push reconstruction effects along the analysis of hyperraising if we look into how the indefinite DPs can be interpreted in the higher or lower position. Example (65a)is an unraised structure as we can see that the default features of the raising noun *shikil* and the feminine DP *mwat<sup>2</sup>in-i* do not enter into subject agreement match as raising structures do. Now, the indefinite DP *mwatin-i* 'a female citizen' is in its base position and the structure should be interpreted with respect to this base low position of the indefinite DP. In the case of example (65b), the same DP is hyperraised, triggering two readings. This implies that there is a trace position in the embedded clause that enables the indefinite DP to be interpreted in the low position.

- (65) a. ∫ikl-u inn-u ma:t-at mwat<sup>2</sup>in-i appearance-3SM C-3SM die-3SF-PAST citizen-3SF 'It seems that a citizen died'.
  - b. fi muwat<sup>2</sup>in-i<sub>i</sub> jikl-ha inn-u ma:t  $t_i$ In citizen-3SF<sub>i</sub> appearance-3SF C-3SM died-3SF-PAST  $t_i$ 'There is a citizen seems to have died'.

We can also have a numeral-modified DP that can be interpreted under the scope of a quantified expression positioned in the embedded clause. This stands as evidence that the DP must have been in the embedded clause before it raises to the matrix clause. The reconstruction effect shows that the dual DP *labe:n* 'two players' is either interpreted out of the quantifier's scope *kul jo:m* 'everyday' or interpreted being within the scope of Q meaning that Q c-commands the NP at LF (any two players) (Chomsky, 1981).

(66) fi: laSbe:ni ∫ikil-hum inn-u bint<sup>2</sup>ardu ti from the-match every In players-dual appearance-3MPL C-3SM Pass-kicked-out-3MPL min il-muba:ra kul day jo:m
 'There are two players seem to be kicked out from the metch everyday'

'There are two players seem to be kicked out from the match everyday'.

Note that the quantified expression modifies the embedded verb  $bint^2 ardu$  (kick) rather than the raising predicate *fikil* (appearance). This means that the universal interpretation is not computed as a result of the covert movement of the quantified expression. Instead, the nature of raising (thus, hyperraising) implies that the DP is in the embedded clause and shows universal interaction with the quantified expression. We can strengthen this assumption if we move the quantified expression to the left periphery of the embedded clause; immediately after the complementizer *inn-u*. This movement guarantees that the quantified expression modifies only the embedded clause, and we still get the same outcome about raising with respect to reconstruction.

(67) fi: la<sup>s</sup>be:n<sub>i</sub>  $\int$ ikil-hum inn-u kul jo:m bint<sup>2</sup>ardu  $t_i$ In players-dual appearance-3MPL C-3SM every day Pass-kicked-out-3MPL from the-match min il-muba:ra 'There are two players seem to be kicked out from the match everyday'.

The fact that the raised NP is able to reconstruct in the embedded clause implies that there is a

genuine type of raising involved in such constructions.

### 1.5.3 Idiom Chunk Movement

Idiom chunk movement has also been taken as evidence for A-movement (Chomsky, 1981) since this movement preserves the idiomatic meaning implying that the moved DP has a base position in the embedded clause, otherwise, the meaning crashes. This preservation is licensed only if there is a raised position and a trace position. However, it is argued that there is a scale of degree among idioms in terms of being metaphorical, weak or strong idioms. For instance, den Dikken argues that idiom chunks are not always uniform in allowing movement. This applies to the idiosyncratic case of *kick the bucket* with respect to tough movement:

(68) a. Headway is easy to make on this projectb. \* The bucket is easy to kick

However, we can dispense with den Dikken's observation by the fact that *kick bucket* is a strong idiom, which might be stored as a whole in the lexicon and be accounted for by an impoverished rule (Halle, 1997). This idiosyncratic strength of idioms also appears in Jordanian Arabic. For instance, the idioms in (70a) and (70b) cannot be raised with *fikil*. The base structure of the idiom in (70a) is the VS word order *inkasar xatru* 'His mind broke'. In (70b), the idiom is used in an active structure where the DP *ras* is in object position viz. *akal ras-u* 'He ate his head'. It seems that the canonical position of the DP in post-verbal or in object position is strongly preferred as in (69a,b):

(69)	a.	in-kasar xat <sup>?</sup> r-u	
		broken-3SM-PASS mind-his	
		'his mind was broken'.	
		Meaning: he got upset.	(VS order)
	b.	ita:kal ras-i	
		east-3SM-PASS head-my	
		'his head was eaten'.	
		Meaning: I had a headache.	(VS order)
		-	

Once it is raised, the idiom seems to lose its meaning. This is expected if we treat such idioms as of *kick the bucket*-type.

- (70) a. \* xat<sup>2</sup>r-u ∫ikl-u in-kasar mind-his appearance-3SM broken-3SM-PASS 'his mind seems to be broken'. Meaning: he got upset.
  - b. \* ras-i ∫ikl-u ita:kal head-my appearance-3SM eat-3SM-PASS 'my head was eaten'. Meaning: I had a headache.

On the other hand, metaphorical-like idioms (weak idioms) are not strong evidence of raising because of their metaphorical interpretation.

(71)	a.	t <sup>²</sup> ndʒara o	lagat yataa-ha	
		pan and	d found cover-PO	SS-3SF
		<sup>•</sup> A pan foun	d its cover.'	
		Meaning: It	is said when two	people (or two things) match.
	b.	nifs-i	in-saddat	min ir-r:ha
		Appetite-F-1	ny Pass-shut-dov	vn-3SF from the-smell
		'My appetite	e was shut down	from the smell'.
		Meaning: I	ost my appetite l	pecause of the smell.

Weak idioms often seem to allow raising. For instance, the image in (72a) is a pan finding its cover as a metaphor for matching and the image in (72b) is the apatite being blocked as a metaphor for losing one's appetite. These examples remind us of the English weak-type idioms, e.g. *the cat seems to be out of the bag*.

- (72) a. t<sup>2</sup>ndʒara o ∫ikil-ha lagat yataa-ha pan and seems-3SF found cover-POSS-3SF 'A pan found its cover'.
   Meaning: Two people (or two things) match.
  - b. nifs-i ∫ikil-ha in-saddat min ir-r:ha appetite-F-my appearance-3SF Pass-shut-down-3SF from the-smell 'My appetite seems that t was shut down from the smell'. Meaning: It seems I lost my appetite from the smell.

We can dispense with the difference between *strong* and *weak* idioms in Jordanian Arabic. The following idiom is more abstract in its metaphorical imagery than the image of the pan as in example (72a) above. This idiom might be analogous to the idiom-type of take advantage of.

- (73) a. in-galbat il-a:j-i PASS-turn around the-verse-3SF 'was turned around the verse'
  - b. il-a:j-i ∫ikil-ha in-galbat
     the-verse-3SF appearance-3SF PASS-turned around
     'The verse seems to be turned around'
     Meaning: The situation is reversed

Therefore, it can be said that idiom chunk movement in Arabic seems to behave like English raising of idiomatic chunks. This may be compared to the behavior of hyperraising in topicalization . In the case of subject topicalization, A-bar movement preserves the idiomatic meaning and a resumptive pronoun is encoded in the embedded clause. The only difference between hyperraising and subject topicalization is agreement in the idiomatic chunk movement.

(74) il-a:j-i fikl-u/fikil-ha in-galbat
 the-verse-3SF appearance-3SM/appearance-3SF PASS-turned around
 'The verse seems to be turned around'.
 Meaning: The situation is reversed.

However, since we can topicalize an object as well, a minimal contrast can be drawn between the grammaticality of object topicalization, which preserves the idiomatic meaning, and the ungrammaticality of idiomatic hyperraising because the idiom loses its meaning, viz. the raising noun *fikil* licenses A-movement of subjects, but not objects. This prediction is borne out.

- (75) a. \* katli<sub>i</sub> mratab-i fikl-ha makil  $t_i$  mba:riħ beat<sub>i</sub> good-3SF appearance-3SF PART-eating-3SM  $t_i$  yesterday 'good beat seems he ate yesterday'. Meaning: He got strongly beaten.
  - katli mratab-i ∫ikl-u makil-u mba:riħ
     beat good-3SF appearance-3SM PART-eating-3SM-clitic-3SM yesterday
     'good beat seems he ate it yesterday'.
     Meaning: He got strongly beaten.

#### 1.5.4 Hyperraising of expletives

The last diagnosis in this section is the hyperraising of the overt locative expletive *fi*. As a *pro*drop language, JA expletives are null in principle, however, their default features (3SM) can still be present on the target item as we have seen earlier when raising the noun *fikil* or the COMP *inn-3SM*. To explain, locative expletives are overt in Arabic and they are of two types: the adverbial pronoun *huna:k* 'there' and the preposition *fi:* 'in'. One should note that the preposition *fi* is different from the non-expletive preposition *bi*. Consider the following example:

(76) fi: bissi bi-l-balaconiin car-F in-the-balcony'There is a cat in the balcony'.

We can apply hyperriasing and the agreement must show default features (3SM), otherwise, the match fails.

(77) fi ∫ikl-u/\*∫ikil-ha bissi bi-l-balcony in appearance-3SM/\*appearance-3SF cat-F in-the-balcony 'There seems to be a cat in the balcony'.

Also, the copula is supposed to be part of the *cat*-clause rather than the matrix clause as in English. However, the JA copula is absent in present tense. The facts about agreement can be motivated if we insert the copula in its licensed context (let's say Past T). The prediction is that if this copula appears before the raising noun, it will show default features which agree with the raised subject as in (78a). By contrast, if this copula appears right to the raising noun and left to the DP *bissi* 'cat' as in (78b), it will be able to show agreement with this embedded DP. And this is what we actually get. This pattern of agreement shows congruence with respect to locative expletive structures since default features indicating subject-verb match those of expletive-copula on the one hand, and full agreement shows copula-DP agreement, which resembles in some abstract level the infinitival fashion of *to be a cat* on the other. Full agreement must appear because it is a consequence of hyperraising in general.

- (78) a. fi kaan/\*kaan-at ∫ikl-u bissi bi-l-balcony in was-3SM/was-3SF appearance-3SM cat-F in-the-balcony 'There seemed to be a cat in the balcony'.
  - b. fi ∫ikl-u ka:n-at bissi bi-l-balcony in appearance-3SM was-3SF cat-F in-the-balcony 'There seems that was a cat in the balcony'.
    Int.: It seems there was a cat in the balcony.

Agreement seems to support the subjecthood status of the locative expletive. Apart from the agreement diagnosis, expletives in general cannot fill A-bar moved positions. JA is reported to show a typical order of A-bar positions with respect to subjects as follows:[*Topic*[*Focus*[*Subject...*]]] where topics often precede focused DPS, which, in their turn, precede subjects. Based on this argument, expletives can never be in a position to the left of an A-bar position (whether it be topic or focus). This clearly supports the claim that this locative expletive fills a subject position and must come after A-bar positions. Consider the well-formedness of (79a) where the topicalized DP occurs before the expletive subject and the ungrammaticality of (79b) where the expletive subject occurs before the topicalized DP.

- (79) a. Ahmad<sub>k</sub> fi:<sub>i</sub>  $\int$ ikl-u  $t_i$  sha:fat-u<sub>k</sub> Ahmad<sub>k</sub> there<sub>i</sub> appearance-3SM  $t_i$  saw-u<sub>k</sub> 'Ahmad, there seems to be a girl that saw him'.
  - b. \* fi:<sub>i</sub> Ahmad<sub>k</sub> jikl-u  $t_i$  ja:fat-u<sub>k</sub> there<sub>i</sub> Ahmad<sub>k</sub> appearance-3SM  $t_i$  saw-u<sub>k</sub> '\*There, Ahmad seems to be a girl that saw him'.

# 1.6 Hyperraising vs. Infinitival raising

There seems to be a parallel between English infinitives and Arabic tenseless clauses. The tenseless morphology adopts the Standard Arabic forms for present conjugation. This conjugation only appears in infinitival-like contexts in JA, using the prefixes '*a*-1S, *na*-1PL, *ja*-3SM, *ta*-3SF, *etc*. and showing agreement unlike English infinitives. We can call it *ja*-morphology. This parallel of context is evident since control infinitives, ECM-like contexts, let-type of verbs, and universal PRO infinitives trigger tenseless complements (showing *ja*-morphology). Yet, this parallel fails when it comes to the complement of the raising predicate *fikil*. The complement must show tense, adopting primary tensed morphology by using prefixes such *ba-1S*, *bi-3SM*, *ti-2S*, *etc.*. Let's call it *ba*-morphology where there are two morphological paradigms: the unmarked paradigm (indicative morphology) and the marked paradigm (infinitival morphology).

(80)		
(00)	Form	Features
	l?ab	root
	<b>ba-</b> l?ab	1S
	<b>bni-</b> l?ab	1PL
	<b>bti</b> -l?ab	2SM
	<b>bti</b> -l?ab-i	2SF
	<b>bti</b> -l?ab- <b>u</b>	2MPL
	<b>bji</b> -l?ab	3SM
	bti-l?ab-i	3SF
	<b>bja</b> -l?ab-u	3MPL
	bi-l?ab-in	3FPL

*ba*-morphology: the present conjugation of the root *l?ab* 'play':

*ja*-morphology: the default present conjugation:

(it is default because it is only present in the Standard form, but the inflection does not indicate tense in JA).

(81)		
(01)	Form	Features
	l?ab	root
	<b>a-</b> l?ab	1S
	<b>ni</b> -l?ab	1PL
	<b>ti</b> -l?ab	2SM
	<b>ti</b> -l?ab-i	2SF
	<b>ti</b> -l?ab- <b>u</b>	2PL
	<b>ji</b> -l?ab	3SM
	ti-l?ab	3SF
	ji-l?ab-u	3MPL
	ji-l?ab-in	3FPL

We can see that the tenseless conjugation indicates full agreement specification with the default forms. Looking into these two main paradigms of verb conjugation should help examine the parallel of the tenseless conjugations which appear in infinitival contexts. All the examples below adopts *ja*-conjugation, but they fail when applying with *shikil*-hyperraising.

- (82) a. bed-u jru:h want-3SM Ja-leave 'He wants to leave'.
  - b. xali:-ni aru:h let-ACC-me Ja-leave 'Let me leave'.
  - c. tru:h la-ha:lak jna:n go-INF-2SM by-yourself madness 'To go alone is madness'.
  - d. batwaqa<sup>°</sup> Omar yrawih expect-1SM Omar Ja-leave 'I expect Omar to leave'.
  - e. Omar shikl-u \*jihib/bihib il-bu:za Omar appearance-3SM ja-like/ba-like the-ice-cream 'Omar seems to like ice-cream'.

The hyperraising construction must select a tensed clause using the *ba*-morphology. It is puzzling why it does not select a tenseless complement like English infinitives with raising predicates (e.g. *seem*). In a tensed clause, we obtain a verb with proper conjugation based on tense, person, number, and gender as in (83a). There are also agentive NPs derived from verbs which indicate that the action is in the perfective rather than only indicating tense. This agentive NP can ambiguously mean the perfective present, stative adjectives, and perfective future. Example (83b) can mean: (i) Eman seems to have left, (ii) Eman seems to be going and can be strengthened by inserting the future adverb *bukra* 'tomorrow', and (iii) there is the stative interpretation where the participle NP *mrawha* 'going' can mean the state of the subject *Eman* (e.g. seeing the bags packed, Eman seems in a leaving state).

- (83) a. Eman ∫ikil-ha rawah-at
   Eman appearance-3SF leave-3SF-PAST
   'Eman seems to have left'.
  - b. Eman ∫ikil-ha mraw-ha (bukra)
    Eman appearance-3SF leaving-3SF-PART (tomorrow)
    'Eman seems to be leaving (tomorrow)'.

