# AGREEMENT, SPECIFICITY EFFECTS, AND PHRASE STRUCTURE IN RURAL PALESTINIAN ARABIC EXISTENTIAL CONSTRUCTIONS

A Thesis Presented to the Faculty of the Graduate School of Cornell University in Partial Fulfillment of the Requirements for the Degree of Master of the Arts

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2000 Frederick MacNeill LePage Hoyt

# **BIOGRAPHICAL SKETCH**

Frederick MacNeill LePage Hoyt was born February 20, 1967 in a US Army hospital in Nüremberg, Germany. He grew up in New Hampshire, graduating from Keene High School (Keene, NH) in 1984. Afterwards, he spent a year and a half working in food service, and travelled within the US and abroad. In Spring 1986, he matriculated at the University of New Hampshire, studying English literature, and worked his vacations as a house painter, pierhand, translator, and public groundskeeper in Portsmouth, NH. In May 1990 he obtained a BA in English Literature, with a focus on Old English poetry, and with minor concentrations in German, Spanish, and Forest Ecology.

After completing his BA, he spent a 10-month sojourn in New York City, working for Greenpeace, various food service concessions, and the press office at Sotheby's auction house. In 1991, he returned to the New Hampshire Seacoast, where he resumed his job as a groundskeeper, apprenticed as a tree surgeon, and forayed across the continental US on several occasions. In Spring 1995, he traveled to Greece, Egypt, and Israel, and during these travels had his first contact with the Arabic language and peoples. Smitten, he entered an MA program in the Department of Linguistics at Cornell University in the Fall of 1996, for the purpose of studying lingustics with respect to Arabic.

In addition to Arabic, German, and Spanish, he has spent time studying Old English, Scots Gaelic, and Modern Greek. He also plays the guitar, enjoys listening to Early Music and Celtic folk music, and maintains an amatuer interest in urban forestry. At the time of writing, he lives with his sweetheart Emily, two cats, and a Shetland Sheepdog named Ben. This Thesis is Dedicated to the Memory of:

My Mother

Margaret Ann LePage B.A., Cornell Class of '64

My Father

Frederick Anthony Hoyt B.A., Cornell Class of '62

My Maternal Grandfather

Dr. Wilbur R. LePage B.A., Cornell Class of '33 Ph.D., Cornell Class of '41

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# LIST OF ABBREVIATIONS

RPA	=	Rural Palestinian Arabic
NPA	=	Northern Palestinian Arabic
LA	=	Lebanese Arabic
EA	=	Egyptian (Cairene) Arabic
ТА	=	Tunisian Arabic
MSA	=	Modern Standard Arabic
3, 2, 1	=	third-, second-, and first-person
M, F	=	masculine, feminine
S, P	=	singular, plural
IMP	=	imperative
INDIC	=	indicative mood
PART	=	participle
PASSPART	=	passive participle
NEG	=	negation
OBJ	=	a semantically null morpheme used to
		host clitic pronouns
-CL	=	clitic pronoun
REL	=	relative particle
AOR	=	aorist
NOM	=	nominative
ACC	=	accusative
GEN	=	genetive
ABL	=	ablative



Arabic is like an ocean.

# Chapter 1

# Introduction

#### 1.1 **Overview**

This thesis is a study of the structure of existential constructions in a sub-dialect of Palestinian Arabic, referred to as *Rural Palestinian Arabic* (or *RPA*; Herzallah 1990; Younes 1993, 1994, 1995). RPA is a conservative dialect of colloquial Arabic, which retains several features of older Arabic which have been lost in more progressive dialects<sup>1</sup>. Of principle interest among these features are patterns of agreement marking found in existential constructions.

Unlike what is the case in most urban dialects of Arabic, as well as in many other languages, full agreement in number and gender between the post-verbal noun phrase and verb seems to alternate with impersonal agreement, agreement marking in third-person masculine singular, regardless of the number and gender of the understood "subject." For example, in (1a), the logical subject is *ixtyâre* "old woman," which is a feminine singular noun; the participle of the copula *bâķi* can be marked either in impersonal masculine singular, or agree with *ixtyâre* in the feminine singular:

<sup>&</sup>lt;sup>1</sup>RPA examples from the Schmidt and Kahle (1918, 1930) are identified selection and section; for example, (10.1) indicates selection number 10, section 1. Selections 1-64 are in Schmidt and Kahle (1918), and 65-132 in Schmidt and Kahle (1930). RPA data elicited from native speakers are indicated as such. Sources of examples of other dialects are given with the examples. Examples unidentified with respect to dialect are fabricated (by the author or by native speakers), and should be considered to fall under the rubric of "Educated Levantine Arabic," a super- or meta-dialect associated with higher social prestige in the Levantine region, and bleached to one degree or another of local dialectal characteristics.

- a. bâķi /bâķye hanâk ixtyâre warâ-ha kôm kawiyîn bepartMS/bepartFS there oldFS behind-cl3FS clanMP strongMP "There was an old woman there who had a strong clan behind her." (RPA: elicited data).
  - b. baka /baku fîh xams izlâm fi-d-dâr was3MS/were3MP THERE five menMP in-the-house
    "There were five men in the house." (RPA: elicited data).

There are hints that semantic or pragmatic factors may interact with choice of agreement form; noun phrases controlling full agreement are interpreted as "specific," in the sense that a listener will understand that the speaker has a particular referent or set of referents in mind corresponding to the description in the noun phrase (cf. Lumsden 1988; Abbott 1993). For example in (2b), full agreement marking coincides with a reading of the noun phrase *ulâd* "boys, children" that takes scope wider than the quantificational adverb *čill yôm* "every day":

- (2) a. čill yôm **b-îği** la-ṣ-saff **ulâd**  *every day iNDIC-come3MS to-the-class boysMP* "Every day, boys come to class."  $\forall x[(day(x)) \rightarrow \exists y[boys(y) \& come-to-class(y) in (x)]]$ 
  - b. čill yôm b-îğu la-ṣ-ṣaff ulâd
    every day INDIC-come3MP to-the-class boysMP
    "There are (certain) boys who come to class every day."
    ∃y[boys(y) & ∀x[(days(x))→ come-to-class(y) in (x)]]

In (2a), in which the verb is marked with impersonal agreement, *ulâd* "boys" is interpreted with narrow scope with respect to the quantifier *čill* "every." In (2b), however, the verb is marked in full agreement with the noun phrase, which is interpreted with scope outside of the quantifier.

In (3), full agreement marking does not seem to affect scope interpretation, but rather the sense attributed to the preposition *cind-* "at," commonly used to indicate possession, as well as spacial location:

- (3) a. hanni, baka <sup>c</sup>ind-e xams ulâd Hanni, was3MS at-ci3MS five childrenMP "Hanni, he had five children (i.e., 'he was the father of five children' or 'he had five children with him or chez lui')."
  - b. ḥanni, **baķu** <sup>c</sup>ind-e **xams ulâd** *Hanni, were3MP at-cL3MS five childrenMP* "Hanni, he had five children (chez lui)."

In (3a), the verb is marked for singular agreement, and the clause is ambiguous between a possessive and locative interpretations and can mean either that Hanni was the father of five children, or that he had five children in his company or supervision at some particular point in the past. (3b), in contrast, shows the verb marked in the plural, and only the locative sense is available; the clause can only mean that Hanni had five children with him at the moment in question.

There is also evidence that the way a noun phrase is modified interacts with form of agreement marking. For example, modification of an indefinite noun phrase with a cardinal numeral or the "indefinite" demonstrative *hal-*"this" creates a (possibly very) slight preference for impersonal agreement, while a relative clause containing a definite noun phrase increases some preference for full agreement. Judgements provided by native speakers for this point are very weak, but seem to never-the-less be systematic; the preferences for one agreement form or another, if not strong, are consistent across speakers.

While the semantic or pragmatic interpretation of existential constructions will not be addressed in this thesis, it is tempting to follow Fodor and Sag (1982), Lumsden (1988), McNally (1992), and Abbott (1993) in arguing that rich descriptive content increases the specificity that discourse participants attribute to a nominal description. In Lumsden's (1988) terms, rich descriptive content signals increased commitment on the part of the speaker to the existence of actual objects corresponding to the description in the noun phrase. Conversely, marking a noun phrase with a numeral quantifier increases the salience of a set-denoting and therefore non-referential interpretation of the noun phrase, and therefore makes full agreement less likely.

# 1.2 Theoretical Issues to be Addressed

The facts just mentioned present two challenges to the Minimalist Program as formulated in Chomsky (1995), Collins (1997), and Bowers (1998, 1999): first, optionality in the application of grammatical rules is held to be a chimera in the Minimalist Program, arising from variation in underlying structure or formal feature specification of lexical items; second, the syntactic module of grammar is assumed to be "closed," in the sense that it does not interact directly with other grammatical systems, such as those involved in interpretation or pronunciation.

Therefore, the apparent empirical generalization concerning agreement in RPA existential constructions - that agreement form co-varies with different interpretations - should be inexpressible in a Minimalist grammar. At issue is how a grammar in which form is constructed by algorithmic processes, allows for apparent optionality in application of a rule like agreement marking, and how a closed system (as the syntactic module of grammar is assumed to be in the Minimalist Program) can be affected by "external" factors like semantic or pragmatic specificity.

This situation suggests a paradox in the T-model of grammar. It is widely assumed that agreement licensing takes place at the PF, the interface between the syntactic and morpho-phonological components of the grammar, while licensing conditions that relate to semantic specificity take effect at LF, the interface between the syntactic and semantic/pragmatic component. In the case of Arabic, we have seen that NPs can stay in situ in the surface syntax, and therefore undergo whatever LF-raising they need after Spell-out. Given that no conditions require these NPs to raise in the surface syntax, it is mysterious why semantic specificity, a property associated with semantic or pragmatic interpretation, should play a role in licensing agreement marking, a process that is ordered prior to LF in the derivation.

(1-1) The T-Model



PF (agreement licensing)

In the T-model, a dependency between agreement and specificity would mean that the derivation has to "look ahead" of Spell-Out, in order to feed the correct information to the morphological processes that license agreement. But according to the principle of Full Interpretation, only information that is interpretable at a given interface can be legitimately represented there: "there are no PF-LF interactions relevant to convergence" (Chomsky 1995: 220). Therefore, specificity, which is post-LF information, should not be interpretable at PF, and therefore should not affect the PF operations that license agreement marking.