This shows that the hyperraising complement of the evidential predicate *fikil* can appear in non-perefective and perfective contexts like English infinitival complements. The hyperraising construction can be tensed in other infinitival-like contexts. For example, we expect VP complements of modals and the TP complement of ECM-like predicates to appear as non-finite clauses inflected with *ja*-morphology. This prediction is borne out with modals and ECM-like verbs.

- (84) a. lazim/mumkin/il-mafrud<sup>?</sup> ju-drus must/possible/supposed study-3SM-INF 'He must/should/ought to study'.
  - b. batwaqa<sup>§</sup> Omar (inn-u) ji-sa:fir expect-1S Omar (C-3SM) travel-3SM-INF <sup>§</sup>I expect Omar to travel'.

However, this parallel breaks down again in the context of ECM (Exceptional Case Marking). This context shows that the DP seems to appear in a case-marked object position, but is interpreted semantically as the subject of the non-finite embedded clause (Chomsky, 1981). We have seen that this description seems to apply in JA as in (84b) above where Omar is placed in the object position of the matrix clause and is interpreted as the subject of a non-finite clause (*ji-sa:fir*). Also, a perfective non-finite clause with ECM-type of predicates can be embedded in a parallel manner to perfective English infinitives. This is applicable if we use participle agentive NPs (e.g. *msa:fir* as the main predicate of the embedded clause and then insert the copula *ji-ku:n* in the tenseless mood with the ECM predicate

(85) batwaqa<sup>S</sup> Omar ji-ku:n msa:fir expect-1S Omar be-3SM-INF travel-3SM-PART 'I expect Omar to have travelled'.

Unlike *fikil*-hyperraising, ECM raising structures seem to behave in parallel with English raising structures with respect to non-finiteness and perfectiveness. However, although JA has a non-finite version of ECM, it still has the option of hosting a tensed clause.

(86) atwaqa<sup>Y</sup> Omar inn-u fa:z bil-mubara expect-1SM Omar-ACC C-3SM won-3SM the-match 'I expect John that won the match'. Int.: I expect John to have won the match.

We know this case is impossible in English because English raising is categorically infinitival. In English, to implicate that the non-finite embedded verb is completed requires using a perfect tense of the verb. However, raising the DP out of the finite clause to the matrix object position is not possible in English.

- (87) a. John expects that Mary won the match
  - b. \* John expects Mary that won the match
  - c. John expects Mary to have won the match

Therefore, the tenseless complements in JA seem to behave as infinitival clauses. When it comes to hyperraising contexts such as subject raising and ECM, the option of extracting a DP out of a tensed clause is possible in JA, which makes it different from English-type languages. Hence, it is not the case that Arabic does not have infinitival-like contexts because hyperraising is possible. The case is that JA is infinitival and parallel their English counterparts, but Arabic also has an extra strategy that allows raising to occur out of tensed clause, which is known as hyperraising. We have already seen that hyperraising and infinitival-like contexts are in complementary distribution when it comes to *fikil*-raising because it allows the former, but it rejects the latter. In the case of ECM, this complementary distribution is not sustained since ECM predicates can select raising non-finite clauses as well as hyperraising finite clauses. With control infinitival complements, the embedded clause can only be non-finite. So, they are completely parallel to those of English. Following part of Martin (2001), control infinitives might be actually tensed at some level. Regardless of whether Martin's generalization is empirically true or not, there seems to be some opaque futurity associated with control infinitives, which is dependent on control predicates. At least, there might be difference between raising infinitives and control infinitives. If this is the case, it is predicted that control predicates cannot select finite clauses the way it is with *fikil* or exceptional case marking verbs. If we apply Hornstein's movement analysis of control (Hornstein, 1999), the analysis will apply parallel to that of English. There is no case of *control* hyperraising. The difference remains that JA tenseless control clauses are embedded in CPs. However, we have seen that the head C appears everywhere regardless of the syntactic

context, and it seems to be independent of the embedded T. This is a plausible description of how Arabic control structures behave.

- (88) a. Maria bed-ha (inn-u) t-na:m Mariam want-3SF (C-3SM) sleep-3SF-INF 'Mariam wants to sleep'.
  - b. \*Maria bed-ha (inn-u) na:m-at Maria want-3SF (C-3SM) sleep-3SF-PAST 'Mariam wants that slept'.

In the last chapter, we will see how other raising predicates (LIKELY-type) can be ambiguous between a modal-reading that hosts a tenseless clause and a hyperraising-reading that hosts a tensed clause. So far, a raising strategy that seems to be distinct from that of English is operable. Two contexts have been offered:

(89) a. SEEM-hyperraising (e.g. *fikil*)
b. ECM-hyperraising (e.g. *batwaqa<sup>s</sup>*)

This section has shown a true parallel between English and Arabic involving two distinct paradigms that feature a split between tensed clauses and tenseless clauses. This split seems to be predictable in proper contexts such as control infinitives, modals, and ECM. The difference in JA appears when appears in raising contexts. It seems that there is a pattern of hyperraising the DP out of a tensed clause in the case of SEEM-raising (e.g. *fikil*), LIKELY-raising (e.g. *mumkin*), and ECM-hyperraising. We will look into ECM-hyperraising and LIKELY-hyperraising more closely in Chapter three.

In this chapter, we have looked into the main data of hyperraising in Jordanian Arabic by investigating the elements of the structure on the one hand, and examining the behavior of raising. The raising predicate *fikil* seems to show a raising computation between the matrix DP and the embedded clause. Different factors such as locality, reconstruction, agreement pattern, idiom chunk movement, and minimal contrasts with other surface-similar structures reveal that hyperraising is actually a type of raising. However, if hyperraising is a true raising, this will leave the theory unable to account for the finiteness constraint on the one hand, and abstract Case and

agreement on the other. The assumption here is that there are specific rules of a language such as JA that render the constraints of Tense or Case compatible with hyperraising.

#### **CHAPTER 2**

## HYPERRAISNG AND THEORY

# 2.1 Arabic Literature of Raising

There has been a debate in the literature on Arabic as to whether it is considered a raising language or not. The debate is conducted within two different approaches. The first approach supporting a non-raising analysis (Soltan, 2007; Mohammad, 2000; Farghal, 1993) argues that Standard Arabic does not allow *seem*-type raising since the verb arguably always maintains a default agreement (3SM) whether the subject precedes the raising predicate *yabdu* 'seem' in the matrix clause or follows it in the embedded clause. In either way, the subject cannot enter into full agreement with the raising predicate. Also, it is been argued that the pre-verbal NP in the matrix clause cannot be indefinite, which is a restriction characterizing A-bar positions rather than A-positions. The assumed anti-agreement split and the indefiniteness constraint have led these researchers to conceptualize the raising structure of MSA as a non-raising split-agreement structure. This type of structure exists in English, but it is more salient in Arabic because expletives are usually implicit through agreement (3SM) rather than overt (e.g. *it*) as in English:

- (90) Mary, it seems that she likes ice-cream
- (91) Mariam yabdu-3SM/\*tabdu-3SF ?anna-ha tuħib l-bu:za Mariam seem-3SM/\*seem-3SF C-3SF likes-3SF the-ice-cream 'Mariam, it seems that she likes ice-cream'.

On the other hand, the second approach (Fehri, 2013; Benmamoun, 2000) argues that full agreement is actually possible in (91) and that the subject has been raised to the specifier of the matrix TP. This debate about raising is reminiscent of another debate about the polarity of word order in MSA as SVO vs. VSO. For instance, Soltan (2007), also see (Al-Balushi, 2012) proposes that the actual subject of SVO or VSO is *pro* while the difference remains whether there is a base-generated topic as in SVO or the subject remains in the specifier of VP, i.e., it has not moved to

the specifier of TP as in VSO. However, Benmamoun (2000) argues that the pre-verbal NP of the SVO order is actually a subject fulfilling the EPP features of the specifier of TP whereas pro is the subject of the VSO order. By this logic, we end up with a topic-analysis vs. a subject-analysis. This theoretical opposition lines up with the opposition about raising as base-generated (topic) vs. subject-movement (subject-analysis). Since both approaches argue about the existence of very sensitive syntactic features such as agreement (full vs. default) or definiteness, there should be more focus on Arabic dialects and more elaboration about these factors with respect to raising. Motivating rich data from some Arabic dialect can be the right track to solidly ground the facts about raising in Arabic. Although the literature provides some data from Palestinian Arabic (PA) (Mohammad, 2000) and Iraqi Arabic (IA) (Alburarabi, 2015) the data does not contribute much in constructing a solid presentation about the agreement facts and the multiple diagnoses of Arabic SEEM-type raising because of the dominant focus on MSA data. However, there are two recent papers: one addressing perceptual reports and raising predicates in MSA and Maltese Arabic (Camilleri et al., 2014), and the other deals with raising in Egyptian Arabic (EA) (ElSadek and Sadler, 2015). Camilleri et al (2014) maintain that MSA cannot be a raising language following Soltan's analysis (2007), but they show that it uses a copy raising construction where the predicate yabdu 'seem' combines with the preposition ka-inn-u 'like-C'. Maltese Arabic which using the same predicate *dehr*, shows an ambiguous split between copy raising and subject-to-subject raising. (92a) shows reconstruction where the fronted subject is mapped onto the base subject position in the embedded clause whereas (92b) the matrix subject is related perceptually to its object base position and so, reconstruction fails.

(92)	a.	Kull	saèèara	t-i-dher	qars-ha	a	lil	Marija
		Every	witch	3-FRM-VWL-seem.IPFV.SGF	pinch.l	PFV-3SGF	DEF	Maria
		'Every	witch see	ms like she pinched Marija'.	-		(Ma	ltese Arabic)
	b.	Kull	saèèara	t-i-dher	li	qaras-ha		
		Every	witch	3-FRM-VWL-seem.IPFV.SGF	Comp	pinch.PFV	/.3SGN	1-3SGF.ACC
		Mario.						
		Mario						
		'Every	witch see	ms like Mario pinched her'.				

ElSadek et al (2015) addresses perceptual predicates in Egyptian Arabic (EA). What is particularly relevant in their paper is the discussion of the predicate *fakl*, which is the same predicate we are addressing in JA. The Egyptian predicate can host a pronominal suffix that shows agreement like in JA. Consider the following sentence where the plural agreement appears on the suffix of the raising noun predicate:

(93) Jakl-ohom mestaneyin haga mohemma (Egyptian Arabic) form-3MPL wait.AP.PL thing important
 'They seem to be waiting for an important thing'.

Their analysis focuses on the concept of perceptuality introduced by Asudeh and Toivonen (2012) showing that this predicate evokes a type of eventuality rather than a type of perceptuality in the sense that it is eventual like infinitival raising rather than perceptual like copy raising. This intuition is actually sound and can ready apply to the semantics of the the predicate *fikil* found in JA. However, although the aforementioned two papers have laid out some interesting data with respect to copy raising and raising, they focus more on the perceptual reports of those predicates and not addressing the problem that these NPs with the predicate *dehr* in Maltese Arabic (MA) and the predicate *fakl* in EA are extracted out of tensed clauses, so they cannot be infinitival-type raising as they are described. Furthermore, they seem to fall into the trap of ambiguity of the predicate between its lexical version meaning 'appearance' and its raising usage with respect to the agreement pattern of those structures, (see Chapter 1). One can conclude, therefore, that the non-perceptual raising in EA or MA is actually hyperraising, which lines up with the analysis outlined for Jordanian Arabic in this thesis.

So far, four varieties of Arabic have been mentioned with respect to raising: Modern Standard Arabic (MSA), Egyptian Arabic (EA), Maltese Arabic (MA), and Jordanian Arabic (JA). Consider the following comparison that hints at conformity of the existence of hyperraising across more Arab dialects.

(94) a. [Mariam [tabdu-3SF CP[t ?anna-ha tuħib l-bu:za]]]
 [Mariam [appearance-3SF CP[t that-3SF likes-3SF ice-cream]]]
 'It seems that Mariam likes ice-cream'. (Modern Standard Arabic)

b.	[ $\int akl$ - <b>ohom</b> $_{CP}[t mestaneyin]$ [appearance-3MPL $_{CP}[t waiting-3MPL-I]$	PART something in	mportant]]
	'It seems that they are waiting somethin	e i	(Egyptian Arabic)
c.	[ <b>Kull saèèara</b> t-i-dher	<sub>CP</sub> [ <b>t</b> qars-ha	lil Marija]]
	[Every witch 3-FRM-VWL-seem.IPFV.S	SGF <sub>CP</sub> [ <b>t</b> pinch.PF	V-3SG DEF Maria]]
	'Every witch seems like she pinched Ma	rija'.	(Maltese Arabic)
d.	[ <b>Mariam</b> ?ikil-ha <sub>CP</sub> [ <i>t</i> bitħib	il-bu:za]]	
	[Mariam appearance-3SF <sub>CP</sub> [ <i>t</i> like-3SF-	PRES the-ice-crea	m]]
	'It seems that Mariam likes ice-cream'.		(Jordanian Arabic)
e.	[ <b>Fatma</b> ?ikil-ha <sub>CP</sub> [ <i>t</i> tħib	il-bu:za]]	
	[Fatma appearance-3SF <sub>CP</sub> [ <i>t</i> like-3SF-P]	RES the-ice-cream	.]
	'It seems that Fatma likes ice-cream'.		(Saudi Arabic/personal)
f.	[Ttshab-et-li <b>mmi</b> <sub>CP</sub> [beli žat	<i>t</i> ]]	
	[seem-3SF mother-my <sub>CP</sub> [COMP com	e-3SF-PAST <b>t</b> ]]	
	'It seems that my mother came'.	(Mc	proccan Arabic (Ura, 1994))

Therefore, NP-movement in Arabic appears to be a type of hyperraising that calls for a syntactic analysis to address its mechanism within the system as well as its relevance to syntactic theory in general.

# 2.2 Hyperraising Across Languages

Hyperraising has been found across different languages to show similar behavior and features. The most prominent studies, which have been done on Brazilian Portuguese (BP) (Fong, 2018, 2017; Nunes, 2008; Ferreira, 2004) argues that it is possible to raise a subject DP out of a CP clause, which shows a raising behavior with respect to idiomatic chunks and reconstruction. Consider the following expletive structure as opposed to a hyperraising structure:

(95) Parece [que os alunos vão fazer pão] seems [that the students will make bread]'It seems that students will make bread'.

(BP)

(96) Os alunos<sub>i</sub> parecem [que  $t_i$  vão fazer pão] the students<sub>i</sub> seem [que  $t_i$  vão fazer pão] 'The students seem that will make bread'.

We will be looking into three main theoretical proposals to accommodate hyperraising within syntactic theory: inherent Case, COMP composite features, and CP-deletion Rule

#### 2.2.1 Nunes's Inherent Case Licensing

Nunes (2008, 2019) claims that if we theorize that the CP complement is assigned inherent Case by the raising predicate *parece*, the head C can no longer induce an intervention effect on the subject DP to raise out of a CP clause. Inherent Case-marked items are understood to be inert for purposes of A-movement (Hornstein and Nunes, 2002). This generalization is claimed to apply in parallel to the case of the DP experiencer that is inherently assigned Case by the raising predicate as in English and does not intervene between the trace and the matrix DP. Sentence (97b) indicates that this experiencer DP is able to c-command the free expression *John* and therefore, inducing Principle C effect (Chomsky, 1981). However, the inherent Case-assignment of an experiencer role by the raising predicate *seem* makes the DP invisible to block A-movement as in (97b).

- (97) a. John seems to him *t* to be polite
  - b. \* It seems to him<sub>i</sub> that John<sub>i</sub> is nice

Nunes defines this invisibility for intervention because of the nature of inherent Case-marking as immobility. In a sense, the DP experiencer is immobile to behave as a c-commanding (intervening) position, in other words, it is inert for A-relations. For the same reason, the CP complement of the raising predicate *parece*'seem' in Brazilian Portuguese is immobile because it receives inherent Case. The immobility of the CP is shown in (98) as the fronting of the CP renders the structure ungrammatical:

(98) \* que os meninos fizeram a tarefa parece t that the boys did the homework seems
'It seems that the boy did their homework'. (BP)

Therefore, for Nunes, the immobility of the CP to be fronted is the same pattern of the immobility of the DP experiencer to c-command into the embedded clause. This parallel exists due to the unified syntactic inert nature of Case-marked items with respect to A-movement. Therefore, the C head does not block the raising of the subject DP because the CP layer is inherently Casemarked by the raising predicate. Nunes shows that if the CP is not inherently Case-assigned, it turns mobile and the subject DP fails to raise out of this CP. Both predictions are borne out as in (99a) where the CP can be fronted and as in (99b) where the C head blocks movement.

- (99) a. Que eles viajaram parece óbvio. That they traveled seems obvious 'That they traveled seems obvious'.
  - b. \* Eles parecem óbvios que viajaram. they seem obvious that traveled 'It seems obvious that they traveled'.

The assumption that the ungrammaticality of (99b) is predicted is based on the premise that the C head blocks the movement of the DP because its CP layer is not inherently Case-marked by the raising predicate *parece*. However, this assumption of Case could be in the wrong direction. For instance, we can conceptualize this example as producing an intervention effect on the null subject of the adjective *obvio* 'obvious', which is between the trace and the matrix DP. In English, the OBVIOUS-type adjectives host an expletive and select CP complements:

(100) It is obvious that they travelled

The case in BP is that the expletive of the adjective *obvio* is null. Therefore, the underlying structure of (99b) would be as follows:

(101) Eles<sub>i</sub> parecem [ $_{CP}$  (null expletive) obvios] que  $t_i$  viajaram

The intermediate CP of the adjective *obvio* seems to be the trigger that leads to the violation of the minimality of the trace to the matrix DP. The fact that the CP is not inherently assigned Case by the raising predicate is irrelevant since it is assigned Case by the adjective. The same situation applies in Jordanian Arabic where the intermediate CP of an adjective of the OBVIOUStype always makes the sentence ill-formed. The adjective *mbjain* 'obvious' carries default features indicating the existence of a null expletive while the raising predicate *shikil* enters into plural agreement with the fronted subject in a higher different clause. The ungrammaticality of (102) is identical to the ungrammaticality of (99b).

(102) \* il-fabab fikil-hum [CP (null expletive) mbajin] inn-u sa:far-u the-boys appearance-3MPL obvious-3SM C-3SM travel-PAST-3MPL 'It seems obvious that the boys travelled'.

The argument here is that what renders the OBVIOUS structure ungrammatical in BP and JA is not particularly the intervention force of C that is assigned by the adjective, but rather the intervention of the null subject of the adjective itself. This analysis actually applies to intervening weather verbal clauses. The following structure shows how the weather verb is inserted in an intermediate position and hosts an adjunct-like clause. The ungrammaticality of the example is not due to the intervention of the island of the adjunct particle, but rather it is the null subject of the weather verb *bitshati* that causes intervention. Note that the expletive features of weather verbs happen to be feminine in JA.

(103) Mariam  $\int ikil-ha$  [CP (null expletive) shatt-at] lamma wes<sup>2</sup>l-at Mariam appearance-3SF rain-3SF when arrive-3SF 'It seems that it rains when Mariam arrives'.

Therefore, it seems irrelevant to claim that the mobility of the CP of the OBVIOUS data contrasts with the immobility of the CP when it is assumed to be inherently Case-marked as Nunes claims. Also, the parallel between CPs of *parece* and the DP experiencers in terms of the notion of *immobility* seems to be far-fetched. It is less encouraging to claim that moving a lexical item (the DP subject) out of its higher inherent Case-marked element (CP) allows raising in the same manner of an inherent Case marked DP itself as that of the experiencer, which does not block raising in English. Intuitively, there is a difference with respect to inherent Case between a DP being intervened by its governing head (C) and being intervened by another DP (experiencer). Also, the assumption that the DP experiencer is immobile sounds somehow vague since the DP is flexibly mobile unlike *parece*-type CPs.

(104) To Bill, John seems to be polite.

Even if immobility means inability to behave as a c-commanding position, it is still unclear how this behavior parallels the illegal fronting of CPs. Immobility seems to describe the illegality of the actual movement of CP to the left-periphery whereas the DP experiencer's immobility is less clear to recognize. We can dispense with this parallel diagnosis of immobility, and focus more on the actual parallel that CPs of raising predicates such *parece* might have inherent Case, which explains why the head C does not violate minimality as it is the case with the non-intervening design of DP experiencers in English. The intuition that CP is immobile with raising predicates seems to apply in JA. For instance, it is always possible to move the bare TP to the specifier of the matrix TP, but it always fails when moving the CP to the specifier position. The following structure of non-raising is as same as the example of Nunes's in (98).

(105) (\*inn-u) Mariam bitħib il-bu:za, ∫ikl-u
 (C-3SM) Mariam like-PRES-3SF the-ice-cream, appearance-3SM '(\*that) Mariam likes ice-cream, it seems'.

The same contrast applies to a hyperraising structure where moving the bare TP (or arguably VP) to the specifier position is possible while it is not with the CP layer.

(106) (\*inn-u) bitħib il-bu:za, Mariam ſikil-ha
 C-3SM like-PRES-3SF the-ice-cream, Mariam appearance-3SF
 'Likes the ice-cream, Mariam seems'.

The fact that the CP is immobile as Nunes points out might imply that there is some inherent relation between the predicate and the CP such as inherent Case. However, this Case analysis needs more justification to hold true. To sum up, the head C in Brazilian Portuguese and Jordanian Arabic is not an intervening element and is inert for A-purposes.

## 2.2.2 Composite Features of COMP

Fong (2017, 2018) has also addressed hyperraising in Brazilian Portuguese. She provides crosslinguistic types of hyperraising that not only target subject-to-subject raising, but also extends to cover other types of hyperraising such as object-to-subject raising, which resembles ECM pattern in Romanian (Fong, 2017) and Kipsigis (Jake and Odden, 1979), and object-to-object raising as in Passamaquoddy. Kipsigis is reported to have an instance of hyper-raising of the embedded subject to be placed in the matrix clause (Jake and Odden, 1979). This resembles the typical paradigm of ECM where the subject is placed in the matrix clause, but semantically interpreted as the subject of the embedded clause. The following contrast demonstrates this:

- (107) a. mcè Mù:sá [klápát Kíplànàt].
   wants Musa [run Kiplagat]
   'Musa wants Kiplagat to run'
  - b. mcè Kìplànàt Mù:sá [ klápát ] wants Kiplagat Musa [ run ] 'Musa wants Kiplagat to run'

The moved NP in (107b) shows different tone marking from (107b) and it is placed before the matrix subject in the higher clause. It is argued that this movement in Kipsigis is sensitive to an intervention effect by an intermediate CP. This supports a level of locality between the DP-trace and the hyperraised DP and refutes an analysis of prolepsis since prolepsis shows no sensitivity to intervening intermediate CPs as in the English example I know of  $Alex_i$  that Max said that  $he_i$  is the best candidate for the job. Hyperraising in this example is supposed to be expressed by the prefixes that cross-references the most embedded subject. Second person feature is shown on the base-position in the embedded clause as well as on the raised position in the matrix clause. Since there is an intermediate CP that intervenes this cross-reference, the structure is ill-formed.

(108) \* -mc-i:n [k-yay Mu:sa [i-til-in pè:nd meat]] 1s-want-2s [3s-make Musa [2s-cut meat]] Int.: 'I want that Musa make you cut the meat'.

(Kipsigis)

Therefore, it seems that hyperraising is not limited to subject-to-subject raising. Fong claims that since languages seem to report different types of hyperraising, there seems to be some inherent feature that unifies all of them. Departing from Nunes's claim of inherent Case, Fong adopts Van Urk's featural definition of syntactic features (VanUrk, 2015), which means that the head COMP has composite A-bar/A-features that enable A-movement out of CPs as is the case with A-bar movements. Therefore, inherent features are encoded in COMP and the subject DP will be able to move to the edge of the CP boundary (intermediate movement), and then fill the empty position of the matrix subject. So far two slightly different proposals have been observed. On the one hand, Nunes's proposal assumes that the head C is not an intervening element because the entire CP is inherently Case-assigned, and the DP can move with no intervention. Fong's

(Kipsigis)

proposal, on the other hand, considers the head C itself as carrying inherent features that enable the DP to move to its edge.

## 2.2.3 CP-Deletion Rule

Yadava (2007) puts forward a different argument for HR in Maithili, an Indian-Aryan language mainly spoken in India and Nepal. Maithili is a *pro*-drop language and it seems to behave in a very consistent fashion with Brazilian Portuguese and Jordanian Arabic with respect to raising. The subject DP seems to be extracted out of a CP clause that shows both tense and agreement on the verb inflection. Once this DP fills the empty matrix position, it enters into a full agreement pattern. Otherwise, the structure is non-raising and the DP remains in situ. In this case, the empty position is either filled by a *pro* (with the default features) or by an overt expletive *i*, which seems to be an optional case because of the nature of *pro*-drop languages in general with respect to expletives. (109a) is the expletive structure and (109b) is the hyperraising structure.

(109)	a.	i/ <i>pro</i> lagait aich je ahaa gaari nahi pakair sakab	
		it/-3 seem be-PRES-3 that you train not catch can	
		'It seems that you cannoy catch the train'.	(Maithili)
	b.	ahaa lagait aich-chi je $t$ gaari nahi pakair sakab	
		you seem be-PRES-2h that t train not catch can	
		'You seem not to be able to catch the train hill'.	

Yadava proposes that this type of raising is distinct from local/non-local topicalization/focusing movements. First, A-bar movement such as topicalziation shows that an anti-agreement pattern with the raising predicate, which is different from the full agreement subject-verb match. Also, sometimes, certain particles appear with those A-bar moved elements, but they always fail to appear with subjects. Yadava finds this contrast a good diagnosis to distinguish hyperraising from other types of movements. For instance, the particle *da* is a topic/focus clitic. It fails to be affixed to an hyperraisied DP as in (110a), which implies that this DP is a subject. The same affix appears with an A-bar moved DP as in (a110b), and it carries second person agreement, which is a split from the third person agreement of the raising predicate *lagait chi*.

(110)	a.	* ahaa-da lagait aich je gaari nahi pakair sakab	
		you-2h be-PRES -2h that train not catch can	
		'you seem that <i>t</i> cannot catch train'	(Maithili)
	b.	ahaa-da lagait chi je gaari nahi pakair sakab	
		you-2h be-PRES -3h that train not catch can	
		'you, it seems that cannot catch the train'	

The proposed data from Maithili shows a raising pattern in terms of theta-assignment (hosting expletives), agreement pattern, and other factors. Following the binding theory for DP-traces and anaphors proposed by Chomsky (1981), Yadava assumes that raising out of a finite clause is possible because the subject DP is not constrained under government as it is the case in English-type languages. For the antecedent-anaphor relation, Chomsky (1981) proposes principle (A):

(111) (A) An anaphor is bound in its governing category.

The original intuition that this principle extends to DP-traces. Therefore, anaphors and DP-traces must be locally A-bound in their governing category. Thus, a governing category contains the following:

- (112) a. the governed element
  - b. the governor
  - c. a SUBJECT accessible to the governed element.

Following the GB-framework, government means that heads of constructions govern their complements. In this case, INFL is the governor for a tensed clause. Regrading the accessible SUBJECT, AGR is assumed to be kind of a subject as it is obligatory with [+tense]. Therefore, tense (INFL) and agreement (AGR) are problematic when considering raising out a finite clause. Because the subject of a finite clause is governed, the DP-trace must be A-bound in its domain and has its accessible SUBJECT, AGR, and cannot be co-indexed with a DP that lies outside its domain. Yadava claims to solve this problem by looking into the special status of INFL in Maithili. For example, INFL in Maithili behaves differently from English-type languages in not allowing subject-auxiliary inversion which separates INFL from V and shows agreement not only with subjects, but also with direct objects, indirect objects, and possessive DPs within a direct object. INFL in this case is conceived as a non-governing category and is analyzed as base-generated within VP. Since agreement is not only specified for subjects, Yadava finds the notion of accessible SUBJECT not tenable in Maithili and AGR unable to be SUBJECT. Thus, difference with English-type languages is parametric. By this logic, AGR cannot c-command the subject.

a. John [I past AGR] [VP win DP]
b. jon [VP DP [V [stem jeet] [I past AGR] John won DP

Dispensing with tense and AGR as being generated within a VP, Yadava proposes that the actual governor is COMP; an abstract COMP. For the DP to be raised out of a CP clause (out of its governing category), a CP-deletion rule is computed to facilitate movement. COMP is the element that assigns nominative Case to the subject. If a rule of CP-deletion is always applied with raising predicates, Principle A will be preserved as the DP-trace will no longer be A-bound by the embedded COMP, and can raise to fill the empty position. To sum up, three important main theoretical generalizations about hyperriaisng in Maithili can be made:

- 1. INFL is not a governor. COMP is the governor
- 2. AGR is not accessible to SUBJECT. Maithili does not follow the notion of SUBJECT as in English-type languages
- 3. CP-deletion rule is required to free the DP-trace from its governing category (COMP). Thus, raising out of a finite clause does not violate principle (A).

So far, there are three different theoretical solutions: First, there is the inherent Case that addresses the immobility of the CP complement and the selection of the raising predicate. Yet, Nunes (2008) does not explain why the raising predicate *parece* 'seem' assigns inherent Case to a CP layer in particular. Second, Fong's idea of composite features seems to be too strong an assumption since hyperraising languages do not allow all types of hyperraising consistently. For instance, Jordanian Arabic seems to allow subject-to-subject raising using the raising noun *shikil*, and there is also speculation that JA might allow ECM-hyperraising, viz. this falls when it comes to hyperraise an object to the matrix subject position.

(114) \* Maria shikil-ha Ahmad bahdal t Maria appearance-3SF Ahmad shout-3SM-PAST 'It seems that Ahmad shouted at Maria'

Therefore, a hyperraising language is not expected to show all types of hyperraising (subjectto-subject, subject-to-object, object-to-subject, object-to-object, etc.). If this is the case, what is the actual extension of those inherent features encoded in COMP? It can be assumed that the inherent features encoded in C in Jordanian Arabic only allow subject raising whereas in some other languages such as Passamaquoddy, their inherent features extend to allow object-to-object hyperraising. However, this kind of logic is circular because it cannot explain why one type of hyperraising is possible in some language, but not in others. Fong's proposal of A-inherent features on COMP might be partially correct, but it does not say anything about the fact that types of hyperraising are at variance across languages and it does not explain why it is the Case that a hyperraising language happens to have such composite features. Last, the CP-deletion analysis seems to focus more on the question of why finiteness does not block movement and how come raising is possible when the DP ends up assigned Case twice. The assumption that T is not a governor and AGR cannot be SUBJECT for the DP-trace might be too strong to adopt, because it introduces an analytical point that some languages with hyperraising movement seem to show special behavior toward T and AGR. This will pose a question why there is a split between the locality of hyperraising and the finiteness constraint.

# 2.3 The Puzzle behind HR

The way it is, hyperraising is recognized as a problematic area to phase theory (Nunes, 2019; Ferreira, 2009; Nunes, 2008). According to Chomsky (2000, 2001), CPs and \*vPs are strong phases and TPs are not. This contrast indicates that once the phasal heads merge, the TP is spelled out and no further syntactic operations are allowed. This phasal rule is known as the Phase Impenetrability Condition. This means that hyper-raising that allows raising out of a CP is a violation since it allows movement to cross the phasal head C.

(115) Phase Impenetrability Condition (PIC) In phase *alpha* with head H, the domain of H is not accessible to operations outside *alpha*, only H and its edge are accessible to such operations

The phasal heads (C, \*v) are recognized as the locus of the features that trigger movement.