# 1.2.1 *Optionality in Grammar*

Prominent syntactic analyses of existential constructions are based on the facts of Standard English or French, in which form of agreement is putatively obligatory (cf. Chomsky 1995; see Schūtze 1999<sup>2</sup> for a dissenting view); full

<sup>&</sup>lt;sup>2</sup>Schütze gives examples like the following, arguing that they are part of the productive grammar of (spoken) English:

agreement between the verb and NP being required in English, and impersonal agreement in French:

- (4) a. There \*was/were three dogs in the room.
  - b. Il y a /\*ont trois chiens dans la salle *There it hasMS/haveP three dogs in the room* "There are three dogs in the room."

In view of the examples in (4), many researchers have concluded that agreement marking in existential constructions is an either/or phenomenon: one language may do it one way, another language in another way, but we would not expect both options to be freely available within one language.

For example, agreement in English is frequently assumed to be due to covert raising of the formal feature of the noun phrase into an agreementlicensing position (cf. Chomsky 1995, Collins 1997). The agreement facts of French and other languages that require impersonal agreement are frequently analyzed as being due to the insertion of an expletive pronoun; the verb agrees with the expletive, rather than the thematic NP, resulting in impersonal agreement, as in the following examples:

(5) a. Il est venu trois hommes hier. *It isS comeS three men yesterday.*"There came three men yesterday." (*French*)

(iii) On the center of the page is two houses.

- (iv) Vit komu *we-NOM cameP* "We came."
- (v) Honum nytist ðeiri bókahillar heima hjá sær him-DAT needs3S more bookshelves-ACC at-home with self "He needs more bookshelves in his home." (Faroese)

<sup>(</sup>i) There [wəz] 50 people at the party last night.

<sup>(</sup>ii) There's often problems at the South Precinct.

Schütze claims that nouns checking nominative case features agree with the verb, while nouns checking other case features do not. Therefore, agreement variation in English is similar to agreement marking in quirky case constructions in Scandanavian, in which the verb agrees with a "nominative subject," but not a "dative subject":

- **Es** gibt Hammelbeinen mit Erbsen zum Speise
   *It givesS mutton-legsP with peas to-the eating* "There are lamb shanks with mashed peas to eat." (*German*)
- c. It IS dogs in this house!
   "There ARE dogs in this house." (African American Vernacular English<sup>3</sup>).

Moreover, optionality in agreement marking is not necessarily typical of Arabic. Native speakers of some of the more "progressive" urban dialects find full agreement in existential constructions - particularly *fih*-constructions dispreferred or downright ungrammatical (although both agreement options are permitted in locative-inversion constructions). This is illustrated in the following contrast between Rural Palestinian and Tunisian Arabic, which, on the one hand, allow both full and impersonal agreement in an existential construction, and Lebanese (Beirut) and Egyptian (Cairene) Arabic, which, on the other hand, permit only impersonal agreement:

- (6) a. baka /bakên fîh içlâb ičtâr /ičtîre fi-l-lôða was3MS/were3FP THERE dogsFP manyP/manyFS in-the-room "There were many dogs in the room." (RPA)
  - b. **kân** /**kânu** famma barša klâb fi-l-bêt *was3MS/were3MP there many dogsP in-the-room* "Same." (*TA*)
- (7) a. kên /\*kênu fîh klêb ktîr /ktîre fi-l-<sup>o</sup>ôḍa was3MS/were3P there dogsFP manyMS/manyFS in-the-room "Same." (LA)
  - b. **kân** /\*kânu fîh kilâb kitîra fi-l-ôda was3MS/wereP there dogsP manyFS in-the-room "Same." (EA)

<sup>&</sup>lt;sup>3</sup>Labov (1973: 270) reports that AAVE "uses the dummy subject *it* where standard English uses *there*, as in *it's a difference* or *it's a policeman at the door*. This is not a categorical rule, but it rises to a very high frequency in the vernacular."

Arabics dialects like Lebanese and Egyptian therefore seem to be more like French (and therefore well-behaved in the view of the Minimalist Program), in that they employ an agreement strategy involving insertion of an expletive pronoun.

One possibility for explaining the availability of two forms may be that they are in free variation with one another, or that they represent a "virus" in the grammar (see Schūtze 1999 for discussion). However, while the optionality of agreement form as well as a correlation with specificity effects in RPA and dialects may seem anomolous, it is not unique to Rural Palestinian Arabic. Sigler (1997) describes comparable facts for Standard Western Armenian: if an indefinite subject is modified by a numeral or a weak quantifier and unmarked for number or definiteness, the verb may be marked in the singular:

- 8 a. ayt baderzm-i-n meč hink zinvor əsbann-ve-c-av that battle-gen-the in 5 soldiers kill-pass-AOR-3S "In that battle were killed 5 soldiers."
  - b. **kəsan usanov** kənuten-e-mə casove-c-**av** *twenty sudenttS exam-ABL-a fail-AOR-3S* "Twenty students failed an exam."

If plurality and/or definiteness are marked on the NP, plural agreement marking on the verb is obligatory:

(9)	a.	ayt baderazm-i-n meč <b>hink zinvor-ner</b> əsbann-v-ec- <b>an</b> /*-av
		that battle-gen-the in 5 soldier-P killpassaor-3P / -3S
		"In that battle five soldiers were killed."
	b.	ayt baderazm-i-n meč <b>hink zinvor-ner-ə</b> əsbann-ve-c- <b>an</b> /*-av
		that battle-gen-the in 5 soldier-P-the kill-pass-aor-3P / -3S
		"In that battle the five soldiers were killed."
(10)	a.	<b>kəsan usanoʁ-ner-ə</b> kənuten-e-mə casoʁe-c- <b>an</b> /*-av
		twenty sudent-P-the exam-ABL-a fail-AOR-3S / -3S
		"The 20 students failed an exam."

b. **kəsan usanor-ner** kənuten-e-mə caxore-c-**an**/\*-av *twenty students-P exam-ABL-a fail-AOR-3P* / -3S "20 students failed an exam."

Sigler then goes on to note that "rich" descriptive modification can make plural marking, and hence agreement marking, optional or obligatory. For example, in (11a), the noun phrase *šad hay* "many Armenian(s)" occurs with 3rd-person singular marking on the verb *ga* "exist," and is infelicitous with a plural suffix. In contrast, (11b) shows *šad hay* modified by the relative clause *pars ga-s den-en nor yegad* "newly arrived from Iran," the presence of which makes the plural suffix *er* felicitous on *hay* "Armenian" and plural marking on the verb acceptable. A similar contrast can be seen in (12):

- (11) a. **šad hay**/#-er **ga**/-#an hon? *much Armenian-P exist3S*/-3P *there* "Are there many Armenians there?"
  - b. **šad parsga-sdan-en nor yegad hay**/-er **gan** hon? *much Iran-ABL-the new comepart Armenian-P exist3P there* "Are there many Armenians there who have recently arrived from Iran?"
- (12) a. mer dun-\(\overline{\overlin}\overline{\uverline{\uverline{\uverline{\uverl
  - b. mer dun-ə kišer-ə **utə təram ç-une-c-oB hyur**/-**er**  *GEN-P house-the night-the eight money NEG-have-AOR-REL guest-P*  **ge-c-an**/-**av**  *stay-aor-3P*/-3S "Eight guests who had no money stayed overnight at our house."

Sigler indicates that, as in RPA, these different options for agreement marking correlate with different semantic/pragmatic interpretations. Given this, the two agreement options should be represented as systematically available, rather than as being in free variation.

#### 1.2.2 Agreement Licensing and NP Structure

My proposal, drawing on analyses by Sigler (1997) and Déprez (1998), is that a direct correlation between agreement form and interpretation is indeed inexpressible in a Minimalist grammar, but that it can be shown to be in fact an epiphenomon of basically syntactic processes. I argue that what agreement marking and interpretation of a noun phrase in an existential construction have directly in common is the structure of the noun phrase. In particular, noun phrases that control full agreement include a determiner layer in their phrase structure; they are Determiner Phrases (in the sense of Abney 1987), rather than Noun Phrases.

Determiners, rather than nouns, are specified for case, and therefore only DPs are visible to case checking operations. Noun phrase movement is driven by case checking, so a noun phrase unspecified for case will not participate in a movement operation, and as a consequence will not enter PrP, in which agreement marking is licensed. In such a situation, an expletive null pronominal is inserted into PrP, in order to check its agreement features. Determiner phrases, being specified for case, can raise into agreement checking positions. As such, my analysis is very similar in spirit if not in the details to Halila's (1992), who argues that optionality in agreement in Tunisian Arabic is due both to pronouninsertion and agreement with the post-verbal NP being available.

# 1.2.3 NP Structure, Agreement, and Interpretation

While I will not explore the interpretation of noun phrases in existential constructions here, I will suggest a way in which the presence or lack of a determiner layer in noun phrase structure may correlate with specific vs. non-specific interpretation of the noun phrase. In particular, DPs may be interpreted as arguments or as "rigid designators" in Abbott's (1993) terms, while "bare"

indefinites are interpreted as "incorporated" predicates that become part of a complex description of the event denoted by the verb phrase.

Following Lumsden (1988), the optionality in agreement form would therefore arise from an ambiguity in the syntactic description a listener assigns to his or her interpretation of the clause. Rich modification of an indefinite may dispose the listener to identify or assume a particular (or specific) referent, and therefore to assume a structural description in which the noun phrase includes a determiner layer. Alternately, a numerical quantifier may dispose the listener to understand the noun phrase merely as part of a complex description of an event, and therefore to assign it a structural description without a determiner.

#### **1.2.4** The Structure of Arabic Noun Phrases

Additional theoretical issues to be addressed therefore include the structure of noun phrases. I argue in some detail that nominal heads undergo at most partial movement in the Arabic NP (cf. Ritter 1988, 1991; Borer 1996; Choueiri 2000; Shlonsky 2000). Evidence for this includes modification of nominal heads with numerical quantifiers, and arguments for external determiners given in Choueiri 2000. I also argue that the "small clause" complement of the copula in an existential construction consists of a Predication Phrase selecting the thematic predicate (such as a prepositional phrase) as its complement. Evidence for this is presented involving agreement marking on verbal stems in non-finite contexts, and from Aoun's (1996) discussion of Clitic-Left-Dislocation in Lebanese Arabic.

### 1.2.5 *PF-Scrambling*

Finally, I present arguments for a theory in which at least some word order inversions (which I refer to as PP-scrambling, after Belletti and Shlonsky 1995) can be analyzed as PF-operations, and therefore not syntactic in the strict sense. This is in response to data that present apparent counterexamples to the analysis presented thus far, in that they show multiple frontings or inversions in a clause. Following Aoun and Benmamoun (1998), Neeleman and Reinhart (1998) and Zubizarreta (1998), I compare word order inversions which occur to the right of the copula in existential constructions with similar inversions to the right of the verb in transitive clauses.

I argue that both are due to well-formedness conditions on PFrepresentations which require that constituents with new-information focus be the right-most or most deeply embedded constituent in the clause. PP-scrambling occurs when the prepositional phrase (or other constituent) does not have new-information focus, but still is the most deeply-embedded constituent in the clause. In order to resolve this conflict, it is raised and adjoined to the most local maximal projection containing it, deriving the final word order. However, since this operation occurs at the PF-interface, it does not affect the LFrepresentation of the clause in any way.

# 1.3 The Language

# 1.3.1 Historical Background

In 1910, when Schmidt and Kahle collected their material, the population of Bir Zeit consisted of 3 Christian clans, and 1 Muslim, numbering in total some 700 persons (Schmidt and Kahle 1930: 12-13)<sup>4</sup>. The Christian inhabitants trace their origins to a group of Christian Bedouin who migrated to Bir Zeit sometime in the early 18th Century from the environs of el-Karak, a city in Jordan on the south-eastern shore of the Dead Sea (see also Cadora 1992: 32-33). Currently, the population is by some (informal) estimates roughly 5000, and the town has become host to Bir Zeit University, perhaps the best-known

<sup>&</sup>lt;sup>4</sup>Schmidt and Kahle provide no indication that significant differences in speech were to be found between the Christian and Muslim communities.

and most prestigious of Palestinian universities. However, the RPA as recorded in 1910 still seems to be more or less intact, although contact with native speakers suggests that it has suffered more from inroads of education than from demographic change. Some differences of usage (particularly with regard to plural inflection) were noted among younger speakers, but the examples taken from the Schmidt and Kahle texts were all judged normal and acceptable by native speakers from a wide spectrum of ages.

#### 1.3.2 *RPA and other Dialects*

RPA is distinct from the urban dialects spoken nearby (such as in Ramallah, Jerusalem, Nablus, etc. as well as from rural dialects in other areas of the historical Palestine, such as Northern (or Galilean) Palestinian (cf. Mohammad 1989, 1998; Khalaily 1997; Shlonsky 1997). The relationship between RPA and urban dialects is summarized in the following report from Schmidt and Kahle (1918: 45):

> The Arabic spoken in the larger cities is again clearly distinct from the Arabic of the *fallâhîn* [peasants], especially the Arabic of Jerusalem, about which, relatively speaking, we have been the best informed up to this point. The cities have time and again seen influx from the most disparate Arabic speaking regions, various analogizations and levelings have taken place, and as a result, a trade language has developed which is excepted from the actual dialect area of Palestine. The dialect of Jerusalem is closer to that of Damascus - where in many respects similar circumstances prevail - than it is to that of the surrounding *fallâhîn*<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup>"Von dem Arabisch der Fellachen ist wieder deutlich geschieden das in den größeren Städten gesprochene Arabisch, insbesondere das Arabische von Jerusalem, µber das wir bisher relativ am besten unterrichtet sind. Die Städte haben immer wieder aus den verschiedensten arabisch sprechenden Gegenden Zuzug erhalten, mancherlei Angleichung und Abschleifung hat da Stattgefunden und so ist eine Verkehrsprache entstanden, die aus dem eigentlichen Dialektgebiet Palästina herausfällt. Der Dialekt von Jerusalem steht dem von Damaskus - wo in mancher Hinsicht ähnliche Verhältnisse vorliegen - näher als dem der umwohnenden Fellachen. "

Distinguishing characteristics of Rural Palestinian Arabic include the following (see Bergstrasser 1915; Schmidt and Kahle 1918: 45-93; Blau 1960):

- Substitution of the verb *baķa -yibķa/yiķba<sup>6</sup>* (Arabic یبقی بقی) or its participle *bâķi* (Arabic باقی) for *kân -yikûn* (Arabic یکون کان) as the copula.
- Retention of inflection for the feminine plural in adjectives and verbs; -*ât* for adjectives, and -*în* for verbs.
- Affrication of the consonant /k/ (Arabic ك) to /č/, as in člâb for klâb (Arabic كلاب), čanîse for kanîse (Arabic كنيسة), etc. Exceptions obtain in certain environments, including distal demonstratives such as haðâk "thatMS," haðîk "thatFS," haðôlak "those," hanâk "there," etc., and the 2MS object clitic -ak (as opposed to the 2FS clitic -ič); this contrast seems to have been grammaticized. See Schmidt and Kahle (1918: 49-50).
- Affrication of the pharyngealized stop /d/ (Arabic ض) to /ð/, such that the verbs /dall/ "to err" (Arabic ضلل) and /ðall/ "to remain" (Arabic ظلل) are both pronounced *ðall*.
- Fronting of /q/ (Arabic  $\underline{s}$ ) to /k/ (transliterated as /k/).
- In Bir Zeit, fronting of vowels in pronoun clitics: for example, -(*h*)*u*, the 3MS object clitic in Standard Arabic and other dialects is pronounced -(*h*)*e* (see Bergstraser 1915: §34 and Map 13), the 3MP and 3FP object clitics -*hum* and -*hun* are pronounced as -*him* and -*hin*, and the 2MP and 2FP clitics -*kum* and -*kun* are pronounced -*čim* and -*čin*.

According to comments by native speaker informants, there are certain notable differences between RPA as spoken in area of Bir Zeit/Ramallah and as spoken further north, in the rural areas around Nablus or Jenin. In particular, as noted just above, vowels in clitic pronouns are fronted in the Bir Zeit/Ramallah variation of the dialect. Certain lexical differences are to be noted, and affrication

<sup>&</sup>lt;sup>6</sup>*Yikba* is a common metathesized variant of *yibka*, the imperfect of *bakâ*.

of /k/ is perhaps more pervasive in Bir Zeit: note Bir Zeit  $\partial cil$  "he ate," cil "eat!" vs. Jenin-area  $\partial kal$  "he ate" and kul "eat!" However, these differences being noted, RPA as spoken in these two areas seems to be largely identical, particularly with regard to the phenomenon under discussion in this thesis.

#### 1.3.3 *Data Sources and Methods*

The majority of the data from RPA come from the Schmidt and Kahle collection (Schmidt and Kahle 1918, 1930), and from field work conducted in Bir Zeit in 1998. Additional data were provided by a native speaker of the dialect, as spoken in rural areas near Jenin, further north in the West Bank. Most of the data from Schmidt and Kahle were extracted by means of concordance-building software: the text of Schmidt and Kahle (1918) was scanned into a computer and then converted into electronic text using optical character recognition (OCR) software. After the text had been edited for errors, and to normalize various form of phonological variation, concordance software (*Conc 1.80* from The Summer Institute of Linguistics) was used to locate examples of the grammatical phenomena under study.

Examples from Schmidt and Kahle (1930) were extracted by manual search. Additional data from the Schmidt and Kahle volumes was taken from examples in Blau's (1960) syntax of the Bir Zeit dialect. Fieldwork was conducted in Bir Zeit in 1998; native speakers were presented with example sentences (written in Arabic characters) which were based either entirely or in part on examples extracted from Schmidt and Kahle (1918). These examples consisted of both isolated sentences, and short texts. Similar methods were used with other native speakers, although the examples were frequently given in Roman characters (many native speakers find the dialect easier to recognize in Roman characters than in Arabic characters).

#### 1.3.4 *Other Dialects*

Data has also been included from other sub-dialects of Palestinian Arabic, including Northern Palestinian (Mohammad 1998a,b, 2000; Shlonsky 1997; Khalaily 1997) and what I will refer to as Urban Palestinian, including the dialects of Jerusalem and Nablus (however, see comments above the distinction between urban and rural sedentary dialects). Northern Palestinian Arabic is a term used for a group of sedentary dialects (as distinct from Bedouin dialects: see Rosenhouse 1984) spoken in the Galilee region of northern Israel. Non-Palestinian dialects represented in the data include Lebanese (Beirut), Syrian (Damascus), Jordanian (Amman), Saudi Arabian (Dahran), Egyptian (Cairo), Tunisian (Sfax and Tunis), and Moroccan Arabic.

Data from these additional dialects have been brought into the discussion both to supplement and contrast the data from Rural Palestinian Arabic. I have made these parallels based on a (possibly controversial) assumption that dialects (especially in the Levantine region) differ by degree, and therefore that two dialects within the area may agree closely in some respects while differing in others and that where two dialects agree, native speaker judgements provided by a speaker of one can be generalized to another. For example, the Palestinian and Lebanese dialects that I have examined both make use of the "indefinite" demonstrative *hal-* "this," parallel to the "indefinite" use of *this* in colloquial English, so I have assumed that judgements of a speaker of Lebanese can be generalized to a speaker of Palestinian, and have mixed data from the two dialects in the discussion of this point.

As we saw above, Lebanese and Rural Palestinian differ in the forms of agreement marking they allow in existential constructions with the existential particle *fih*: Rural Palestinian allows both full agreement between the verb and noun as well as impersonal agreement, while Lebanese Arabic allows only

impersonal agreement, as is also the case for the Urban Palestinian, Lebanese, Jordanian, and Cairene dialects. Rural Palestinian, on the other hand, patterns with Tunisian and Urban Saudi Arabian, in allowing full agreement in existential constructions. Therefore, Rural Palestinian and Lebanese, etc. are not comparable in terms of the agreement facts, and so in discussions of agreement in *fih*existentials, data has not been mixed.

### 1.4 **Organization**

#### 1.4.1 *Chapter* 1

The thesis is organized as follows: in Chapter 1, I outline the data to be analyzed in the subsequent chapters. First, I present a general sketch of the facts of word order and agreement in Rural Palestinian Arabic and spoken Arabic in general. Then, I introduce examples of existential constructions, including locative inversion existentials and *fih*-existentials. These include examples of various permutations of word order, both full and impersonal agreement, and examples with definite or indefinite noun phrases.

Then, I briefly discuss different ways in which nominal modification can affect restrictions on form of agreement, word order, and quantifier restriction. I note an apparent generalization, following Lumsden (1988), such that certain forms of modification signal increased "commitment" on the part of the speaker to the existence of a referent instantiating the set described by the noun phrase, and that agreement marking in existential clauses signals such commitment. This explains the correlation between richness of modification and agreement marking.

I also discuss the relationship between verbal argument structure and agreement marking, noting that impersonal agreement, when it occurs at all, only occurs with unaccusative verbs, verbs the "subject" of which behave syntactically like the objects of transitive verbs. I conclude the chapter by giving examples of the discourse function of impersonal agreement in existential constructions; sentences showing impersonal agreement mostly occur in places in texts in which characters or referents are added to the narrative, usually either at the beginning of the narrative, or at a key juncture within it.