This begs the question about the features of the non-phasal head T. Feature inheritance dictates that T receives its features by inheritance (C-T interface). The absence of C means there are no features for T to receive. Because Jordanian Arabic seems to move the DP out of the CP, the DP is not expected to cross a feature-bearing element C that intervenes between the DP and the higher position. Under the Agree-based model, the features of the empty specifier position should be interpreted according to the the requirement of the EPP of where there is some *Probe* that will be matched with an active DP, which is the Goal. Both of the Goal and Probe enter into Agree-relation and Match. Case is a reflex of this agreement match. Ferreira (2009) proposes that we can have a movement out of a CP while the theory stays faithful to phase computations. This argument is suggested in Brazilian Portuguese where it seems that there are two types of finite Ts, showing different morphological specifications. Wherever T shows bundle-complete features (person and number), the complement is a strong phase and the full pattern of features implies that TP is spelled out to semantics and phonology after the head C has merged. The other CP shows only number specification and Nunes (2019) points out that this number specification appears to be lost in some dialects. The CP has a partial pattern bundle of features and thus, it is analyzed as non-phasal. The DP subject is assumed to move to the raised position before C is merged, which frees the DP from any intervention. There seems to be a strong parallel between the locality of null subjects of finite control complements to their antecedents and the locality of hyper-raising constructions. This supports the existence of a non-phasal version of CP that allows A-movement. Nunes points out that both constructions (finite control of subject and hyperraising) show the same interaction of the agreement pattern with content of the subject's features (person). Therefore, they parallel in the morphological specification of the complement, in the interaction with the subject, and in preserving locality. Ferreira's insight of the ambiguity of finite T seems to show evidence for a split of the CP. In the case of Jordanian Arabic, the hyperraising CP complement is finite and shows full morphological specification of the agreement pattern (person, number, gender). However, the structure shows locality between the gap and the raised DP.

(116) \* Fatma ∫ikil-ha muhtamal inn-u bitħib il-bu:za
 Fatma appearance-3SF likely-3SM C-3SM like-PRES-3SF the-ice-cream.
 'John seems it is likely that she likes ice-cream'

Interestingly, the hyperraising construction does not adopt the tenseless morphological specification used in common infinitivals. This construction in JA deviates from what appears in BP by adopting the full agreement pattern in strong phases on the one hand, and by avoiding the salient morphological specification in infinitival contexts. Thus, there are three CP complements that seem to behave differently: the CP complement of control declaratives, the CP complement of the control infinitives and the CP complement of hyperraising constructions.

- (117) a. il-ſabab shikil-hum (inn-u) **b**-iſadʒ?-u hada il-fari:g the-boys appearance-3MPL (C-3SM) PRES-cheer-3MPL this the-team 'the boys seem to support this team'
  - b. il-ʃaba:b ga:l-u (inn-u) **b**-iʃadʒ?-u had il-fareeg the-boys say-PAST-3MPL (C-3SM) cheer-3MPL-PRES this the-team 'the boys say that they support this team'
  - c. il-fabab bed-hum (inn-u) **j**-fadʒ?-u hada il-fari:g the-boys want-3MPL (C-3SM) INF-support-3MPL this the-team 'the boys want to support this team'

Following studies on Brazilian Portuguese that the finite T is ambiguous, it will be reasonable to look up a parallel between the null subject constructions (CPs) and hyperraising. First, it seems that Arabic does not constrain null subjects in the same way as BP because they show loose non-local behavior with their antecedents. This lack of this sort of non-locality, if strongly considered, indicates that the CP of the null subject is the same of the CP of any control clause and that the null subject seems to behave as a pronoun in this respect. In such a case, A-movement will not apply. The following example shows that Arabic null subjects can refer to the closest c-commanding antecedent (Omar) as well as to the matrix antecedent (Husam).

There is no evidence that finite T of the hyperraising construction differs from the finite T of the control verb. Both are CPs and show full morphological specification. The relevant key difference is that the base position contained by the CP shows raising behavior to where it moves (the matrix subject position). The diagnosis of the raising behavior seems strong in the sense that the distinction of the CP complement of hyperraising from the strong phase version of CP is required. So far, first of all, the head C can select a tensed TP where presumably, it inherits its features from the phasal head C. However, the selection also of a tesneless TP raises a critical question about the strength of the feature inheritance of the C-T interface. If the TP is non-finite by verb selection, it is spelled out independently of the merge of the head C. Presumably, if we assume C's independence of T with respect to features, we end up with a strong phasal finite TP, a raising finite TP, and a non-finite TP. Let us dispense with the non-finite TP for the time being since it targets control infinitives and modals, but not raising predicates in particular. The diagnosis of the raising behavior of hyperraising construction can lead us to believe that finite T is ambiguous between control finite T and raising finite T that seem to be identical in surface structure and morphology, but behave differently in their deep structures. Following Ferreira's split of the finite T, the raising finite T seems to be non-phasal and the DP can move freely without the obstruction of the head C. The non-phasal status of the head C might be explained by Nunes's suggestion (Nunes, 2008, 2019) that the raising predicate assigns inherent Case to the CP complement, so that the head C as a feature-bearing element will not induce an intervention effect on A-movement. First, this intuition about the non-phasal status of the CP seems to be correct. Chomsky (2008) points out that the contrast between strong phases and TPs can be shown more strongly in the course of the derivation of successive cyclic movement of the extraction of a whphrase. For instance, under Haung's analysis (Huang, 1998), it is proposed that the extraction of a wh-phrase out of a PP complement of the subject DP (the driver, picture) in (119) is due to blocking the island of the subject itself known as subject condition. However, looking into the structure in (120) seems to cast doubt on this assumption. The wh-phrase seems to move freely to SPEC,C without the obstruction of subject island. Chomksy emphasizes that the actual contrast

resides in how phases actually work throughout the derivation. Example (119) is a subject control structure where the subject along with its PP complement (of which) moves from its base position (SPEC, \*vP) to the SPEC, T and the subject instantly inherits the features of T that are inherited from the phasal head C. Therefore, the subject phrase is no longer visible for further operations, which explains the ungrammaticality of the extraction of the wh-phrase. The derivation of the strong phase freezes the wh-phrase preventing it from proceeding to the specifier position of C. As for the raising structure in (120), it is acceptable. This is predicted since the subject phrase along with its PP complement moves cyclically from the specifier position of \*vP in the non-phasal TP complement to the specifier of that complement. No spell out is triggered since there is no head C that inherits features to T in this case. Movement proceeds to the higher position and the wh-phrase (of which) moves freely to the specifier position. Therefore, phases are consistent in their effect along the cyclic movement of a wh-phrase.

- (119) a. \* It was the CAR (not the Truck) of which [the driver, picture] *t* caused a scandalb. \* Of which car [the driver, picture] *t* cause a scandal ?
- (120) a. It was the CAR (not the Truck) of which [the driver, picture] is likely/seem t to t cause a scandal
  - b. Of which car is [the driver, picture] likely *t* to *t* cause scandal?

The expectation is that the CP complement of the hyperraising construction in JA adheres to the non-phasal status of TP and shows parallel behavior with such derivations. The prediction is borne out. JA shows the same type of contrast of grammaticality of the wh-phrase extraction along the derivation of a raising CP complement and the ungrammaticality of the same extraction along the derivation of a control CP complement (Chomsky, 2008). The same case applies to JA. The subject phrase in the raising structure in (122a) moves to the specifier position of the v to the specifier position of T. Now, we can adopt the assumption that a tensed TP is independent of the head C in a hyperraising construction, a subject DP freely moves to the subject position and a wh-phrase remains accessible and active as to filling the uninterpretable features of the edge position of C. Movement before the merge of the head C has a non-phasal character of the CP complement of the hyperraising construction, which allows as a consequence A-bar movement of the wh-phrase to the edge of C.

(121)	a.	* Heyi il-SAJARA (mish il-SHAHINI) illi min-ha [il-sajig <sub>Spec, *vP</sub> [ <i>t</i> she the-CAR (not the-TRUCK) C of-it the-driver
		sabbab fadi:ha]] caused-3SM scandal 'It was the CAR (not the-TRUCK) of which the driver caused a scandal'.
	b.	* min aj saja:ra [il-sajig $_{\text{Spec},*\nu P}[t \text{ sabbab fad}^2i:\hbara]]$ of which car the-driver caused scandal? 'Of which did the driver cause a scandal?'
(122)	a.	Heji il-SAJA:RA (mish il-SHAHANI) illi min-ha [il-sajig al-aʕlab/ʃikl-u she the-CAR (not the-TRUCK) C of-it the-driver likely/seem-3SI

she the-CAR (not the-TRUCK) C of-it the-driver likely/seem-3SM
Spec,TP[t Spec,\*vP [t rah j-sabbib-SUBJ fad<sup>?</sup>i:ħa]]]
will cause-INF scandal
'It was the CAR (not the-TRUCK) of which the driver is likely/seem to cause a
scandal?'
b. min aj saja:ra [il-sa:jig al-aSlab/Jikl-u Spec,TP[t Spec,\*vP[t rah

b. min aj saja:ra [il-sa:jig al-a'lab/Jikl-u Spec,TP[t Spec,\*vP[t rah of which car the-driver likely/appearance-3SM will jsabbib fad<sup>?</sup>i:ħa?]]]
cause-SUBJ scandal?
'Of which car is/did the driver likely/seem to cause a scandal?'

If the finite TP of the CP complement of hyperraising is not a phase, and therefore, Amovement is permissible, we ought to explain why a non-phasal TP ends up being finite and having full agreement pattern. Finiteness implies that there is the head T that has uninterpretable features that need to be valued by the subject DP. This assumption of the phase theory depends on the notion of *feature inheritance*. T inherits features from C. However, we have seen that C's presence is not consistent with having obligatorily a finite complement as it is the case with non-finite complement of control verbs.

(123) Maria bed-ha inn-u tsa:fir Maria want-3SF C-3SM travel-3SF-INF 'Marian wants to travel'.

Also, although the complement is non-finite and the morphological specification of the verb

inflection adopts a standard pattern that is distinct from tensed clauses, full agreement features remain there. Therefore, there is a question of separation of agreement from finiteness. Since the embedded verb shows agreement in all cases, abstract Case as a reflex of that agreement will also be independent at some level of T as well. This special character of agreement might explain why the subject DP ends up being assigned Case twice in the embedded clause and in the matrix clause, which violates the theory of raising. Let us begin with the first question:

(i) What is the nature of the interface between C and T in JA?

The hypothesis of independent features of T might seem to apply in JA. For instance, the Arabic COMP *inn* is always attached to a clitic where it shows optionality by adopting either default agreement (3SM) or full agreement with the subject DP. Thus, the clitic of the raising predicate *fikil* shows a plural match (plus person and gender) to the DP *il-suja:h*'tourists' and can also appear with default singular features (3SM) (number mismatch).

(124) is-suja:ħ ∫kil-hum in-hum/inn-u raħ-u ?a su:g the-tourists appearance-3MPL C-3MPL/C-3SM go-PAST-3MPL to downtown 'The boys seem to have gone to downtown'.

Al-Jarrah (2019) proposes that full agreement of C is not limited to the embedded subject position. A topicalized/focused object moved to the edge of the embedded clause becomes the DP goal for the C's uninterpretable features instead of the subject. This might indicate that the option of the full agreement pattern is not structurally tied with the subject of the clause. There might a linear principle that matches the features of C with the features of the DP that follows it.

(125) Mustaħi:l in-ha il-tt<sup>?</sup>t<sup>?</sup>a:lib-i a?t<sup>?</sup>a:ha il-markiz musa:Sadi impossible-3SM C-3SF the-student-3SF gave-3SM the-center help 'It is impossible that the student the center gave help'. Int.: It is impossible that the center gave the student help.

In addition, the existence of default features of C as an option implies that C might have independent features of T. Al-Jarrah points out that default features are a *last resort* in case agree fails in JA. However, the occurrence of default features always remains an option even if Agree is possible whether in SVO or VSO. Consider C's agreement optionality with the feminine DP in the embedded clause in the following structures:

- (126) mi:n bra?jak inn-u/in-ha Fatma sha:fat who think-2SP C-3SM/C-3SF Fatma sha:fat 'who do you think Fatma saw'
- (127) mi:n ∫ikl-ha inn-u/inn-ha sha:fat Omar? who seem-3SF C-3SM/C-3SF saw-3SF Omar? 'who does it seem that saw Omar?' (who does it seem to have seen Omar?)

This separation of the agreement pattern of C from T seems to appear in some Bantu dialects. Carstens and Diercks (2009) show that T might have independent features since the Bantu C can agree with an operator while the local T agrees with a subject.

(128)	a.	Bikí <b>bi-b</b> -éte	<b>bá</b> -ku-lyá?	
		8what 8whAgr-2SA-AS 'What are they eating?'		(Kilega)
	b.	emikeeka abawala <b>gye</b> - mat 2girl 4wh 'the mats that the girls	Agr-2SA-PST-plait	(Luganda)
	c.	Ekihi <b>kyo</b> Kamba what 7whAgr-C Kamba 'what did Kambale see?		(Kinande)

It seems that the full agreement of C is not a feature-driven from the C-T interface, but is affected by some linear distance principle or as Al-Jarrah (2019) assumes by the NP that is closest in terms of c-command. This correlates with the option of default features as they show the impersonal character of C with respect to T as can be seen in (129a) where the raising predicate and the embedded verb show agreement, but COMP is still able to hold its default features. Furthermore, it seems the fact that this default pronominal suffix is always available to satisfy C's probing correlates with the ability of JA to escape *that*-trace effect. In contrast, MSA shows an accusative Case marker on the COMP *inn*, which never hosts a default suffix. As a consequence, MSA shows a *that*-trace effect as in (129b).

- (129) a. min bra?jak (inn-u) sha:f Mariam? who think-2SP C-3SM see-3SM Mariam?
  'Who do you think (that-clitic) saw Mariam?'
  - b. man bra?jik (\*inn-a) ra?a: Mariam?
     who think-2SP C-ACC saw-3SM Mariam?
     'Who do you think (\*that) saw Mariam?'

The character of C in JA seems to parallel the subject extraction (whether wh-DP or NP) out of a surface CP. In fact, the that-trace effect might not be an effect in the strict sense because C behaves as passive to the local T. In other words, C is does not interact with T in the way English COMP *that* interacts with T. The claim does not center around the existence of a clitic or not since not all hyperraising languages show complex Cs (C + Agreement); however, the complex character of C seems to be a manifestation that it interacts differently with the head T in embedded clauses. Therefore, if the feature inheritance of C to T is not strongly consistent with raising CP complements, it will be reasonable to conceptualize a system where the CP complement of that a raising predicate is the non-phasal TP and the CP complement of a control predicate is the strong phase \*vP. When T's features are given by inheritance as in English, we can predict that hyperraising is illegal. When the local T seems independent, hyperraising occurs at least with one of the following (if not all): subject-raising, ECM, or control, given that control is a type of movement as Hornstein proposed (Hornstein, 1999). All the following English ill-formed sentences seem to obtain in JA:

(130)	a.	* Mary seems that $t$ likes ice-cream	(SEEM-HR)
	b.	* Mary is likely that <i>t</i> left an hour ago	(lIKELY-HR)
	c.	* Mary might that <i>t</i> went to downtown	(MODAL-HR)
	d.	* Mary believes John that $t$ will win	(ECM-HR)
	e.	* Mary wants that <i>t</i> leave	(CONTROL-HR)

It is necessary to demonstrate that all of the above structures are actually raising structures and they adhere to the diagnosis of raising. Presumably, if this is the case, this will support the assumption that raising shows uniform behavior in JA with respect to the DP extraction of CP complements, defined as hyperraising. Within this broad notion of hyperraising across different types of structures, there is also the question about the difference between hyperraising out of a tensed TP (finite) or out of a non-finite TP. JA, for example, always shows control-hyperraiisng with non-finite clause, but never with tensed clause. As discussed in Chapter one, this constraint is predicted since control infinitives might imply futurity, which is dependent on the meaning of the matrix control verb (e.g. *want*). Therefore, a control predicate selecting a tensed clause will be a contradictory of the temporal relation between the control predicate and the control complement. If this occurs, the non-finite complement is predicted in parallel with English-type languages. The fact that this non-finite control complement is contained in a CP has to do with particular nature of the JA COMP as it appears with all types of clauses. Therefore, control hyperraising (Ademola, 2011) might not be hyperraising in the strict sense because the complement is non-finite.