#### 1.4.2 *Chapter 2*

In Chapter 2, I outline the theoretical framework I assume for my analysis. This is based largely on the Minimalist Program as formulated in Chomsky (1995) and Collins (1997), as well as on Bowers' (1993) theory of "generalized predication." In particular, I follow Bowers (1993, 1997a, 1997b, 1998) in identifying the "light verb" projection *v*P of Chomsky (1995) or Transitivity Phrase of Collins (1997) with Predication Phrase. I begin with a brief overview of the Minimalist Program, focusing in particular on the feature structure of lexical items. Then I present arguments applying Bowers' (1993) Predication Phrase to the data at hand. Lastly, I present the model of phrase structure I assume for the Arabic clause, sketching a structure for the left periphery of the clause (cf. Rizzi 1997). I then present a structure for prepositional phrases and noun phrases, focusing on contrasts between definite and indefinite noun phrases.

#### 1.4.3 *Chapter 3*

In Chapter 3, I present my syntactic analysis of existential constructions. The main idea of the analysis is that existential constructions with the *fîh*-particle and inverted locative expressions undergo very similar derivations. In both cases, the fronted constituent - existential *fîh* or the locative expression undergoes A-movement as a maximal projection, adjoining first to Predication Phrase and then to Tense Phrase, to check strong formal features in each (cf. Chomsky 1995; Collins 1997). The difference between the two kinds of existential clauses

is that existential *fih* is base generated in Predication Phrase, a position to which inverting locatives would raise, blocking them from doing so.

An apparent contrast between *fih* and inflected prepositions on the one hand, and prepositional phrases with full noun phrases on the other with regards to their category status reduces to the morphological requirements of the negation morpheme *ma*-...-š, which is hosted only by head-level constituents that can "incorporate" with it. The head of a prepositional phrase with a lexical noun phrase argument cannot raise in this way, and so does not host negation.

# 1.4.4 *Chapter* 4

In Chapter 4, I examine previous analyses by Halila (1992), Eid (1993) and Mohammad (1998) of this apparent contrast between fih/inflected prepositions and non-inflected prepositions. Halila and Eid claim that fih and inflected prepositions behave as thought they were verbal heads, undergoing head raising through Verb Phrase, and in this way hosting ma-...-š, the "sentential" negation morpheme. Mohammad points out a flaw in this analysis, which is that it predicts that fih and inflected prepositions should have a more restricted word-order distribution than they actually do. He offers his own analysis, according to which fih is a nominal expletive that, along with the polarity item hada, can "exceptionally" host sentential negation.

My contribution to this debate is to show that the assumption that *ma*-...-š is an exclusively "sentential" negation exponent is unfounded, and that it is instead the default negation marker, used to mark negation on a variety of constituents including verbs with clausal scope. This allows for a unified account of the syntactic behavior of existential *fih*, and inverted locative expressions (with both inflected and uninflected prepositions).

# 1.4.5 *Chapter 5*

In Chapter 5, I examine some apparent counter-examples to my proposal. These data show a "double" or "secondary" locative inversion structure "within" the first (which I refer to as PP-scrambling, after Belletti and Shlonsky 1994). The analysis I have developed thus does not account these structures, as it would predict them to be impossible; the syntactic mechanisms that drive locative inversion or the fronting of existential *fih* only allow for one such process per derivation. However, I argue that PP-scrambling can be accounted for by analyzing it as a form of focus-induced re-linearization that takes place in the PF-component, following Aoun and Benmamoun (1998), Neeleman and Reinhart (1998) and Zubizarreta (1998). PP-scrambling therefore is a purely "interface" operation which has no effect on logical form representations - in other words, it is not a syntactic operation at all.
#### Chapter 2

# Agreement Marking in Existential/Presentational Constructions

# 2.1 Introduction

I begin in Section 2.2 with a presentation of the essential data to be addressed in this thesis. This includes the structure of existential constructions, including both those derived by locative inversion, and those derived with the existential particle *fih*, the equivalent in Palestinian (and other dialects) of English existential *there*. I then describe conditions that can affect variation between full and impersonal agreement. In Section 2.3, I discuss the relationship between impersonal agreement and verb class, showing that reduced agreement only occurs with the class of unaccusative verbs. In Section 2.4, I discuss the relationship between impersonal agreement is associated with a presentational discourse function, according to which novel indefinite noun phrases are introduced to a narrative.

# 2.2 Word Order and Agreement in Existential Constructions

In this section, I describe the relationship between agreement and word order in Rural Palestinian Arabic, and in particular present the conditions under which impersonal agreement can take place.

2.2.1 Structure and Agreement in Unmarked Word Orders

In Rural Palestinian Arabic (as well as most Arabic dialects), verbs generally agree with their subjects. In particular, full agreement in person, gender, and number is required in any word order in which the subject precedes or is adjacent to the verb. Only definite nouns or indefinite nouns with "specific" interpretations are allowed in SV word order:

- (1) SV Word Order
  - a. **in-nâs ağu** ta-**yistru** min-him i<u>t</u>nên *the-people*<sup>3MPL</sup> *went*3MP *IN-ORDER-buy*3MP *from-cL*3MP *two* "The people went in order to buy two from them." (50.4)
  - b. **ķôm**-u **bâķyîn čuffâr** *clanMP-cL3MS bepARTMP unbelievers* "His clan were unbelievers." (2.1)
  - c. **abû-hin** čill yôm **yirûḥ yiķarmil** *father-cL3FP every day go3MS cut-wood3MS* "Their father went and cut wood every day." (46.2)
  - d. u-banât il-malič čill yôm yitḥammamin and-daughters the-king every day bath3FP "And the king's daughters bathed every day." (53.7)
- (2) *SAuxV Word Order* 
  - a. **hāði baķat** čill yōm **tir**<sup>c</sup>**a** min hanâk ta-taṣal iš-šâm *thisFS was3FS each day graze3FS from there until-reach3FS the-Sham* "She would graze every day from there until she reached Damascus." (2.3)
  - hâða sâr čill yôm yisraḥ thisMS began3MS every day get-up3MS "He started getting up every day." (30.5)
  - c. čill il-<sup>c</sup>arab bâkye tikội <sup>c</sup>ind-e *all the-BedouinFS bepartFS pleadFS at-cL3MS*"All the Arabs would seek justice by him." (38.20)
- (3) *AuxSV Word Order* 
  - a. kâmat hâði râḥat <sup>c</sup>a-hal-wâd *rose3FS this3FS went3FS at-the-valley*"She up and went to the valley." (48.4)

b. **bâķi abû-ha** čill yôm ma **yṣalli** illa <sup>c</sup>a-bâb hal-hifte *bepARTMS father-CL3FS every day not pray3MS but at-door the-ditch* "Her father prayed every day nowhere but at the mouth of the grave." (38.6)

Full agreement can occur in both VS... and V...S orders. It is required in VS word order (in which the subject is immediately adjacent to the verb), and possible in V...S word order:

- (4) VS... Word Order
  - a. u-čill lêle titḥammam wâḥade
     and-every night bathe3FS oneFS
     "And every night one would bathe herself." (50.11)
  - b. čill ma tîği wâhade tihčî-l-ha kuṣṣa each time come3FS one3FS tell3FS to-cLFS story "Every time someone would come and tell her a story..." (47.7)
- (5) V...S Word Order
  - a. rûḥ la-l-hifte illi bakat <sup>c</sup>ind-ha xêmit bint-i
     *goIMP to-the-grave REL was3FS at-cL3FS tentFS daughter-cL1S* "Go to the grave that my daughter's tent was next to." (38.7)
  - b. hâði b-irûḥu <sup>c</sup>ind-ha maǧānîn thisFS INDIC-go3MP at-cLFS insaneMP "This woman, the insane would come to her." (10.2)
  - c. bâķyîn hâna tnên ixwe kâ<sup>c</sup>dîn fi dâr wâḥade
     bepartMP here two brothersMP sitpartMP in house oneFS
     "There were two brothers here, living in one house." (28.1)

Full agreement is *required* when the post-verbal noun subject is adjacent to the verb, regardless of whether the noun is definite or specific:

 (6) a. bâķye /?bâķi xtyâre hanâk warâ-ha ķôm ķawīyîn bepartFS/bepartMS oldFS here behind-cL3FS clan strongMP "There was an old woman who had a strong clan behind her." (RPA: elicited data)

- b. **bâķye** /\***bâķi ixtyâre** fi-l-maṭbax bi-**tsawwi** xubz *bepartFS/ bepartMS the-oldFS in-the-kitchen INDIC-make3FS bread* "The old woman was in the kitchen making bread." (*RPA*: elicited data)
- c. **bâķye** /\*bâķi **wâḥade tḥibb**-ha *bepartFS/ bepartMS oneFS love3FS-clFS* "One woman was fond of her." (37.3)
- d. **bâķye** /\*bâķi **mara tuxbiz** fi-ṭ-ṭābûn *bepartFS/bepartMS womanFS cook3FS in-the-oven* "A woman was baking in the oven." (59.1)
- (7) a. kânat /\* kân xararîf kţîre <sup>c</sup>an falaşţîn was3FS/ was3MS storiesFS manyFS about Palestine
   "There were many stories about Palestine."
  - kânat /\* kân kundara ğanb l-bâb was3FS/ was3MS shoeFS next-to the-door "There was a shoe next to the door."
  - c. kânat /\*kân bint bên l-waladên was3FS/ was3MS girlFS between the-boysDL "There was a girl between the two boys." (NPA: Mohammad 1998)

Full agreement is required in V...S word order with definite noun phrases.

In (8), the definite noun phrase follows the verb and a prepositional phrase

modifier: only (8a), with full agreement, is grammatical:

- (8) a. **bâķye** /\***bâķi** hanâk **marat** iḥmad id-dabbâč *bepartFS/ bepartMS there wifeFS Ahmad the-Dabbak* "Ahmad the Dabbâk's wife was there." (16.4)
  - b. **lafu** /\*lafa <sup>c</sup>alê-h **ğamâ<sup>c</sup>at ið-ðyûf** came3MP/ came3MS upon-cL3MS group the-guestsMP "One day a group of guests happened upon him."
  - c. bâķye /\*bâķi l-ixtyâre hanâk warâ-ha ķôm ķawīyîn bepartFS/ bepartMS the-oldFS here behind-cL3FS clan strongMP "There was the old woman who had a strong clan behind her." (RPA: elicited data)

To summarize, full agreement between verb and "subject" noun phrase is required in most word orders in Rural Palestinian Arabic, particularly when the noun phrase precedes the verb, is immediately left-adjacent to it, and when the noun phrase is definite. It is also possible in V...S word order.