(131) Eman bed-ha/ħa:walat/bitħib/qarrarat (inn-u) tsa:fir
 Eman wants/tried/like/decided (C-3SM) 3SF-travel-SUBJ
 'Eman wants/tried/like/decided to travel'.

The same applies with modals (or modal-like predicates):

(132) Eman lazim/momken/nadi:r/btigdar (inn-u) tsa:fir Eman NP-must/AP-possible/AP-rare/V-can (C-3SM) 3SF-travel-SUBJ 'Eman must/possible/rare/can travel'.

Therefore, modals and control verbs intersect in allowing movement out of tenseless complements. However, modals that host past T show hyperraising out of tensed clause. The contrast with English is borne out as it uses the infinitival clause have-VP *should have gone* while Arabic employs the indicative clause VP *\*must went*:

(133) Eman lazim (inn-u) t rahat 'al muGabali
Eman must (C-3SM) t went-3SF to meeting
'Eman should have gone to the interview (but she didn't)'.

With SEEM-type of raising, it has been shown that JA allows *fikil*-hyperraising only out of tensed clauses, but unexpectedly, it fails with tenseless clauses.

 (134) \* Eman ∫ikil-ha (inn-u) tħib il-bu:za Eman seem-3SF (C-3SM) like the-ice-cream 'it seems that Eman will like the ice-cream' This fact about *fikil*-raising with respect to hyperraising is against expectations since we can suppose that raising predicates will line up with control or modal predicates in hosting tenseless complements the way they line up with those of English in hosting infinitival complements. The set of examples above show that hyperraising structures in JA are equivalent of English infinitives. Now, if we follow the assumption made earlier that T has features independent of C, A-movement will be derived out of non-phasal tensed TPs with *fikil*-hyperraising. Now, let us move to the second question: (ii) if T is independent, what about agreement? So far, there are two types of non-phasal TPs: raising finite TPs and non-finite TPs. The former is often associated with a full agreement pattern (*ba*-morphology pattern) and the latter with a non-finite pattern of agreement (*ja*-morphology). Since the alternation of T as finite and non-finite appears regardless of C's presence/absence, a full agreement pattern appears independently of T. Therefore, it seems that agreement is independent of T since the non-tensed clause shows a full agreement pattern with the subject. Under the minimalist approach, it is only the complete probe that is able to assign formal features (bundle-features and structural Case). If the probe is defective like in the context of non-finite clauses, no formal features or Case can be assigned. This will predict the ungrammaticality of the ECM structure in (135). To explain, the clause is non-finite and the probe to which the active Goal DP fills its uninterpretable features is actually defective. Therefore, the fact that the pronoun *she* has received features and Case from its clause is contradictory.

## (135) \* John want she to leave

As has already been discussed, in the case of JA, as it is in the case of many null subject languages (e.g. Romanian, Greek, etc.), a defective probe of the tenseless clause can establish full agreement features. By this logic, the features of the defective probe can assign Case independently, which, actually, seems to be the case. Saeed (2017) theorizes that Case in Standard Arabic is not contingent on T. The following contrast in JA seems to support this assumption. In (136a), for the NPI hada 'anybody' to be merged with the matrix clause (supposedly, ECM-hyperraising), the matrix verb must merge with negation. In (136b), for *hada* to be placed in the local subject position, it must be merged with the negative particle *wala*. This fact about *wala* in (136c) shows that *wala*-NP can never occur in the matrix clause unless *wala* is replaced by negation merge. Therefore, (136c) is ill-formed. The verb-negation merge of (136a) vs. the existence of an independent particle as *wala* in (136b) indicates that the former is in the matrix clause whereas the latter is in the local clause.

(136)	a.	il-muʕallim bed-u-sh ħada (inn-u) jɣi:b
		the-teacher want-3SM-not anybody (C-3SM) get-absent-SUBJ
		'the teacher does not want anybody to get absent'
	b.	il-muɣallim bed-u (inn-u) wala ħada jɣi:b
		the-teacehr want-3SM (C-3SM) no body get-absent-SUBJ
		'the teacher wants that nobody gets absent'
	c.	* il-muʕallim bedu wala ħada (inn-u) jɣi:b
		the-teacher want-3SM not anybidy (C-3SM) get-absent-SUBJ

'the teacher wants nobody to get absent'

Therefore, (136a) is different from (136b); they have different Case-assignment of the NPI *hada*. In the ECM-hyperraising structure (a), the NPI receives an accusative Case from the matrix similar to exceptional case marking in English whereas the NPI in (b) receives nominative Case from its local probe; the defective probe. The case of (136b) is impossible in English because the infinitive mood is disallowed in *'that'* CPs.

(137) \* I want that John to leave

This is possible in JA since non-tensed TPs occur within CPs and are able to assign agreement and Case independently. It is reasonable to assume that (136a) is an example of ECM-hyperraising rather than a non-local prolepsis structure by arguing that the former induces an intervention effect showing locality, while the latter does not.

- (138) a. \* Al-mu?allim bitwaqa? Mariam inn-u ma ħada ysa:yid-ha the-teacher expect-PRES-3SM Mariam C-3SM not nobody help-her-ACC-3SF '\*The teacher expects Mariam that nobody would help her'.
  - b. Al-mu?allim bitwaga? min Mariam inn-u ma hada ysa:yid-ha the-teacher expect-PRES-3SM from Mariam C-3SM no nobody helps-her 'The teacher expects of Mariam that nobody would help her'.

This contrast supports the analysis the (136a) and (138a) are cases of ECM-hyperraising and that (136a) is different in the sense that the NPI *wala hada* is in the local clause and it is assigned a

nominative case by the defective probe. Based on this data, the argument is that neither Case nor agreement is contingent on T. It is possible that the head Agr is base-generated in the verb since the verb shows full agreement in T and non-T moods. As Agr is assumed to be base-generated in the verb, it is always possible for the complete features of the verbs to assign structural Case as in the case of tenseless complements. As a result, it seems that JA maintains that the version of Chomsky's approach (2000, 2001) that complete feature-bundles are necessary in assigning Case; however, the tense of the clause does not affect the Case-agreement system of Arabic as it was proposed in Saeed's work on MSA (2017).

Going back to the theoretical issues of hyperraising: Based on the logic of the previous discussion, we assume the following as a theoretical resolution of the puzzle of hyperraising:

- Following Ferreira's suggestion of the split of finite T (Ferreira, 2004, 2009), hyperraising is an A-movement that occurs out of the non-phasal version of finite Ts
- Following Carstens and Diercks's analysis of the C-T interface in Bantu (Carstens and Diercks, 2009), the head T in Arabic might have independent features from the head COMP
- Following Saeed's analysis of Modern Standard Arabic (Saeed, 2017), Case-agreement system is not contingent on T. Therefore, double-Case assignment is a natural consequence of the internal interaction of agreement features on the head V whether in T or non-T contexts.

To sum up, this chapter has looked into the different types of hyperraising reported across languages. Three proposals are presented: inherent Case (Nunes, 2008), composite features on C (Fong, 2017, 2018), and CP-deletion rule (Yadava, 2007). It has been argued that the head T in JA seems to show features from COMP. The same applies to the Case-agreement system as it seems not to be contingent on the head T. As a consequence, raising out of a CP layer is predictable and the double-Case assignment problem is solved. How come is it possible to raise out of a finite clause? In this case, Ferreira's argument that the finite T of the hyperraising construction is not

a phase and is distinct from the strong finite T soles the problem. Hence, the DP will be able to raise without obstruction.

#### **CHAPTER 3**

### HYPERRAISING VS. COPY RAISING

In languages that allow hyperraising the basic question is: since these languages tend to be *pro*drop, could the subject position of a hyperraising structure be a *pro*, in which case there is no movement, or could it be a trace? In this chapter, we will discuss the distinction between trace and *pro* by adopting a structure that follows the behavior of *pro* rather than that of trace to create a contrast with hyperraising. A good candidate is what is been called in the literature *copy raising* structures, which look similar to the surface make-up of raising constructions.

(139) John seems like he is cooking

However, it can be observed that the copy raising predicate selects a prepositional phrase (*like*-clause) and the embedded clause that relates to the subject is finite. In JA, the only surface difference that distinguishes copy raising from hyperraising is the appearance of the comparative particle ka-inn-u 'like-COMP-3SM' next to the raising noun *shikil*. This is expected as the overt pronoun of copy raising is null and hyperraising will target tensed clauses leading to close similarity between the two with respect to the surface structure. This is very effective since the embedded clause of each construction is reduced to a minimal contrast.

- (140) a. Eman fikil-ha [t btitbux]Eman appearance-3SF t cook-3SF-PRES'It seems that Eman is cooking'
  - b. Eman ∫ikil-ha ka-inn-ha [*pro* btitbux]
     Eman appearance-3SF like-C-3SF *pro* cook-3SM-PRES
     'Eman seems like she is cooking'

Therefore, this chapter will begin with a background about what researchers have said about copy raising constructions, particularly the work of Asudeh & Toivonen (2012) on perceptuality. In the second section, the focus will be more on discussing the different diagnoses of raising to copy raising, such as reconstruction, intervention effect, and among others, to draw a distinction between hyperraising and copy raising. The third section will address other types of raising predicates in JA and categorize them within raising theory. The last section will introduce den Dikken's argument (2017) against hyperraising and copy raising construction, and builds on the counterargument that his predicational approach might hold for copy raising constructions, but not hyperraising constructions. This is expected because we believe that hyperraising is actually one type of raising computation, whereas copy raising is not raising in the strict sense, i.e. the subject DP is base-generated.

# **3.1 Copy raising and Perceptuality**

Asudeh and Toivonen (2012) assimilate the syntax of copy raising to standard raising through three operations:

- (141) a. Standard raising relation between subject of open PP complement and subject of copy raising verb
  - b. Anaphoric binding: copy raising subject binds a copy pronoun in the complement; and
  - c. Manager resource: which is lexically contributed by the copy raising verb, and it removes the copy pronoun from composition and thus, licenses it

The first operation targets canonical raising of the DP subject from the specifier position of PP *like*-clause to the matrix subject position.

(142) a. e seems John like he is cookingb. John seems *t* like he is cooking

This means that the PP complement of *seem* is conceptualized like predicative complements (e.g. *John seems out of control.* However, their work extends in assuming that the relation between the DP and the pronoun in the embedded clause is actually anaphoric binding. The claim of Asudeh & Toivonen (2002) is not that there is syntactic raising between the DP and the copy pronoun in the *like*-clause, but the relation between the two seems to be controlled by anaphoric locality conditions. This is done by the manager resource that guarantees the licensing of a copy pronoun in the embedded clause, which is lexically contributed by the copy raising verb. They argue this assumption implies that the copy pronoun is not the raised subject, but is embedded somewhere

in the *like*-clause. Since this analysis implies that the pronoun is not raised, but is anaphoric, this will not exclude the possibility that the clause might contain no copy pronouns at all, but only relate to the matrix clause. This is borne out:

#### (143) Tom seems like Mary lost

They suggest that the pragmatic relatedness between the embedded clause to the matrix clause depends significantly on the notion of perceptuality. Thus, *seem*-type verbs are perceptual in the sense that they seem to assign perceptual meaning to the DP subject. The above structure in (143) is interpreted based on the proposition that Tom has some perceptual source (e.g. such as having bruises on his body) that will entail that Bill hurt him again. Therefore, the raising predicate in copy raising constructions seems to assign a perceptual semantic role to the DP subject. This perceptual selection is not defined in the narrow structural sense such as agent, patient, etc. Rather, the selection is of the same design as the selection of the experiencer role DP by the raising predicate in English.

### (144) John seems to Mary like he is in pain

Therefore, this structure will be interpreted that John has a perceptual source (e.g. moaning) The literature on copy raising (Rogers, 1971, 1972; Landau, 2009; Asudeh and Toivonen, 2012) has somehow floated around the idea that there might be two different types of copy raising structures. One is true copy raising in the sense that there is a principle of locality between the subject and the pronoun. For instance, Asudeh & Toivonen (2012) show that it is unacceptable to have the embedded pronominal referring to somebody except the matrix subject.

(145) a. John seems like he is cooking pastab. \* John seems like she is cooking pasta

However, in the case where CR seems not to be quite strict in locality, we can have a case of pseudo copy raising. A good example is the case where there is no pronominal copy at all.

(146) John seems like Mary won

Landau (2009) claims that there is a pattern of contrast between true copy raising vs. pseudo copy raising, which can be reflected in other types of structures. According to him, the pattern of contrast between hanging topics and dislocation is the same as the pattern of contrast between true copy raising and pseudo copy raising.

- (147) a. John, something terrible happened to him
  - b. For John, something terrible happened

Based on this proposal, true copy raising is processed through the support of an operator in the same manner as those of A-bar movements, whereas pseudo copy raising is predicational.

Thus, both of Asudeh & Toivonen's perceptual proposal and Landau's operator analysis intersect in that they both show that the pronoun in the *like*-clause holds an anaphoric relation with its antecedent. Copy raising, therefore, means that raising a DP occurs in a position different from that of the *pro* (the specifier of the PP complement of the head *like*); yet, the *pro* is still assumed to hold an anaphoric relation with the DP subject. It follows that this construction is raising, as it undergoes ordinary raising from the specifier position and imposes locality on the embedded *pro* independently of raising itself.

## 3.2 trace vs. pro

We have seen in Chapters 1 and 2 that there seems to be sufficient evidence to claim that the item left behind the hyperraising is a trace, not a *pro*. The intervention effect of an intermediate CP shows that there is locality between the hyperraised DP and the trace. This means that this trace has an anaphor-like status and adheres to Principle A of the binding theory (Chomsky, 1986). If we conceptualize this trace as *pro*, we might end up with a different structure such as copy raising. The goal in this section is to introduce the distinction between *pro* and trace in raising structures. (Asudeh and Toivonen, 2012; Landau, 2009; Rogers, 1972, 1971). Usually, the copy raising predicate is combined with a comparison predicate e.g. *like* that will embed a clause.

(148) John seems like he is cooking pasta

f However, this overtness of the pronominal copy is absent in a pro-drop language, which renders

the surface representation fuzzy, i.e., the base position may be a *pro* or a trace. To form copy raising in JA, the raising noun *shikil* is combined with the comparison predicate *ka-inn-u* (*like-*COMP-3SM).

 (149) Eman ∫ikil-ha ka-inn-u btitbux ma§karo:na Eman appearance-3SF like-C-3SF cook-3SF pasta
 'Eman seems like she is cooking pasta'.

The copy raising structures allow intermediate CPs in Arabic, which indicates that the item is a pronoun not a trace. For instance, the raised DP can relate to the pronoun in the embedded clause in different syntactic positions (subject, specifier, object, etc.). The following examples are all possible in JA. To explain, (150a) shows escaping from the intermediate CP, in (150b), the pronoun is an object clitic, in (150c) the pronoun is a POSS determiner, and (150d), there is no pronoun at all, but the subject DP relates to the embedded clause, so it is acceptable.