#### 2.2.2 Word Order and Agreement in Existential Constructions

I intend the word "existential" rather loosely, referring as much to a class of syntactic constructions as to a particular semantic or pragmatic use. In syntactic terms, existential clauses are distinguished by a post-verbal "subject" noun phrase - usually indefinite - in a word order inversion with a constituent that usually has some kind of locative construal. I further divide existential constructions into *locative inversion existentials* and *fih-existentials*. Locative inversion existentials are characterized by the leftward displacement of the locative phrase, such that the locative appears between the verb and the "subject" noun phrase, or in some cases, preceding the verb. *Fîh-existentials* include the existential particle *fîh*, the counterpart of English existential *there* (at least in functional terms), which can either precede or follow the verb, and which also allows the the noun phrase to either precede or follow the locative expression.

#### 2.2.3 Locative Inversion Existentials

Locative inversion existentials are characterized by leftward displacement of the locative expression (usually a prepositional phrase, a participial predicate containing a prepositional phrase, or a locative adverb such as *hanâk* "there" or *hân* "here") and an indefinite noun phrase following the verb as well as the locative expression. A prepositional locative expression can contain either a full lexical NP (in which case I will refer to the preposition as a "bare" preposition), or host a pronoun clitic (in which case it is referred to as an inflected preposition). The most typical word order is (*copula*)-Locative-NP:

- (9) Locative Inversion with Inflected Prepositions
  - a. bâķi <sup>c</sup>ind-ha talt mît ķirš *bepartMS at-cL3FS three hundred qurush* "She had three hundred qurush [unit of money]." (97.2)
  - b. şâr **cind-e** b-îği <sup>c</sup>išrîn râs became3MS at-cL3MS INDIC-come3MS twenty head "He came to have some twenty head." (93.36)
  - c. yôm-ha baka ma<sup>c</sup>-i talat awâk titin *day-cL3FS was3MS with-cL1S three tins tobacco* "That day, I had with me three tins of tobacco." (16.4)
- (10) *Locative Inversion with Bare Prepositions* 
  - a. bâķi <sup>c</sup>a-râs-ha arb<sup>c</sup>în ķiriš
     bepartMS on-head-cl3FS forty qurush
     "She had on her head [i.e., braided into a headdress] forty qurush." (50.1)
  - b. bâķi fi buțin bint il-malač ḥayye bi-sabi<sup>c</sup> rûs bepartMS in belly daughter the-king snakeFS with-seven heads "In the belly of the king's daughter was a serpent with seven heads." (34.5)
- (11) Locative Inversion with Locative Adverbs
  - a. bâķi hâna wâḥad ķațî<sup>c</sup>a miṯl ibn-i hâða *bepartMS here oneMS cut-off like son-cL1S thisMS*"Here was a single child, like this son of mine." (34.1)
  - b. bâķi hanâk wâwi fi-l-<sup>c</sup>illêķ *bepARTMS there jackalMS in-the-thicket*"There was a jackal in the thicket." (19.5)

In addition to the word orders described above, the order *Locative-Copula-NP* is also possible:

(12) a. il-xawâğe, **il-e** bâķi walad *the-gentleman, to-cL3MS bepARTMS sonMS* "The gentleman, he had a son."

- b. iṭ-ṭanǧare, **fî-ha** baka kuṭmit laḥme *the-potFS, in-cL3FS was3MS pieceFS meatFS* "The pot, in it was a piece of meat."
- c. <sup>c</sup>ind-ha bâķi <u>t</u>al<u>t</u> mît ķirš
   *at-cl3FS bepartMS three hundred qurush* "She had three hundred qurush." (*RPA*: elicited data)
- (13) a. il-xawâğe, ma-l-e-š-š bâķi walad *the-gentleman, not-to-cL3MS-NEG bepartMS sonMS*  "The gentleman, he didn't have a son."
  - b. il-xawâğe, il-e, ma-bakâ-š walad the-gentleman, to-cL3MS not-was3MS-NEG sonMS "Same."
  - c. iṭ-ṭanǧare, fî-ha, ma-bakâ-š kuṭmit laḥme the-potFS, in-cl3FS, not-was3MS-NEG pieceFS meatFS "The pot, in it there was not a piece of meat."
  - d. ma-<sup>c</sup>ind-hâ-š bâķi ḥitta ķirš not-at-cL3FS-NEG bepARTMS even qurush
    "She didn't have even a qurush." (RPA: elicited data)

Locative inversion existentials with inflected prepositions are frequently embedded within clitic-left-dislocation constructions, with the existential serving as a predicate applied to the left-dislocated element:

- (14) a. **hâða** bāķî-l-**e** <sup>c</sup>êle čbîre *thisMS bepartMS-to-cL3MS familyFS bigFS* "He had a big family." (87.1)
  - b. **imm-e**, bâķi ma<sup>c</sup>-**ha** meiyt il-ḥayâh *mother-cL3MS bepartMS with-cL3FS waterFS the-life* "His mother, she had with her some of the water of life." (42.5)
  - c. xaṭra, **marat yûsif abu manṣûr**, baḥâ-l-**ha** ḥuṣṣa fi-ṯôr once, wife Yusif Abu Mansour was3MS-to-ci3FS shareFS in-bull "Once, Yusif Abou Mansour's wife had a share in a bull." (10.3)

- d. ana, bakâ-l-i axxên w-uxt *I was3MS-to-cl1S brothersDL and-sister*"I had two brothers and a sister." (62.4)
- e. **abû**-i w-<sup>c</sup>**amm**-i ma-baqâ-š yīǧî-**him** *father-cL1S and-uncle-cL1S not-was3MS-NEG come3MS-cL3MP* ulâd u-bāķî-l-**him** imwâl ma-b-tôčil-ha *childrenP and-bepARTMS-to-cL3MP wealth not-INDIC-eat3FS-cL3FS* han-nīrân *the-fires* "My father and uncle, they hadn't had any children, and they had treasures fire couldn't burn." (51.9)

There are also a few rare examples like the following, in which impersonal agreement occurs without any locative expression in the clause at all:

 (15) a. u-hi kâ<sup>c</sup>de hanâk nafad arb<sup>c</sup>în ifdâwi and-she sitPARTFS there appeared3MS forty partisanMP "And while she was living there, forty partisans appeared." (45.4)

However, the locative particle *hanâk* "there" appears in the conditional clause u-*hi ķâ*<sup>c</sup>*de hanâk* "while she was living there," so it may be that the locative predicate usually found in locative inversion constructions is in this example understood from the antecedent conditional clause.

2.2.4 Agreement Marking in Locative Existentials

As the following data show, both full and reduced agreement are available in locative-inversion constructions:

(16) a. bâķye /bâķi fi buțin bint il-malič ḥayye bepartFS/bepartMS in belly daughter the-king snakeFS bi-sabi<sup>c</sup> rûs with-seven heads
"There was a snake with seven heads living in the belly of the king's daugher." (34.5)

- b. lafu / lafa <sup>c</sup>alê-h ğamâ<sup>c</sup>at iğyûf came3MP/ came3MP upon-cL3MS groupFS guestsMP "One day a group of guests happened upon him." (RPA: elicited data)
- c. ağu /ağa fi ġyāb-him <sup>c</sup>arab came3MS/came3MS in-absence-cL3MP bedouin nahabu l-ḥalâl wa-sākû-h w-râḥu plundered3MP the-stock and-took3MP-cL3MSG and-went3MP "In their absence came Bedouin, who plundered their stock, and took it and left." (62.9)
- d. **bâķi** /**bâķyîn** fi haðîk il-balad **tuğğâr mafhūmîn** *bepartMS*/*bepartMP* in thatFS the-village merchantsMP reputedMP "In that village were 'understood' merchants." (34.3)
- (17) a. kân /kânat <sup>c</sup>an falaṣṭîn xarārîf k<u>t</u>îre was3MS/was3FS about Palestine storiesP manyFS
   "About Palestine were many stories."
  - kân /kânat <sup>c</sup>ind iḥmad sayyâra was3MS/was3FS at Ahmad carFS "Ahmad had a car."
  - c. **kân** /**kânu** <sup>c</sup>en-na xams **zlâm** *was3MS/was3MP at-cL1P five menMP* "With us were five men [i.e., visiting us]."
  - d. kân /kânen <sup>c</sup>en-na xams neswân was3MS/was3FP at-cL1P five womenFP
    "With us were five women." (NPA: Mohammad 1998)

Impersonal agreement can also occur without any intervening locative expressions. In (18a), the main verb *yîği* "come" hosts a pronoun clitic *-him* "them." In (18b), the matrix predicate is *râyiḥ*, the active participle of *râḥ-yirûḥ* "to go," which hosts the "dative clitic" *l-e* "to him." Note also that in both (18a) and (18b), impersonal agreement is marked on the auxiliary as well as on the main verb:

(18) a. abû-i u-<sup>c</sup>amm-i ma-**baķâ**-š yīğî-him father-cL1S and-uncle-CL1S not-was3MS-NEG come3MS-CL3MP ulâd children3MP "My father and uncle, they hadn't had any children." (51.9)

b. u-**bâķi rāyíḥ**-l-e ğmâl *and-bepartMS gopartMS-to-cL3MS camelsP* "And he had some camels missing." (38.21)

These data show that impersonal agreement can be licensed on more than one verb stem within a clause, and that in the absence of a locative phrase, a pronoun clitic can satisfy whatever synactic mechanisms are involved in deriving locative inversion.

# 2.2.4.1 Impersonal Agreement with Masculine Singular Noun Phrases

There are numerous examples in the data of agreement contexts typical of impersonal agreement, but in which the noun phrase is masculine singular in agreement features. While impersonal agreement is in principle possible or even likely, the agreement features in question make it impossible to tell whether the NP and the verb are sharing features, or only agreeing "coincidentally". Therefore, I will only include such examples in the discussion when agreement form is not at issue. The following are typical examples:

- (19) a. **bâķi** fi hâðik in-nâḥye **amîr** ism-e mḥimmid *bepartMS in thatFS the-areaFS prince name-cL3MS Muhammad* "In that region was a prince named Muhammad." (38.14)
  - b. baka hâna šâyib il-e hal-walad wasMS here old-man to-cL3MS this-boy
    "There was an old man here, he had this son..." (40.1)
  - c. **bâķi** hâna **amīr** ma-b-îğ-i-šš ūlâd *bepartMS here prince not-iNDIC-come3MS-cL3MS-NEG childrenMP* "There was a prince here, he had had no children..." (48.1)

#### 2.2.5 *Fîh-Existentials*

Most eastern dialects of Arabic use an "existential" particle *fîh* in existential sentences that parallels the use of "existential" *there* in English. *Fîh* is used in most dialects of Levantine Arabic (including Palestinian, Lebanese, Jordanian, and Syrian), Egyptian Arabic, and others.

#### 2.2.5.1 Word Order in Fîh-Existentials

The unmarked word order in *fîh*-existentials is (*copula*)-*fîh*-NP-Locative:

- (20) a. bâl-i **fîh** iši **bên-ak** u-**bên-ha** *mind-cL1S there something between-cL2MS and-between-cL3FS* "I think there's something between you and her." (37.4)
  - b. in **fîh** xûri **fi-s-sama** *if THERE priest in-the-heavens* "If there were a priest in Heaven..." (108.5)
  - c. baka **fîh** yahûdi **wâķif hanâk** *was3MS there yewMS standpartMS there* "There was a Jew standing there." (113.12)

#### (21) With Negation

- a. ma fîh kuțmit laḥim fi-d-dist *not THERE piece meat in-the-kettle*"There wasn't a piece of meat in the kettle." (49.1)
- b. lammin <sup>c</sup>irfit inn-e ma-**fîh** fâide **min-ne** *when knew3FS that-cL3MS not-THERE use from-cL3MS* "When she knew that there was no use for him..." (54.4)
- c. wallah ma-fîh mitl ğôz-i fi-hal-balad *by-God not-THERE like spouse-CL1S in-this-village*"By God, there's none like my husband in this village." (26.1)
- d. ma-fîh ḥada fi-d-dinya illa zkûm-čim? *not-there anyone in-the-world but noses-cl2MP*"Isn't there anyone in the world but yourselves?" (85.29)

- e. ma-**fîh**-š naṣâra **fi-l-balad** *not-there-neg Christians in-the-village* "There are not (any) Christians in the village." (98.2)
- f. ma-bakâ-š fîh kuțmit lahme fi-ț-țanğare not-was3MS-neg there pieceMS meatFS in-the-pot
   "There was not a piece of meat in the pot." (RPA; elicited data)

It is also possible for *fih* to precede the copula:

- (22) a. fîh hanâk bâķi midbara fi hal-mizble ķurb dâr *there there bepartMS hornet-swarmFS in this-dump near house*  hal-madâni hâða *this-city-person thisMS*  "There was a hornets' nest in the refuse pile near the house of this city-dweller." (103.8)
  - b. fîh baka kuţmit lahme fi-ţ-ţanğare
     there was3MS pieceFS meatFS in-the-pot
     "There was a piece of meat in the pot." (RPA; elicited data)
  - c. fîh baka ma<sup>c</sup> mona ktâb
     THERE was3MS with Mona bookMS
     "Mona didn't have a book with her." (NPA: Mohammad 1998)
- (23) With Negation
  - a. ma-**fîh**-š baka kuţmit laḥme **fi-ţ-ţanğare** *not-there-neg was3MS pieceFS meatFS in-the-pot* "There was not a piece of meat in the pot."
  - b. \*fîh ma-bakâ-š kuţmit lahme fi-ţ-ţanğare there not-was3MS-NEG pieceFS meatFS in-the-pot "Same." (RPA; elicited data)

The word orders (*copula*)-*fih*-Locative-NP or even Locative-(*copula*)-*fih*-NP are also common:

- (24) (Copula)-Fîh-Locative-NP
  - a. kâl "ya sîd-i, fîh hâna wâḥad fi balad-ak illi said3MS 'Oh lord-cl1S, THERE here one in village-cl2MS REL b-iț<sup>c</sup>am čill dâyirt-ak"
    INDIC-feed3MS all district-cl2MS
    "He said 'sir, there's someone in your village who feeds all of your district.'" (87.13)
  - b. fîh hanâk yaxôr la-<sup>2</sup>afandi
     THERE there stall to-Efendi
     "There was some Efendi's stall there." (118.4)
  - c. baka fîh ma<sup>c</sup> mona čtâb was3MS there with Mona bookMS
    "Mona had a book." (RPA: elicited data)
- (25) Locative-Fîh-NP
  - a. ma<sup>c</sup> môna fîh kân ktâb *with Mona there was3MS book*"Mona had a book." (*RPA*: elicited data)

#### (26) With Negation

- a. ma-**fîh**-š **fi-d-dinya** mi<u>t</u>il-hin *not-there-neg in-the-world like-cL3FP* "There's none in the world like them." (46.4)
- b. môna, ma-bakâ-š fîh ma<sup>c</sup>-ha čtâb Mona, not-was3MS-neg THERE with-cl3FS book "Mona, she didn't have a book."
- c. **ma<sup>c</sup> môna** ma-**fîh**-š iktâb *with Mona not-there-neg bookMS* "Mona doesn't have a book."
- d. ma<sup>c</sup> môna ma-bakâ-š fîh iktâb with Mona not-was3MS-NEG THERE book
  "Mona didn't have a book." (RPA: elicited data)

There are also many examples of *fîh*-existentials in which there is no locative expression at all:

(27)	a.	u-yâma <b>fîh</b> nâs mġaffalîn u-hubul
		and-oh-how there people gullibleMP and-stupidMP
		"And oh, how there are gullible and stupid people!" (29.4)
	b.	haðôla in-nawar asraķ min-him ma <b>fiš</b> -š <i>thesepL he-gypsies more-thievish than-cL3MP not-there-neg</i> "These gypsies, there's none more thievish than them." (20.2)
	C.	bâķi <b>fîh</b> wâḥad naštâri simi <sup>c</sup> bi-d-da <sup>c</sup> wa bepartMS there one good-for-nothing heard3MS in-the-matter "There was a good-for-nothing who heard the story."(94.10)
	d.	ķâl "la <sup>c</sup> âd <b>fîh</b> darâhim uxra" said3MS not fut there drachmas other

As can be seen, there are more possible word order permutations available in *fîh*-existential construction than is the case in English *there*-existentials. Mohammad (1998) concludes that "only the presence of *fîh* permits an indefinite subject to precede its predicate" (32).

"He said 'there won't be any drachmas left."" (?)

2.2.5.2 Agreement in Fîh Existentials

Both full and impersonal agreement are possible in *fih*-existentials:

(28)	a.	bâķi	fîh <b>a</b>	rb <sup>c</sup> în	bint	mitbannt	<b>ât</b> , banât	iğ-ğann
		bepart	MS THERE fo	orty	girl	virginFP,	daughte	rs the-Djinn
		"There	e were 40 v	virgin	girls	s, daughte	rs of the Dj	inni." (50.8)
	b.	kân	/kânu	fîh	xaı	ns zlâm	be-d-dâr	

- *was3MS/was3MP THERE five menMP in-the-house* "There were five men in the house."
- c. **kân** /**kânen** fîh xams **neswân** be-d-dâr *was3MS/was3FP there five womenFP in-the-house* "There were five women in the house."

 d. kân /kânen fîh xams bagarât be-d-dâr was3MS /was3FP THERE five cowsFP in-the-house "There were five cows in the house." (NPA: Mohammad 1998)

### 2.2.6 Impersonal Agreement in Standard Arabic

Impersonal agreement should not be confused with the Standard Arabic rule for agreement in clauses with VSO word order and non-pronominal subjects<sup>1</sup>. This is a categorical rule, according to which verbs that precede their subjects agree with them (optionally) in gender but not in number. Instead, the verb is marked for singular agreement. This applies to both definite and indefinite subject noun phrases. In the case of conjoined subjects, the verb agrees with the first conjunct.

- (29) a. qadima /\*qadimu l-<sup>°</sup>awlâd-u came3MS / came3MP the-boysMP-NOM "The boys came."
  - b. **al-'awlâd-u**, **qadimu** *the-boysMP-NOM came3*<sup>PM</sup> "The boys, they came."
  - c. **xaražat/xaraža** /\*xaražana **al-bint-u** wa-<sup>3</sup>**umm-u-ha** *left3FS* /*left3MS* / *left3FP the-girlFS-NOM and-motherFS-NOM-cLFS* "The girl and her mother left." (*MSA*)

In contrast, Rural Palestinian Arabic (as well as most other colloquial forms of Arabic) requires full agreement with definite nouns in both SVO and VSO word order, in almost all cases. The following are examples of full agreement in VS word order which would be ungrammatical in Standard Arabic.

(30) a. yôm min il-iyyâm **rawwaḥu l-ġazzâye** *day from the-days returned3MP the-raidersMP* "One day, the raiders returned home." (38.12)

<sup>&</sup>lt;sup>1</sup>The VS-agreement rule has been extensively discussed in the generative literature on Arabic (c.f. Mohammad 1988, 1990, 1998a; Fassi Fehri 1993; Benmamoun 1991, 1992, 1993a-b; Aoun Benmamoun and Sportiche 1994; Bahloul and Harbert 1993; Ouhalla 1991; and others).

- b. hâði **b-irûḥu** <sup>c</sup>ind-ha **maǧānîn** *thisFS* INDIC-go3MP at-cLFS insaneMP "This woman, the insane would go to her." (10.2)
- c. **ağu l-<sup>c</sup>arab ķalû**-l-e "yalla nrûḥ niġzi!" *came3MP the-bedouinMP said3MP to-cL3MP "come go1P raid1P* "The Bedouin came and said to him 'come, let's go raiding'." (38.17)

Furthermore, as we have seen, impersonal agreement with definite, immediately post-verbal subjects is found to be awkward or ungrammatical by native speakers, in contrast to the agreement rule in Literary Arabic:

- (30) d. **bâķye** /**\*bâķi** l-ixtyâre hanâk warâ-ha ķôm ķawīyîn *bepartFS* / *bepartMS the-oldFS here behind-ci3FS cian strong3MP* "The old woman was here, a strong clan behind her."
  - e. **bâķye** /\***bâķi l-ixtyâre** fi-l-maṭbax bi-**tsawwi** xubz *bepartFS/bepartMS the-oldFS in the-kitchen INDIC-bake3FS bread* "The old woman was in the kitchen making bread." (*RPA*: elicited data)

This indicates that impersonal agreement in Rural Palestinian Arabic (as well as related dialects) is a phenomenon distinct from impersonal agreement as it occurs in Standard Arabic.