- (150) a. Eman ∫ikil-ha ka-inn-u Mariam gal-at in-ha saxi:fi Eman appearance-3SF like-C-3SF Mariam say-PAST C-3SF silly 'Eman seems like Mariam said that she is silly'
  - b. Eman ∫ikil-ha ka-inn-u il-m<sup>°</sup>almi miskit-ha btyu∫ Eman appearance-3SF like-C-3SM the-teacher caught-PART-3SF cheat-SUBJ 'Eman seems like the teacher caught her cheating'
  - c. Eman ∫ikil-ha ka-inn-u Om-ha btmu:t Eman appearance-3SF like-C-3SF mother-her die-PROG 'Eman seems like her mother is dying'
  - d. Eman ∫ikil-ha ka-inn-u Omar faaz
     Eman appearance-3SF like-C-3SM Omar win-PAST
     'Eman seems like Omar won'

The ability of the DP subject to relate to different syntactic positions is a character of copy raising constructions, which are reported to be judged grammatical with some dialectal differences. Asudeh & Toivonen conducted a wide-ranging questionnaires survey of copy raising and related constructions in four Germanic languages: Dutch, English, German, and Swedish. They have shown an interesting pattern of four dialects (A,B,C,D) in English and Swedish where the A dialect requires that the pronoun be the highest subject. This dialect is the most restrictive as it enforces strong locality. Dialect B allows the pronoun to be in the specifier position, dialect C

places the pronoun in the object position, and dialect C allows complements without pronouns. (Asudeh and Toivonen, 2012). Copy raising is analyzed in several ways in the literature (Landau, 2009; Kim, 2014; Rogers, 1972), but the point here is to show that copy raising behaves differently from hyperraising. The former has some perceptual interpretation that might relate the copy raised DP to different situations (e.g. in (150,c) there is some perceptual source of Eman that entails that her mother is dying). This is a plausible situation. The case is illegal in hyperraising because the item would be a trace that shows strict locality with its raised DP. This notion of perceptuality with copy raising relates a perceptual source to different situations. The case with raising (or hyperraising) is more abstract, as Asudeh and Toivonen describe it as *individual eventuality*. Therefore, it is more constrained to the locality of the source subject with its base position in the embedded clause. This could explain the ungrammaticality of hyperraising when presuming the copy in a non-subject position, which violates locality.

(151) \* Eman ∫ikil-ha Om-ha btmu:t Eman appearance-3SF mother-her-POSS die-PROG 'Eman seems that her mother is dying'

This contrast between hyperraising and copy raising implies that the former is local and the latter is not, which supports the distinction between a trace and a *pro* in each structure. The locality between the two structures is actually the same nature as that of the contrast between ECM hyperraising and a proleptic structure.

- (152) a. \* Al-mu<sup>s</sup>allim bitwaga<sup>s</sup> Mariam inn-u ma ħada ysa:<sup>s</sup>id-ha the-teacher expect-PRES-3SM Mariam C-3SM not nobody help-her-ACC-3SF 'The teacher expects Mariam that nobody would help her'.
  - b. Al-muʿallim bitwagaʿ min Mariam inn-u ma ħada ysa:ʿid-ha the-teacher expect-PRES-3SM from Mariam C-3SM no nobody helps-her 'The teacher expects of Mariam that nobody would help her'.

If the CPs that occur in raising contexts (e.g. subject hyperraising, ECM-hyperraising, etc.) are treated as TPs, a distinction can be drawn between the non-phasal CP (e.g. hyperraising) and the phasal CP of copy raising. This sounds reasonable since the former adheres to locality whereas the latter does not. Also, it has been pointed out (Fong, 2018, 2017; Asudeh and Toivonen, 2012),

copy raising structures (or proleptic structures) do not allow reconstruction. The copy-raised DP must be interpreted as base-generated in its initial position. The DP *la'bi:n* can only have the higher scope over the quantifier *kul*, but not the other way around.

(153) fi la'bi:n ∫ikil-hum ka-in-hum bunt<sup>2</sup>ard-u min il-mbara kul in player-DUAL appearance-3MPL like-C-3MPL kick-3MPL-PASS from the-game every jo:m day 'There are two players who seem to get kicked from the game everyday'.

This means that JA shows a syntactic distinction between hyperraising and copy raising in a similar fashion of the distinction between Subject-to-Subject Raising and Copy Raising (CR) in English.

Therefore, the aspects of locality and reconstruction seem to be intrinsically relevant to hyperraising rather than copy raising. This shows that hyperraising is a type of local raising and the base position should be interpreted as a trace, not a *pro*.

# 3.3 Other SEEM-type Predicates in JA

## 3.3.1 The comparison predicate ka-COMP

So far, the raising noun *fikil* is employed syntactically in a hyperraising structure and semantically as indicating abstract eventuality rather than perceptuality in the strict sense. Then, if this raising noun is combined with a comparison item (e.g. LIKE-type) such as *ka-inn-clitic* 'like-COMP-clitic', a copy raising structure, which resembles the English combination *seem like*. The case becomes more complicated when considering the use of this comparison item in Jordanian Arabic. In addition to its usage as a head of an adjunct PP, it also behaves as a raising predicate by itself. This is different from how English comparative predicates behave. For instance, the following contrast shows how the comparative predicate *ka* has a raising interpretation in (154a) distinct from being the head of an adjunct PP, as in (154b).

- (154) a. Eman ka-inn-ha fa:zat bil-mubaara Eman like-C-3SF win-PAST the-match
   'Eman is like she won the match' Int.: Eman seems like she won the match
  - b. Eman btiħki ka-inn-ha sahbit il-shariki
    Eman talks like-C-3SF owner the-company
    'Eman talks like she is the owner of the company'

First, this situation does not seem to be flexible in English where the comparative item (e.g. LIKE-type) is used in the fashion of a raising predicate. Let us consider examples in (155). The APclauses might sound better than VP-clauses for some reason, but using *like* in the sense of raising is less flexible than in Arabic. If the DP *John* provides a direct perceptual source, it can employ an abstract comparison of John's perceptuality and his being distracted as in (155a), liking the ice-cream as in (155b), or having won the match as in (155c). This could be a plausible perceptual context of abstract usage of a comparative predicate. Nevertheless, the abstract implication is not grounded in English. Following Kayne (2005), languages might show different behaviors in certain syntactic contexts because of the absence of some abstract item in the surface structure. In this context, the comparative item *like* is used as if it assumed the abstract existence of SEEM in the underlying structure. However, this abstraction of SEEM does not hold as strong in English as it holds in Arabic. We cannot say that *seem like* and *like* are used interchangeably in English. Therefore, there is a limitation of the raising-status of *like*-type predicates.

- (155) a. John is like he's distracted (AP-clause)
  - b. John is like he likes ice-creamc. John is like he won the match

(AP-clause) (Stative clause) (Evaluative clause)

Why does Arabic allow SEEM-abstraction so easily with the comparative predicate *ka*? I believe the answer is agreement. The Arabic predicate *ka* is always attached to the complementizer *inn*, and we know from earlier examples that this COMP is complex because it is always attached to a clitic as *inn-clitic*. Therefore, we end up with the seemingly surface unit *ka-inn-u*. This LIKE-AGR is significant in licensing SEEM-abstraction because it shows a subject-agreement match. The agreement features of COMP substitutes the agreement features of the raising noun *shikil*  'appearance', and therefore, it causes the comparative item *ka* to behave as a raising agreement. Clearly, English lacks this LIKE-AGR complex, nonetheless, the comparative perceptuality of the English *like* can still license SEEM-abstraction in limited contexts. The only distinction of JA is that agreement boosts the default perceptuality of a comparison predicate to be a genuine raising predicate that shows a subject-agreement match. T is always carried by the copula *ka:n* in all of these cases. The following example shows a typical raising example of *ka* where the subject is initial position, the copula indicates the matrix T, and the comparative predicate shows agreement. There should be abstract *SHIKIL* in JA as there should be abstract SEEM in English.

(156) Eman ka:n-at [SHIKIL-HA] ka-inn-ha nijhat bil-imitiħan Eman was-3SF [appearance-3SF] ka-C-3SF pass-PAST the-exam 'Eman was like she passed the exam'
 Int.: Eman [SEEMED] like she passed the exam

Actually, it can also be argued that there is a distinction between *like* hosting a clause and *like* hosting a non-clausal complement. For instance, JA uses a different form *zaj* 'like' when hosting other categories (e.g. DPs, APs, etc.). When small complements are selected such as adjectival phrases (APs), the use of *ka* is unacceptable in JA. This *ka* 'as' behaves as a preposition as it has this morphological status of being a prefix like many prepositions *ba* 'in', *al* 'on', among others, and it fails to be stranded, which is a general character of Arabic prepositions. I will assume that it is a preposition, which parallels Asudeh's categorization of the English predicate *like* as such (Asudeh, 2004). The preposition *ka* fails to be a prefix for the adjective phrase. JA only allows this preposition to host only clauses either in a hyperraising context or in an adjunct clause. Thus, this preposition seems to be specified in selecting finite clauses, which matches its raising usage in JA. In other contexts where other complements might appear, JA is expected to employ a distinct form. The prediction is borne out.

(157) Ahmad zaj/\*ka il-hazi:n
 Ahmad like the-sad
 'Ahmad is like a sad person'

There is a significant overshadowing fact about this lexical LIKE distinction in Jordanian

Arabic. For instance, Modern Standard Arabic (MSA) allows the preposition *ka* to be in the context of (157). Yet, what is the consequence? There is no such form as *zaj* (since it is no needed any more) and interestingly, MSA only uses *ka* as a head of an adjunct PP, and cannot be used as raising.

(MSA)

(158) \* Eman ka-ann-aha fa:zat fil musabaGa Eman like-COMP-3SF win-PAST in contest 'Eman is like she won the contest'

This pattern of MSA with the particle *ka* is predictable since it lacks this LIKE-distinction and, thus, lacks a raising reading. In the case of JA, we can conclude that there is a complementary distribution between the use of *ka* as raising and the use of *ka* as a lexical predicate. JA allows its raising version with *ka*, but it uses a different form *zaj* for its most primitive usage such as hosting small clauses. MSA allows this primitive usage (e.g. hosting AP), but fails to apply raising. The distinction is complementary in nature. We can conceptualize the same distinction between *like* in primitive usage and *like* in SEEM-abstraction, but the case is less direct in English.

- (159) a. John is like the boss Int.: Lexical comparison
  - b. John is like he won the lottery Int.: perceptual comparison [SEEM]

The fact that JA adopts two different versions of LIKE is another piece of evidence that there is a raising version of LIKE not only in Arabic, but also at least, partially, in English. So far, three raising predicates can be recognized:

- 1) fikil-clitic (appearance-clitic) for hyperraising (HR),
- 2) *fikil-u ka-inn-u* (appearance-clitic like-COMP-clitic) for copy raising (CR), and
- 3) *ka-inn-clitic* (like-COMP-clitic)

The question now is whether the third predicate (COMP-like-clitic) stands for HR or CR? Intuitively, it should be copy raising because it is identical to a CR predicate if we assume its underlying structure being encoded with the abstraction [*/IKIL-clitic*] *ka-inn-clitic*. However, let us check if it behaves the same by diagnosis. When it comes to reconstruction, the DP allows only one interpretation where the DP has a scope higher than the quantifier, which lines up with copy raising rather than hyperraising.

(160) fi la?bi:n ka-inn-hum bint<sup>?</sup>ard-u min il-mubara kul jo:m in players-DUAL like-COMP-3MPL kick-PASS from the-match every day 'There are two players who seem to be kicked from the match everyday'

If the diagnosis is the intervention effect, in other words, the ability to relate the subject DP to different syntactic positions, it seems to be partially available. The ability is more constrained, but it can be judged acceptable within the proper contexts. The more constrained character might be due to the surface absence of the raising predicate *SHIKIL* to support the perceptuality of the subject to relate to different types of positions.

- (161) a. ? Eman ka-inn-ha Om-ha btmu:t Eman like-C-3SF mother-her-POSS die-PROG 'Eman is like her mother is dying'
  - b. ? Eman ka-inn-ha Ahmad bahdal-ha Eman like-C-3SF Ahmad scold-3SM-PAST-her-ACC 'Eman is like Ahmad scolded her'
  - c. ? Eman ka-inn-ha Mariam ga:lat in-ha saxif-i Eman like-C-3SF Mariam say-PAST C-3SF silly-3SF 'Eman is like Mariam said that she is silly'

As a matter of fact, this ability of the comparative item to relate the subject to positions other than strictly the subject can be conceptualized in English. If given the proper context, John in (162a) can be interpreted as the perceptual source (p-source) that can entail he is like dying to some experiencer (e.g. being physically injured) and the same kind of perceptual logic can apply to (162b) (e.g. John showing distress)

(162) a. John is like he is dyingb. John is like Mary insulted him

Therefore, this presents the comparative item as a copy raising predicate not as a hyperraising predicate. The case in JA is strengthened by agreement comparing with the non-strong use of the English *like* as a copy raising predicate.

## 3.3.2 The Puzzle of the Absent Cook in JA

Now, we examine the predicate *mbajjin* 'obvious-PART', which seems to resemble the case of *the puzzle of the absent cook* in Swedish addressed by Asudeh & Toivonen (2012). This type of raising can select a prepositional phrase that contains its perceptual source (p-source). First, let us look at the Swedish case in which the predicate *verkar* can select a PP containing a perceptual source. Having the subject in the matrix position will render the sentence ungrammatical because it causes the structure to have two p-sources: the copy-raised subject and the DP contained in a PP. The example in (163a) indicates that Lisa is the p-source that shows that Tom has won whereas (163b) crashes as the subject stands in conflict with Lisa for being the p-source.

(163) a. Det verkar pa Lisa som om Tom har vunnit it seems on L. as if T. has won 'Lisa gives the impression that Tom has won'

(Swedish)

b. \* Tom verkar pa Lisa som om han har vunnit Tom seems on L. as if he has won 'T. seems on L. as if he had won'

Egyptian Arabic (EA) uses the same predicate of JA, but with slightly different form bayen.

This EA predicate selects a PP containing a p-source similar to the Swedish case.

(164) kan bayen alek-i inn-ik mabsut<sup>2</sup>a
 was show on-2SF C-2sF happy
 'you give the impression that you are happy'

Now, the predicate *mbajin* in JA shows the same design by selecting a PP containing the p-source.

(165) mbajjin min Omar inn-u Maria fazat
 obvious-3SM-AP-PART from Omar C-3SM Maria win-PAST-3SF
 'it is obvious from Omar that Maria won'
 Int.: Omar gives the impression that Maria won

If we copy-raise a DP in the matrix position, we can create a crash in having two p-sources:

 (166) \* Mariam mbajn-i min Omar inn-u faz:at Mariam obvious-AP-PART from Omar C-3SM won 'Mariam is obvious from Omar that she won'

We have identified the nature of this predicate in three varieties so far (Swedish, EA, and JA) and they all share the property of a PP-selection that contains the p-source (*pa Lisa*, 'on Lisa', *al-ik* 'on-you', and *min Omar* 'from Omar' respectively). This predicate has the option of a PP-selection in an expletive structure since whenever there is such selection, an expletive is found as a p-source (some aspect of event) such as the expletive *Det* in (163a) or the expletive-like features of the noun predicate *bayen-3SM* in EA in (164) as well as the adjectival predicate *mbajjin-3SM* in JA in (165). The same predicate has the option of having the embedded subject in the matrix clause to be as the p-source, and thus, avoid as PP-selection (avoid a perceptual crash). In such case, this subject will enter into an agreement match with this predicate. The question that arises here is whether the structure with this predicate is hyperraising or copy raising. The previous diagnosis can be used in this case. If the matrix subject cannot reconstruct under the scope of the quantifier, a case of copy raising obtains. The interpretation must be that there is a specific woman that comes to the store every day. It cannot be that every day, a woman comes to the store. Therefore, the matrix subject must always have a higher scope. This result lines up with CR predicates in general.

(167) fi mara mbajn-i inn-u bteedʒi ?al maħal kol jom in a woman obvious-AP-PART C-3SM come-PRES to-store every day 'there is a woman that seems like she comes to the store everyday'

What about locality? Let us examine some of the different non-local ways of binding that occur in CR structures. The case seems possible with this predicate. This non-local binding might sound best with *fikil ka-COMP* 'seem like'. Nonetheless, the case is still acceptable with *mbajjin* as it imposes a strong p-source on its subject.