# 2.2.7 Agreement Variation in Existential/Presentation Clauses

As we have seen, an indefinite noun phrase in an existential/presentational construction can occur with either masculine, third person singular ("impersonal") agreement, or with "full" agreement in gender and number. This was illustrated in (16) and (28) above. However, various forms of modification can create a preference for either full or impersonal agreement. In traditional Arabic grammar, modification makes a noun more "specific" (c.f. Wright 1875, Mohammad 1998). Similar observations have been made by Fodor and Sag (1982: 358-359), Lumsden (1988: 86-89, 95-96), and Abbott (1993). While specificity is an ill-defined term, I assume it to be an essentially pragmatic notion (c.f. Prince 1981; Lumsden 1988; Abbott 1993), according to which the form or degree of modification reflects the speaker's degree of commitment to the existence of a particular referent satisfying the description of the indefinite noun phrase; the specific indefinite is understood as introducing a "constant" (Lumsden 1988: 95) or a "rigid designator" (Abbott 1994: 477-479). For example, modification by a numeral (a cardinality predicate) can create a (slight) preference for impersonal agreement<sup>2</sup>:

- (31) a. bâķyîn / Bâķi fi dâr abû-ha sabi<sup>c</sup> taman ḥarrātîn bepartMP / bepartMS in house father-cLFS seven eight plowmenMP "There were in her father's house seven or eight plowmen." (37.3)
  - b. **bâķyîn** /**wbâķi** fi dâr abû-ha **ačam ḥarrâṯ** *bepartMP / bepartMP in house father-cLFS NUMBER plowman MS* "There were in her father's house several plowmen." (*RPA*: elicited data)

This may be because a numeral quantifier emphasizes a set-denotation for the NP, rather than reference to an individual. In contrast, adding adding a relative clause which contains a definite NP (as opposed to one which contains an indefinite one), can create a slight preference for full agreement, as the definite NP embedded in the relative clause will trigger a presupposition of a specific referent, which in turn makes the existence of a referent corresponding to the indefinite more certain:

(32) a. bâķi / 🖙 bâķye hanâk ḥayye bidd-ha tôčil ifrâx iṭ-ṭêr bepartMS / bepartFS there snakeFS wish-cL3FS eat3FS eggs the-bird "A snake was there that was going to eat the bird's eggs."

<sup>&</sup>lt;sup>2</sup>In most cases, both members of a minimal pair are considered grammatical, the difference between them being degrees of preference which are frequently quite slight. As such, *preference* will be indicated by a "<sup>see</sup>" sign (rather than "?" for *infelicity* or "\*" for *ungrammaticality*).

 bâķi /bâķye hanâk hayye bidd-ha tôčil ifrâx ţêr bepartMS/bepartFS there snakeFS wish-cl3FS eat3FS eggs bird "A snake was there that was going to eat bird eggs (or 'a bird's eggs')." (RPA: elicited data)

Also, Rural Palestinian Arabic (as well as other dialects of Palestinian and Lebanese Arabic) has a demonstrative *hal-* "this," which, like *this* in colloquial English (cf. Prince 1981), has an "indefinite" or presentational use:

- (33) a. ağa la-hanâk, illa **u-haš-šağara**  *came3MS to-there, but and-this-tree* u-ţêr b-iḥūm <sup>c</sup>a-râs-ha *and-bird* INDIC-circle3FS over-head-cL3FS "He got there, and there was this tree with a bird circling over its crown." (42.15)
  - b. <sup>c</sup>âwadat illa u-hač-člâb b-ôčilin returned3FS but and-THESE-dogsFP INDIC-eat3FP fi č-čbēbât <sup>c</sup>ala raķbit-e in the-meatballs on neck-cL3MS "She returned, and these dogs were eating the meatballs around his neck." (30.11)

Modification with "indefinite" *hal*- can favor impersonal agreement, as in (34a); the same example with an unmodified noun phrase doesn't favor either form of agreement (34b):

- (34) a. čânat /☞ čân tiḥt sêr-e haṭ-ṭabanǧe was3FS/ was3MS under belt-cL3MS THIS-pistolFS mnazzale bi-l-fiððe inlaidFS with-the-silver "There was under his belt this pistol inlaid with silver."
  - b. **čân** /**čânat** tiḥt sêr-e **ṭabanğe** mnazzale bi-l-fiððe *was3MS/was3FS under belt-cL3MS pistolFS inlaidFS with-the-silver* "There was under his belt a pistol inlaid with silver." (*RPA*: elicited data)

According to Prince (1981), indefinite *hal*- triggers an existential inference, to the effect that a referent corresponding to the NP set exists in the context.

To summarize, different kinds of nominal modification can induce a preference for either full or impersonal agreement. Modifiers that include "referential" descriptions can create a preference for full agreement between the noun phrase and verb, while numerical quantifiers and indefinite *hal-* "this" favor impersonal agreement marking.

# 2.2.8 Other Facts Related to Specificity

Modification and "specificity" have effects in other areas of Arabic word order syntax restrictions on indefinites appearing in "subject" or topic positions, and on quantifier restriction in certain word orders in Tunisian Arabic, a dialect of Arabic with a "weak" definiteness effect.

2.2.8.1 *Modification and Word Order* 

In Arabic, an indefinite NP subject generally must follow the verb (examples from Urban Palestinian Arabic [*Nablus dialect*]; Belyayeva 1994: 53)

- (35) a. \*walad <sup>°</sup>akal teffâḥa boyMS ate3MS apple
   "A boy ate an apple."
  - b. <sup>°</sup>akal walad teffâha ate3MS boyMS apple "Same."

However, if the noun phrase is "modified" or carries intonational emphasis, it is understood as "specific" and can precede the verb:

(36)	a.	wâḥad ism-e	mxêmir xarraf	
		oneMS name-cla "A person name	<i>MS Muxemir narrated</i> 3MS ed Muxamir narrated" (	; RPA)
	b.	walad zģîr boyMS smallMS	akal țeffâḥa ate3MS apple	

"A small boy ate an apple." (*Urban Palestinian; Nablus dialect*: Belyayeva 1994)

# c. zalame wa-walad <sup>°</sup>ağu man and-boy came "A man and a boy came." (NPA: Mohammad 1998)

Modification is here construed very broadly, and can include modification "by anything, such as an adjective, another nominal, by being the first member of a construct state, by being a part of a conjoined NP, or by participating in some event 'out of the ordinary'" (Mohammad 1998: 1-24).

# 2.2.8.2 Specificity and Clitic Left Dislocation

Clitic left dislocation refers to a structure in which a clause-initial noun phrase binds a resumptive pronoun embedded in the thematic portion of the clause. According to Doron and Heycock (1999), left-dislocated NPs (or "broad subjects" as Doron and Heycock refer to them) are the "subject" of the entire clause, in the sense that the rest of the clause is applied to them as a complex predicate. Clitic-left-dislocated noun phrases must be either definite noun phrases or specific indefinites; non-specific indefinites cannot be clitic-left-dislocated.

- (37) a. il-bint itbayyağ <sup>c</sup>aríğ-ha the-girlFS whitened3MS reputation3MS-cL3FS kuddâm ahil-ha w-ğīzân-ha before family-cL3FS and-husbands-cL3FS "The girl, her reputation was cleared before her family and her husbands." (38.24)
  - b. bass xațîye wâḥade ančart-ha only sinFS oneFS committed1S-cL3FS
    w-ma <sup>c</sup>taraft-iš ib-ha and-not confessed1S-NEG with-cL3FS
    "Only one sin have I committed and not confessed (it)." (86.18)
- (38) a. **baṣal žassant** <sup>°</sup>azra<sup>°</sup>, fîh <sup>°</sup>ənd-i **xamse** mazrû<sup>°</sup>în bi-fəxxâr bulb hyacinth blue, THERE at-CL<sup>1SG</sup> five planted<sup>PL</sup> in-pots "Blue hyacinth bulbs, I have five planted in pots."

b. žôz ətwâr lə-l-ḥart b-isammû-hon faddân pair oxen<sup>PL</sup> for-the-plowing INDIC-call<sup>3PL</sup>-CL<sup>3PL</sup> yoke "A pair of oxen for plowing, they call them a 'yoke.'" (Syrian Arabic: Cowell 1964: 429-435)

# 2.2.8.3 Specificity and Quantifier Restriction

Tunisian Arabic allows definite NPs to occur more freely in existential/presentational constructions than does Palestinian Arabic<sup>3</sup>. Accordingly, it also allows quantificational noun phrases to occur there, provided the noun is "sufficiently" modified:

(39)	a.	kân	famma <b>kul</b>	mra	barraniyya	fi-l-ḥafla
		was3N	AS there ever	у woma	nFS foreignFS	at-the-party
		"Ther	e were all the	foreigr	women at the	party."
	b.	??kân	famma <b>kul</b>	mra	fi-l-hafla	

. ??kân tamma **kul mra** fi-l-ḥatla *was3MS there every womanFS at-the-party* "There was every woman at the party." (*TA*: Halila 1992: 352)

Similar facts occur in dialects of Catalan, another language that allows definite noun phrases to occur in existential constructions (from the Valenciano dialect of Catalan):

- (40) a. hi havía cadascú de les estudiantes del segon any a la festa there had each of the students of-the second year at the party "There were each of the second year students at the party," or "Each of the second year students was at the party."
  - b. ??hi havía cadescú dels estudiantes a la festa there had each of-the students at the party "There were each of the students at the party," or "Each of the students were here/there at the party."

It seems as though proper quantification in these examples requires that the sets denoted by the quantifiers be identifiable within a given context. This

<sup>&</sup>lt;sup>3</sup>"Occur more freely" means in particular that definite NPs in an existential construction do not have a "list" interpretation in order to be felicitous.

supports the argument that descriptive "richness" is associated with some kind of referential specificity.

### 2.3 Impersonal Agreement and Verb Class

#### 2.3.1 Verbs Attested with Impersonal Agreement

Reduced agreement occurs most frequently with the copula *baķâ* - *yibķa* /*yiķba* or its active participle *bâķî* (بقی – یبقی، باقی; Standard Arabic "to remain, stay, continue"), which have largely supplanted *kân* (کان – یکن "to be" in Literary Arabic, as well as most dialects): in a corpus of roughly 40,000 words in Schmidt and Kahle (1918), *baķa* or *bâķi* occur 262 times, as opposed to 77 times for *kân*. Of these 262 occurrences of *baķa*, 66 show impersonal agreement<sup>4</sup>, 56 of which involve the participle *bâķi*, indicating that for whatever reason, impersonal agreement is more likely with the participle of the copula.