(168) a. Mariam mbajn-i inn-u Om-ha btmu:t Mariam obvious-AP-PART C-3SM mother-her-POSS die-PROG 'Mariam seems like her mother is dying'  Mariam mbajn-i inn-u fi ħada darab-ha Mariam obvious-AP-PART C-3SM in somebody hit-her-ACC 'Mariam seems like somebody hit her'

Therefore, this predicate is a CR-type not HR.

So far, we identified four types of SEEM-type raising predicates. There is only one predicate specified for hyperraising and the other three types of predicates are specified for copy raising, which might show slight differences with respect to locality as we have seen before.

Form	<b>Raising Pattern</b>
ſikil	Hyperraising
∫ikil + ka-COMP	Copy Raising
mbajjin	Copy Raising
ka-COMP	Copy Raising
	fikil fikil + ka-COMP mbajjin

This chapter has investigated the range of possible SEEM-raising predicates in Jordanian Arabic. The data shows that it is only the raising noun *fikil* that is able to show raising computation between a raised DP and a trace. The other types of similar predicates seem to address what is known as copy raising constructions (Asudeh and Toivonen, 2012). Therefore, this chapter supports a strong distinction between the trace analysis of hyperraising and the copy analysis of copy raising.

## 3.4 den Dikken's Predicational Approach

Den Dikken (2017) claims that the hyperraising argument is not strongly motivated since the syntax of hyperraising can be grounded in the predicational approach. First, the subject DP will be base-generated in the specifier of the CP clause and the pronoun (overt or covert) will be a bound variable. For the idiom chunk movement diagnosis, den Dikken finds the base-generation analysis as strong as the movement analysis. Also, he perceives the idiosyncrasy of *strong* idioms of the type *kick the bucket* as evidence in favor of the predicational approach. The fact that the DP *the bucket* is not able to raise implies that it is base-generated, so that predicating the DP *the bucket* in an initial position makes the predication upon *kick* distorted. Other idioms are possible because

predication seems to be lexically compatible with the unitary meaning of those idioms. In the case of reconstruction diagnosis, den Dikken finds the argument on Brazilian Portuguese (Nunes, 2008; Martins and Nunes, 2010) not convincing. For instance, the following contrast shows that when the negation particle is harbored by the subject as *ninguem* 'nobody', the subject DP seems to reconstruct with the embedded idiomatic NPI *mexer um dedo* 'move a finger'. The NPI item is licensed prior to raising. However, when the subject is non-negative and a negative particle *nao* 'not' is inserted in the matrix clause, the negative is not able to reconstruct anymore. den Dikken finds this compelling evidence. The alternative analysis that the subject is base-generated would imply that the negated subject can be related to the embedded idiomatic NPI through predication, but non-negative-subjects cannot, and there is no need for reconstruction analysis.

- (170) a. Ninguem parecia que ia mexer um dedo para me ajudar (BP) nobody seemed that went move a finger for me help
  - b. \* O Jao nao parecia que ia mexer um dedo para me ajudar Det Joao not seemed that went move a finger for me help

Den Dikken shows that the reconstruction effect in hyperraising in Brazilian Portuguese is not convincing and the argument for idiomatic chunk movement can be grounded in a predicational approach. Therefore, for him, there is no future for the argument of hyperraising that cannot be grounded in the predicational analysis. The DP is base-generated and the null subject is the bound variable. He extends this analysis to Hungarian hyperraising. The analysis primarily focuses on examining Hungarian raising predicates. He points out that the raising adjective *valószínű* 'likely' and the assumed raising predicate *kell* 'need' are used in two distinct structures. Whenever the DP is placed in initial position, it cannot enter into agreement with the raising predicate. The dislocation of an A-bar movement structure forces its anti-agreement pattern once the DP is to the left of the predicate. To force a subject reading, the DP will be placed in internal position, to the right of the predicate, showing full agreement pattern, as expected. This applies in (171a) as hyperraising showing full agreement, while it applies in (171b) as a dislocation structure.

(171) a. ?AZÉRT valószínű\*(ek) a fénymásolók, hogy el fognak tűnni therefore likely\*(PL) the copiers(NOM) that dis- will.3MPL appear.INF 'therefore the photocopiers are likely to disappear'  b. a fénymásolók valószínű/\*valószínűek, hogy el fognak tűnni the copiers(NOM) likely/likely.3MPL that dis- will.3MPL appear.INF 'the photocopiers are likely to disappear'

This agreement contrast seems to fail with an assumed raising predicate *kell* 'need' as the default paradigm appears whether the DP is to the left of the predicate (topic) or to the right of the predicate (subject).

- (172) a. fénymásolók el kell/\*kellenek, hogy tűnjenek copiers(NOM) the needs/need.3MPL that appear.SBJ.3MPL 'the photocopiers need to disappear'
  - b. ?AZÉRT kell/\*kellenek a fénymásolók, hogy eltűnjenek therefore needs/need.3MPL the copiers.PL(NOM) that disappear.SBJ.3MPL 'therefore the photocopiers need to disappear'

den Dikken claims that the predicate kell has an expletive alternate similar to raising predicates, which indicates its non-thematic status. Interestingly, the analysis shows, however, that this predicate fails with reconstruction and idiomatic chunk movement. As a result, the subject DP is analyzed as base-generated and the raising predicate kell resembles modals in being basegenerated in T. The modal-like behavior of these predicates seems to explain the anti-agreement pattern between the predicate and the post-verbal subject. Therefore, there is no raising out of tensed clause. Rather, it is a base-generated DP related by predication to the embedded null subject. In the case of copy raising as studied in English, the DP will be base-generated in the specifier of the like-clause and it raises normally to the empty matrix position, which lines up with Asudeh's insight (2002), while the DP subject relates to the pronoun of the clause as a bound variable through predication. This predicational analysis goes against the proposals made in copy raising that pronouns are anaphoric with their antecedents. Although the DP subject is not raised from the position of the pronoun, Asudeh and Toivonen assume that the pronoun has anaphoric relation with the DP subject. Landau (2009) presumes locality between the pronoun and an operator licensing A-bar movement. Almost all the literature on copy raising supports the assumption that there should be a version of copy raising which requires locality between the DP-subject and the pronoun. This locality implies that the perceptual source of the subject DP has an intrinsic relation to entail a proposition about the same DP. The strategy is to license a copy pronoun somewhere in the embedded clause. Den Dikken's argument states the pronoun must be free in its domain and must not be anaphoric. This shows that the DP is predicated of the *like*-clause and the comparative item *like* stands as *RELATOR* between the DP and the embedded clause. This explains why the complement can be without a pronoun, but still able to relate to the subject DP. This argument finds anaphoric binding untenable with copy raising constructions and the predicational approach can account for all the facts.

## 3.4.1 Against Hyperraising

In Chapter 1, we have seen that the diagnoses of hyperraising seem to make a convincing argument that the DP is raised out of CP. There is a strong parallel between infinitival raising and hyperraising (HR). First, den Dikken does not address the character of locality that hyperraising shows, especially when there is an intervening intermediate CP. The concept of locality was originally addressed by Moore (Moore, 1998) for Turkish where he points out that a language allowing subject movement out of CP seems to show locality effects, and the only violation triggered that makes a language like Turkish departs from English-type languages is escape from the Nominative Island Condition (NIC), which disallows movement out of a finite clause. In principle, there is a level of locality that seems to be of strong theoretical relevance to raising. Furthermore, this locality is actually particular to hyperraising and it is not a mere distortion of predication. For instance, copy raising, prolepsis, and topicalization do not show the same intervention effects. This is expected because the nature of the fronted DP in all of these structure is different from raising. Therefore, locality is a genuine character of hyperraising. Den Dikken conflates hyperraising with copy raising by placing them under his predicational approach. He seems to be lured by the surface structure similarity, which led to dispensing with the distinction in underlying structures. Moving forward to another diagnoses, idiom chunk movement can still be an effective diagnosis. However, we have seen earlier that theoretically, the idiosyncrasy of some *strong* idioms (e.g. kick the bucket reject this movement. This idiomatic rigidity can be resolved by impoverishment

rules as emphasized in Distributed Morphology (DM) (Halle, 1997) where the strong idiom is inserted in the lexicon as a one single item. This means that rigidity of some idioms does not in particular refute the argument of chunk movement in general with respect to raising. In the case of reconstruction, there is a great body of data that shows that hyperraising languages (e.g. Bantu, Turkish, etc.) allow reconstruction normally (Fong, 2017; VanUrk, 2015; Ademola, 2011; Carstens and Diercks, 2009; Moore, 1998; Jake and Odden, 1979). The fact that the negative free morpheme  $n\tilde{a}o$  'not' cannot reconstruct with the idiomatic NPI in Brazilian Portuguese (BP) is not sufficient to refute the character of reconstruction of hyperraising. It could be that there is some other factor about this particle that leads to the anti-effect in BP whereas negated subjects face no issue. I am not sure if the reconstruction of negated subjects and the anti-reconstruction of each of the overt subject and the free negative particle is actually a contrast in the first place. It seems to be illegal for the overt subject and the free negative particle to reconstruct independently and at the same time. For instance, considering the following idioms in Arabic where overt subjects can reconstruct normally into the embedded negative idiom of the clause whereas having the negative particle of the idiom to be dislocated in the matrix clause always makes the meaning distorted. This intuition implies that reconstruction of a subject and a negative particle independently contradicts the logic of reconstruction.

(173)	a.	i:d waħd-i ∫ikil-ha ma bits <sup>?</sup> affig	
		hand one-3SF appearance-3SF not clap-3SF-PRES	
		'One hand seems not to clap'.	
		Int.: One person is not enough to accomplish the task.	(JA)
	b.	* i:d waħd-i ma ∫ikil-ha bits <sup>?</sup> affig	
hand one-3SF not appearance-3SF clap-PRES			
		'hand one-3SF appearance-3SF not clap-PRES'.	

However, if this free negative particle happens to take scope over the subject, reconstruction is possible. This is expected because it would mean that negation alongside the subject are reconstructed as one unit to license the NPI in the embedded clause. The particle *ma* and the expletive *fi* can reconstruct as a one unit indicating that licensing the quantifier *hada* occurred before raising.

(174) ma fi: ∫ikl-u ħad dʒaj not there appearacne-3SM nobody come-PART 'It seems that nobody is coming'.

This analysis suggests that the fact that BP shows an anti-reconstruction effect with an overt subject and an independent negative particle has to do with the fact that reconstructing each item at a different level distorts the logic of reconstruction. Reconstruction must address a single raised item (e.g. the expletive fi) or a united raised item (e.g. ma fi) where negation will take scope of the raised subject and reconstruction will make sense. Den Dikken's emphasis on the ungrammaticality of (170b) in BP might be irrelevant as to whether hyperraising allows reconstruction or not. The ungrammaticality of both in BP and (170b) in JA seems to be relevant to the fact the reconstructing each of a raised subject and of a raised negative particle independently distorts the logic of reconstruction in terms of the one-to-one correspondence between the matrix clause and the base position. As a result, the counterargument against idiom chunk movement and reconstruction of hyperraising do not seem to be strongly motivated. On the contrary, they seem to show original effects in a similar fashion to ordinary raising. Also, den Dikken's argument on the Hungarian hyperraising data seems to have taken the wrong direction. He himself points out that the raising adjective valószínű 'likely' trigger full agreement, whereas the the predicate kell 'need' does not as we have seen earlier in (172a) and (172b). This agreement difference is taken as crucial to which predicate stands as an actual hyperraising predicate. The focus of the diagnoses including reconstruction and idiomatic chunks were applied to the predicate kell 'need', but not to the known raising predicates such as valószínű 'likely' or even to the equivalent of the SEEMtype of predicates. Therefore, the test of hyperraising on that paper lacks the full diagnosis of the main raising predicates. Now, what about the case of the predicate kell 'need' in Hungarian? Den Dikken's suggestion is that there seems to be a set of predicates that can take a default paradigm similar to raising predicates and can be assumed to be base-generated in the head T. However, this *KELL*-type of predicate is actually irrelevant to the argument about hyperraising in particular. For instance, in JA, we can find similar types of predicates that always take a default paradigm with their subjects, and seem to behave as modals, for example *muhtamal* 'probable',

*mumkin* 'possible', and  $d^2 aru:ri$  'necessary', which seem the closest in meaning to the Hungarian predicate *kell*. Whether the subject DP is placed in initial position or in internal position, to the right of the predicate, the predicate preserves its default paradigm exactly like *kell*.

- a. il-fab:ab muhtamal/mumkin/d<sup>2</sup>aro:ri ji-rawħ-u
   the-guys probable-3SM/possible-3SM/necessary-3SM leave-3MPL-INF
   'Tt is possible/necessary that the guys leave'.
  - b. muhtamal/mumkin/d<sup>?</sup>arori il-∫aba:b ji-rawħ-u probable-3SM/possible-3SM/necessary-3SM the-guys leave-3MPL-INF

These modal-like predicates can host tenseless complements as modals exactly. They disallow reconstruction of the DP subject in the low position in the embedded clause.

(176) fi zalami d<sup>2</sup>arori inn-u ji:dʒi
there man necessary-3SM C-3SM come-3SM-INF
'There is some man that is necessary for him to come'.
Int.: *fi zalami* must interpreted in the high position only

They cannot give the interpretation where the DP subject is in the low position.

(177) d<sup>2</sup>arori inn-u ji:dʒi zalami necessary-3SM C-3SM come-3SM-INF man 'It is necessary that some man is coming'.

Therefore, it is reasonable to say that both *kell*-type of predicates in Hungarian and  $d^2 arori$ :type of predicates in Jordanian Arabic behave the same as they always show a default agreement paradigm and behave differently to how raising predicates do in a movement-raising analysis. If this is the case, it is misleading to conceive them as raising predicates in the first place. They are definitely distinct from LIKELY-type and SEEM-type predicates whether in JA or Hungarian. Therefore, they require analysis of their own as a modal-like set of predicates. Den Dikken overgeneralizes the behavior of the modal-like predicate *kell* to the phenomenon of hyperraising. We have seen that this is not a valid generalization. As the base-generation analysis of *kell*-type predicates seem to be compelling, they conceptualize a different set of predicates and deviate from the actual raising behavior that is observed with LIKELY-type and SEEM-type predicates.

In summary, the argument against hyperraising is not compelling because it focuses on a similar, but distinct set of predicates (let us call them *modal-like* predicates). If the hyperraising

argument is dedicated to focus on the perceptual predicates such as SEEM-type, the structure triggers a full agreement pattern, an effect of reconstruction, and a locality effect. All pieces of evidence for raising start to come out when the proper predicate is employed.

#### 3.4.2 Against CR

Since it has been established that hyperraising (HR) is genuinely different from copy raising (CR), den Dikken's treatment of both as the same under the predicational approach seems to be invalid. Nonetheless, it might be that the treatment of CR as predicational is on the right track. Den Dikken claims that it is not the case that raising the subject DP from the *like*-clause can be accompanied by an anaphoric binding relation to a pronoun somewhere in the embedded clause. Rather, the DP subject raises independently of the specifier position, while the pronoun is a bound variable to the subject. Therefore, the pronoun must be free in its domain (Chomsky, 1986) and cannot be an anaphoric copy. The predicational approach says that the DP subject raises from the specifier position of the PP to the matrix subject position. The DP subject is related to the finite clause by the comparative *relator like*. The relationship of the DP subject to different syntactic positions in these constructions. The copy raising construction is found in favor of the base-generation analysis since the DP subject cannot reconstruct in the lower position in the finite clause. This applies in English where the DP *two players* in (178) cannot be interpreted under the scope of the quantifier *every* in the embedded clause:

(178) Two players seem like they are kicked from the game every day.

Let us examine the validity of this predicational approach by looking briefly into the two main proposals that advocate the local version of copy raising constructions: the perceptual-based proposal and the operator-based proposal. First, I find the notion of perceptuality is intrinsically relevant in explaining the ability of copy raising construction to map the DP subject to different syntactic positions. Asudeh & Toivonen's account emphasizes that the perceptual role is crucial in interpretation whether the structure is local in binding or non-local. For instance, it is possible to interpret John in (179a) as showing some p-source that entails he is cooking and interpret John in (179b) carry some evidence of p-source that would entail that Mary won the award.

- (179) a. John seems like he is cooking.
  - b. John seems like Mary won the award.

Now, Landau's operator-based proposal (2009) claims that the perceptual approach might not hold strong with certain sentences. The assumption that *the house* in (180a) cannot be a p-source, but it is related to the pronominal object *it* through a null operator while the DP *house* is raised out of the specifier of *like*-clause and sentence (180b) has the grade sheet as the p-source not the subject John. Therefore, for Landau, we end up with two sentences where perceptuality fails to address their subjects.

- (180) a. The house<sub>i</sub> seems  $t_i$  like  $[OP_i \text{ [nobody wants enjoys cleaning it_i]}]$ 
  - b. Here's the grade sheet: Oh, John looks like he has failed the exam

However, although Landau's operator-based analysis of copy raising sounds theoretically compelling, it is still unclear how the notion of perceptuality actually fails. We could still imagine that the house is a p-source; somebody's description of the house for being so dirty entails that nobody enjoys cleaning it. Also, for sentence (180b), the grade sheet is still an entity related to John (John's grade sheet), so that the subject John can still function as the p-source at some level of perceptual interpretation. Therefore, the notion of perceptuality introduced seems to hold strong to all of those different contexts. If the raising predicate *seem* assigns this semantic role; *p-source*, why it is not the case that ordinary infinitival raising shows the same perceptual behavior as copy raising structure? I would suggest that the solution resides on the insertion of the comparison item *like*. The triggering difference between raising and copy raising in English is the insertion of this item (*like*-type predicate). The same applies for Jordanian Arabic (see Chapter 3).

(181) a. John seems like/as if/as though he enjoys cooking.b. John seems to enjoy cooking.

As discussed earlier, this preposition can be used as a raising predicate in Jordanian Arabic *ka-COMP*. It can assign a perceptual source and relate to the embedded clause as a copy raising structure. Also, even in English, the same item can create a perceptual context. Consider (182).

- (182) a. John is like he's distracted.
  - b. John is like his dad is dying.
  - c. John is like the world is about to end.

we know that the above subjects are assigned theta-roles by the predicate *like*. We can also theorize that the assigned theta role is actually the perceptual role (p-source). The interpretation of (182a) would be that there is some perceptual source of John that makes him like he is in a distracted state. The same intuition can apply to (182b) where John's p-source (e.g. crying or his manner of speech) makes him like his own dad is dying or the world is about to end. Although the judgements on those might not stable among native speakers, but the idea that they are possible partially in some contexts is sufficient to make a point here. The fact that this use of *like* is not so strong in English might have to do with the fact that it is not supported by an agreement match as in JA *ka-COMP-AGR*. Since the agreement exists, it is possible to theorize that there is an abstraction of |SEEM| in the underlying structure. In the case of English, agreement is only carried by the copula *be* and cannot extend to the comparative predicate.

Now, going back to den Dikken's approach, his analysis is that this comparison item functions as *relator* between the subject and the embedded CP under a predicational approach. This might be on the right track. As discussed earlier, the notion of perceptuality on copy raising depends on both the raising predicate *seem* and the comparison item *like*. *Seem* facilitates the raising of the subject, which is, as den Dikken proposes, an ordinary raising from the specifier of the *like*clause. Therefore, under this analysis, the subject in this structure undergoes ordinary raising from the specifier position to the matrix subject position.

## (183) John<sub>i</sub> seems $t_i$ like he is cooking pasta

The argument here is to show that the notion of perceptuality seems to be actually valid. We can analyze perceptuality through perceptual verbs such as *seem*, and also through comparison

predicates such as *like*. Therefore, to analyze the copy raising structure properly, we ought to recognize the perceptuality of the comparative item at one derivation and the perceptuality of the raising verb at a different derivation. The comparative *like* is the actual predicate that assigns a p-source before raising, and therefore, the subject could be related to the embedded CP through predication of this item. As a result, the perceptual analysis dictates that this DP subject is assigned a p-source twice at two different levels of derivation.

- The first derivation addresses the perceptual interpretation that makes John like he is cooking pasta mediated by perceptual comparative items such as *like, as if, as though, ka, etc.*
- The second derivation is processed under standard raising where it is assigned a p-source by perceptual raising predicates such *seem*, *appear*, *shikil*, *parece*, etc.

The notion of perceptuality is interesting area of research and can be expanded to recognize a deeper level of relevance between this concept and raising in general.

Therefore, this analysis would line up with den Dikken's approach that copy raising does not copy the DP subject in the finite clause as the term implies. Instead, it undergoes ordinary raising from the specifier position of *like*-clause, whereas the base DP position is related to the embedded clauses through predication where the actual predicate before raising is *like*.

To sum up, den Dikken's approach is compelling only in the case of copy raising structures. In the case of hyperraising, this approach does not seem to be strongly motivated since hyperraising shows a parallel behavior of a genuine type of raising.

This concludes the discussion of chapter three. We have pushed a distinction between the trace-analysis of hyperraising construction and the pro-analysis of some other constructions. The discussion of both structures is relevant because they overlap in the use of predicates and can seem to lose distinctions with respect to surface similarity. The multiple raising diagnoses show that hyperraising is distinct from what is called copy raising (Asudeh and Toivonen, 2012; Landau, 2009) and they are also distinct from structures of modal-like predicates such as the *KELL*-type found in Hungarian. Finally, den Dikken's argument against hyperraising and copy raising

is discussed as well. His argument is found is invalid in refuting the existence of hyperrsaising. Yet, the analysis of the copy raising construction can be grounded to the predicational approach since the anaphoric binding between the DP subject and the pronoun does not seem to be tenable. This line of logic indicates that hyperraising is genuinely raising.

#### **CHAPTER 4**

#### CONCLUSION

This thesis has addressed the case of raising in Jordanian Arabic. The main proposal shows that Jordanian Arabic raises the subject DP out of a CP clause, which seems to adhere to the phenomenon of hyper-raising observed across languages (Fong, 2018; Carstens and Diercks, 2009; Nunes, 2008). Jordanian Arabic is argued to lack the strong C-T interface argued by Chomsky (Chomsky, 2008) for English-type languages. Thus, hyperraising adheres to phase theory in a sense that the head C is non-phasal and hyperraising is an A-movement occurring out of tensed TPs. A-movement out of a tensed TP is perceived as predictable since tense behaves as independent of C on the one hand and the Case-agreement seems to be independent of T as was proposed for MSA (Saeed, 2017) on the other. Contrary to previous proposals that Arabic is a non-raising language (Mohammad, 2000; Soltan, 2007), JA adopts the syntax of hyperraising showing a parallel behavior of the locality of Principle A and reconstruction effects found in a language such as English. This original intuition of Moore on Turkish (Moore, 1998) that locality can be preserved notwithstanding the violation of the Nominative Island Condition seems to be valid as well in JA. Furthermore, we have seen that the distinction between tensed clauses and tenseless clauses in JA and across the Arabic dialects seems to be of the same pattern as the distinction between tensed clauses and infinitival clauses in English-type languages; however, the selection of either type of clause would rely on the selection properties of the target predicate and the syntactic context. Hopefully, the analysis of hyperraising should be seriously considered as true raising as long as it shows distinctiveness from other types of structures that show surface similarity such as copy raising, prolepsis, or dislocation. Last, the thesis raises questions about the different types of hyperraising that might occur in one language or might exist differently across languages (raising-HR, ECM-HR, control-HR, etc.). The future goal can aim at building a more unified theory that recognizes the behavior of those different types and produces a comparative analysis of how they come into existence in some linguistic system. There is also an original

intuition about the notion of perceptuality with respect to copy raising and how we can conceptualize copy raising in terms of the perceptual interpretation and analyze hyperraising in terms of the eventual interpretation (Asudeh and Toivonen, 2012). In a nutshell, although Arabic might deviate from English in some features (e.g. C-T inheritance, Case system, or agreement pattern), Arabic still stands as a true raising. BIBLIOGRAPHY

### BIBLIOGRAPHY

- Ademola, A. F. F. (2011). A cross-linguistic analysis of finite raising constructions. PhD thesis, University of KwaZulu-Natal, South Africa.
- Al-Balushi, R. (2012). Why verbless sentences in Standard Arabic are verbless. *Canadian Journal* of *Linguistics*, 57(1):1–30.
- Alburarabi, S. (2015). The nature of A-movement in Arabic raising and passive structures. Master's thesis, Eastern Michigan University, Ypsilanti, Michigan.
- Aoun, J., Choueiri, L., and Benmamoun, E. (2010). *The Syntax of Arabic*. Cambridge University Press, New York.
- Asudeh, A. (2004). *Resumption as resource management*. PhD thesis, Stanford University, California.
- Asudeh, A. and Toivonen, I. (2012). Copy raising and perception. *Natural Language & Linguistic Theory*, 30(2):321–380.
- Benmamoun, E. (2000). The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects. Oxford University Press, New York.
- Camilleri, M., ElSadek, S., and Sadler, L. (2014). Perceptual reports in (varieties of) Arabic. In Butt, M. and King, T. H., editors, *Proceedings of the 14th LFG Conference*, page 179–199. CSLI Publications, Stanford, CA.
- Carstens, V. and Diercks, M. (2009). Parameterizing case and activity: Hyper-raising in Bantu. In Kan, S., Moore-Cantwell, C., and Staubs, R., editors, *Proceedings of the 40th North East Linguistic Society Meeting*. GLSA, Amherst, MA.
- Chomsky, N. (1981). Lectures on Government and Binding. Foris Publications, Dordrecht.
- Chomsky, N. (1986). *Knowledge of language: Its Nature, Origin, and Use*. Frederick A. Praege, New York.
- Chomsky, N. (2008). On phases. In Freidin, R., Otero, C., and Zubizarreta, M., editors, *Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud*, pages 133–166. MIT Press, Cambridge, MA.
- Cinque, G. (1990). Types of Ā-dependencies. MIT Press, Cambridge, MA.
- den Dikken, M. (2017). Predication in the syntax of hyper-raising and copy raising. *Acta Linguistica Academia: An International Journal of Linguistics*, 64(1):3–43. Until 2016 Acta Linguisitica Hungarica.
- ElSadek, S. and Sadler, L. (2015). Egyptian Arabic perceptual reports. In Butt, M. and King, T. H., editors, *Proceedings of the LFG15 Conference*, pages 63–81. CSLI Publications, Stanford, CA.

- Farghal, M. (1988). *The syntax of wh-questions and related matters in Arabic*. PhD thesis, Indiana University, Bloomington.
- Farghal, M. (1993). Theory of PRO and Arabic empty categories. *Papers and studies in contrastive linguistics*, 28:99–108.
- Fehri, A. F. (2013). *Issues in the Structure of Arabic Clauses and Words*. Springer Netherlands, Dordrecht, Netherlands.
- Ferreira, M. (2004). Hyperraising and null subjects in Brazilian Portuguese. In Castro, A., Ferreira, M., Hacquard, V., and Salanova, A. P., editors, *MIT Working Papers in Linguistics*, pages 57–85, Cambridge, MA. Department of Linguistics and Philosophy, MIT.
- Ferreira, M. (2009). Null subjects and finite control in Brazilian Portuguese. In Nunes, J., editor, *Minimalist Essays on Brazilian Portuguese Syntax*, pages 17–49. John Benjamins, Amsterdam.
- Fong, S. (2017). Featural and Edge-based Analysis of Hyper-raising. Ms.
- Fong, S. (2018). Featural definition of syntactic positions: Evidence from hyper-raising. In Farrell, P., editor, *Proceedings of the Linguistic Society of America*, volume 3, page 2:1–15.
- Halle, M. (1997). Distributed morphology: Impoverishment and fission. In Bruening, B., Kang, Y., and McGinnis, M., editors, *MIT Working Papers in Linguistics*, pages 425–449, Cambridge, MA. MIT Press.
- Henkin, R. (1993). 'to be' (or not) in the Bedouin Arabic dialect of the *Ahaywat* (Sinai). *Mediterranean Language Review*, 6(25):173–197.
- Hornstein, N. (1999). Movement and Control. Linguistic Inquiry, 30(1):69-96.
- Hornstein, N. and Nunes, J. (2002). On asymmetries between parasitic gap and across-the-board constructions. *Syntax*, 5(1):26–54.
- Huang, C.-T. J. (1998). Logical Relations in Chinese and the Theory of Grammar. Taylor & Francis, London.
- Jake, J. and Odden, D. (1979). Raising in Kipsigis. Studies in the Linguistic Sciences, 9(2):131-155.
- Kim, J. (2014). English copy raising construction: Argument realization and characterization. *Linguistics*, 52(1):167–203.
- Landau, I. (2009). This construction looks like a copy is optional. *Linguistic Inquiry*, 40(2)(2):343–346.
- Marshad, H. A. and Suleiman, S. M. (1991). A comparative study of Swahili *ni* and Arabic *kāna* as copulative elements. *Language Sciences*, 13(1):21–37.
- Martins, A. M. and Nunes, J. (2010). Apparent hyper-raising in Brazilian Portuguese: Agreement with topics across a finite CP. In Panagiotidis, E. P., editor, *The Complementiser Phase: Subjects and Wh-dependencies*, pages 142–163. Oxford University Press, Oxford.

- Mohammad, M. A. (2000). Word Order, Agreement and Pronominalization in Standard and Palestinian Arabic. John Benjamins Publishing, Amsterdam.
- Moore, J. (1998). Turkish copy-raising and a-chain locality. *Natural Language & Linguistic Theory*, 16(1):149–189.
- Nunes, J. (2008). Inherent case as a licensing condition for A-movement: The case of hyper-raising constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics*, 7(2):83–108.
- Nunes, J. (2019). Remarks on finite control and hyper-raising in Brazilian Portuguese. *Journal of Portuguese Linguistics*, 18(1):1–50.
- Ouhalla, J. (1993). Subject-extraction, negation and the antiagreement effect. *Natural Language* & *Linguistic Theory*, 11(3):477–518.
- Rogers, A. (1971). Three kinds of physical perception verbs. In Binnick, R. I., editor, *Seventh Regional Meeting of the Chicago Linguistic Society*, pages 202–222, Chicago, IL. Chicago Linguistic Society.
- Rogers, A. (1972). Another look at flip perception verbs. In Phares, G. C., editor, *Papers from Eighth Regional Meeting of the Chicago Linguistic Society*, pages 303–315, Chicago, IL. Chicago Linguistic Society.
- Saeed, F. (2017). The case-agreement system in subjunctive complements. *Macrolinguistics*, 4:52–79.
- Shlonsky, U. (2004). The form of Semitic noun phrases. Lingua, 114(12):1465-1526.
- Soltan, U. (2007). On formal feature licensing in minimalism: Aspects of Standard Arabic morphosyntax. PhD thesis, University of Maryland, College Park.
- Ura, H. (1994). Hyper-raising and the theory of *pro*. In Giordano, C. and Ardron, D., editors, *MIT Working Papers in Linguistics*, pages 297–316, Cambridge, MA. MIT.
- VanUrk, C. (2015). A uniform syntax for phrasal movement: A case study of Dinka Bor. PhD thesis, Massachusetts Institute of Technology, Department of Linguistics and Philosophy, Cambridge, MA.
- Yadava, Y. P. (2007). Raising from a tensed clause and linguistic theory: Evidence from Maithili.
   In Bayer, J., Bhattacharya, T., and Hany Babu, M. T., editors, *Linguistic Theory and South Asian Languages: Essays in Honour of K. A. Jayaseelan*, pages 143–159. John Benjamins, Amsterdam.