Other verbs that take impersonal agreement include *şâr- yişîr "become*, start, happen", *râḥ - yirûḥ "go," maặa - yimặa "pass", ağa - yîği "come", nafad - yinfad "*to appear," and *lafa - yilfî "find*, happen upon" (most of these occur with impersonal agreement in the tensed form, in contrast to *baķa*):

- (41) a. ağa fi gyâb-him <sup>c</sup>arab nahabu l-ḥalal came3MS in absencecL3MP bedouinMP pillage3MP the-stock
   "In their absence, Bedouin came and pillaged their livestock."
   (62.9)
  - b. râḥ yōmên talâte u-hâða ma ywâjih axû-h wentMS days<sup>DUAL</sup> three and thisMS not face brother-cL3MS
    "Two, three days passed and he didn't see his brother." (38.12)

<sup>&</sup>lt;sup>4</sup>This should be qualified by the observation that some of these examples involve noun phrases that are masculine singular: the structure of the examples as well as their position in the text is typical of impersonal agreement, but given that the features of the noun phrase itself are identical to the features expressed in impersonal agreement, it's impossible to say that there is an agreement "mismatch" at work.

c. u-**şâr**-l-i **santên** axidm-ak and-became3MS-to-cL1S two-years<sup>DUAL</sup> serve<sup>1</sup>sG-cL2FS "Two years have I passed in your service, at your beck and call." (35.9)

- d. u-hi kâ<sup>c</sup>de hanâk nafad arb<sup>c</sup>în ifdâwi and-she sitpartFS there appeared3MS forty partisanMP "And while she was sitting there, forty partisans appeared." (45.4)
- e. yôm min il-iyyâm **lafa** <sup>c</sup>alê-h **iðyûf** *day from the-days happened3MS upon-cL3MS guestsMP* "One day guests happened upon him." (49.1)
- f. čân tiḥt sêr-e țabanğe was3MS under belt-cL3MS pistolFS "There was a pistol under his belt." (25.7)
- 2.3.2 Impersonal Agreement and Unaccusativity

As was mentioned above, impersonal agreement occurs with a class of intransitive verbs referred to as "unaccusative" verbs (cf. Perlmutter 1978), as opposed to those referred to as "unergative" verbs. Unaccusatives are verbs the "subjects" of which share syntactic behaviors with the "objects" of transitive verbs, while the subjects of unergative verbs share syntactic behaviors with the subjects of transitive verbs. Intuitively speaking, the subjects of unergatives seem to play a more "agentive," "active," or volitional role in the action described by the verb, while the subjects of unaccusatives play a more non-volitional role in the action described (this generalization has proved very difficult to define precisely, and seems to vary considerably across languages).

A paradigm example of an unaccusative verb is a verb in the passive voice: by definition, a verb in the passive has as its subject the object of its transitive counterpart. For example, the Arabic word *kasar* "break" (Arabic transitive counterpart. For example, the Arabic word *kasar* "break" (Arabic has as its passive *inkasar* (Arabic انكسر) "break[intrans], be broken." In the clause *kasar il-walad il-finğân* "the boy broke the cup", *il-finğân* "the cup" is

the object of the transitive *kasar* "break", while it is the subject of the passive sentence *inkasar il-finjân* "the cup broke" or "the cup was broken." *Kasar* and *incasar* correspond to the two senses of English "break": *the boy broke the glass* and *the glass broke*; accordingly, the intransitive *break* would be considered unaccusative. Other categories of unaccusative verbs can include experiencer or "psych"-verbs, motive verbs, and inchoative or change of state verbs.

Several well-known examples from European languages will serve to illustrate. In languages such as Italian, French, German, Dutch as well as Old, Middle and Early Modern English, some unaccusative verbs occur in paraphrastic perfect construction with the auxiliary *be*, rather than *have*:

- (42) a. die Kinder **sind** endlich **angekommen** *theP-NOM children are finally arrivedPART* "The children have finally arrived." (*German*)
  - b. il **est venu** trois hommes *it isS comepartS three menP* "Three men have come." (*French*)
  - c. Giacomo **e arrivato** *Giacomo is*sg *arrived*<sub>PART</sub> "Giacomo has arrived." (Italian)
  - d. Ye seek Jesus of Nazareth which was crucified: he **is risen**. (*Early Modern English;* King James Bible: Mark 16:6)

A particularly well-examined diagnostic of unaccusativity is the partitive *ne*particle in Italian. *Ne* is a verb clitic that occurs with gapped quantified indefinite objects of transitive verbs (such as *insultare* "to insult"):

- (43) a. Giovanni ha **insultato due studenti** *Giovanni hassg insulted*<sub>PARTSG</sub> *two students* "Giovanni has insulted two students."
  - b. Giovanni **ne** ha **insultati due** *Giovanni OF-THEM hassG insultedPARTP two* "Giovanni has insulted two of them."

"*Ne*-cliticization" can also occur with the subjects of certain intransitive verbs, such as *arrivare* "to arrive" or the passive of a transitive verb such as *furare* "to arrest", suggesting that the subjects of these verbs are related to the objects of the transitive ones like *insultare* above:

- (44) a. **molti studenti** furono **arrestati** *many students werepL arrestedpartP* "Many students were arrested."
  - b. **ne** furono **arrestati** OF-THEM WEREPL arrested PARTP "Many of them were arrested."
- (45) a. arrivano **molti studenti** *arrived*<sub>PL</sub> *many students* "Many students arrived."
  - b. **ne** arrivano **molti**  *OF-THEM arrivedPL many* "Many of them arrived."

"Unergative" verbs, in contrast, are intransitive verbs the subjects of which are more like the subjects of transitive verbs. In languages such as Dutch, German, Icelandic, Yiddish, and some dialects of French, unergatives can "passivize" just like transitive verbs, producing impersonal clauses in which the understood subject is expressed through a "by-phrase," as would be the case in the passive of a transitive verb. In the following examples from Dutch, unergative and unaccusative verbs are contrasted: (46a-b) show the "passivization" of an unergative verb *lachen* "to laugh." (47a-b) show that the the passivized form is ungrammatical with *groeien* "to grow", an unaccusative verb (Rosen 1984: 59):

(46) a. er wordt altijd door de kinderen gelachen it becomes3S always by the children laughed PART "The children always laugh [lit. 'it is always being laughed by the children]."

- b. de kinderen lachen altijd the children laugh3P always
   "The children always laugh."
- (47) a. \* er wordt altijd door de kinderen erg snel gegroeid it becomes3S always by the children very fast grownPART "It is always being grown very fast by the children."
  - b. de kinderen groeien altijd erg snel the children grow3P always very fast "The children always grow very fast."

Subjects of unergative verbs seem to be "agentive" in some as yet poorly understood way. Sometimes, certain verbs can alternate between unaccusative and unergative behavior based on how "agentive" the subject's role seems to be. For example, Rosen (1984) presents the following examples involving *correre* "to run":

- (48) a. Ugo ha corso meglio ieri
   *Hugo hasS runpART better yesterday."* "Hugo ran better yesterday."
  - b. Ugo **e corso** a casa *Hugo isS runpart to home* "Hugo ran home."

In (48a), perhaps a description of a foot race, the action of running is described in a way that emphasizes the runner's volition in doing so (presumably he wished to improve on his time in a previous race), and the auxiliary selected is *avere* "to have." In (48b), on the other hand, running is presented simply as the manner of motion employed in the subject going from point A to point B, which is less agentive than in (48a), and the auxiliary selected is *essere* "to be."Therefore, *correre* can be either unaccusative or unergative.

To summarize, the subjects (or more properly, arguments) of unaccusative verbs pattern syntactically with the objects of transitive verbs; syntactic phenomona that distinguish the objects of transitive verbs also occur with the subjects of unaccusatives, but not those of unergatives. Conversely, the subjects of unergatives share certain syntactic properties with transitive verbs, such as passivization.

Returning to Bir Zeit RPA, impersonal agreement is judged to be either marginal or ungrammatical with indefinite subjects of verbs which would be judged to be unergative in English, German or Italian. These include *txarraf yitxarraf* "chat", *twašwaš* - *yitwašwaš* "whisper", *nâm* - *yinâm* "sleep" or *raķað yurķuð* "run":

- (49) a. ba<sup>c</sup>d il-miġrib bâkyât yitxarrafin/\*bâki yitxarraf after the-sunset bepartFP chat3FP / bepartMS chat3MS fi-l-mațbax niswân in-the-kitchen women "After nightfall, in the kitchen were chatting women."
  - b. bâķi ??yitwašwaš/bâķyîn yitwaswašu fi-l-ķaşr wuzara bepartMS whisper3MS/bepartMP whisper3MP in-the-palace wazirsMP
     "In the palace were whispering ministers."
  - c. <sup>c</sup>amm-i **nâmat**/ ??**nâm** kuddâm dâr-e **člâb** *uncle-cL1S slept3FS / slept3MS before house-cL3MS dogs* "My uncle, in front of his house slept dogs."
  - d. bakên yurkuğin /\* baka yurkuğ min il-bîr banât were3FP run3FP /was3MS run3MS from the-well girlsFP "From the well were running girls." (RPA: elicited data)

These facts are true, independent of whether the NPs are interpreted as specific or not: both indefinites that are strictly set-denoting and those that make reference to particular individuals occur with full agreement when they are the arguments of unergative verbs. Therefore, the ungrammaticality of impersonal agreement with these verbs is independent of the semantic/pragmatic specificity of their subjects, and must have something to do with their syntactic properties:

- (50)a. baka malač ģinn, wa-<sup>c</sup>ind-e banât. baka fi-l-kasr was3MS king Jinnis and-at-cl3MS daughters was3MS in-the-palace ifrâš siḥri, čill ma **tnâm wâḥade** fî-h bed magic, every time sleep3FS oneFS in-cL3MS bi-tihbal bala <sup>c</sup>arîs, INDIC-conceive3FS without husband "There was a Jinni king and he had daughters. There was a magic bed in the palace; every time one (of his daughters) slept in it, she would get pregnant without a husband."
  - b. kasr <sup>c</sup>atîk, wa-fî-h ifrâš sihri, čill ma baka was3MS palace ancient and in-cL3MS bed magic, every time tnâm wâhade fî-h bi-tihbal bala sleep3FS oneFS in-<sup>CL</sup>3MS INDIC-[GET]pregnant3FS without xatra bint wa-xatra <sup>c</sup>ajûz carîs husband once girl and -once old-woman "There was an old palace, and in it a magic bed; every time a woman (any woman) slept in it, she would get pregnant without a husband, one time a young girl, another time an old woman." (*RPA*: elicited data)

In (50a), the indefinite noun phrase *wâḥade* "one*FS*" is understood as having "partitive" reference, referring to a member of the set of the king's daughters which is introduced in the preceding sentence: we understand "one" as meaning "one of the king's daughters". In (50b), on the other hand, *wâḥade* is has no unique referent, and merely asserts the set of (any) women who sleep in the magic bed: we understand this to mean any arbitrary female, rather than one of the king's daughters in particular.

In both cases, the verb is marked with full agreement, and so therefore both semantic interpretations are compatible with it, unlike what we find with unaccusative verbs. It is therefore ambiguous between the two semantic readings in the way that an English sentence such as "every day boys come to class" would be (that is, referring to a particular set of boys who come to class every day, or to a state of affairs in which some boys or other - not necessarily the same ones on each occasion - come to class every day).

# 2.4 Impersonal Agreement and Discourse Context

In the narrative texts from which the data were extracted, clauses showing impersonal agreement have a *presentational* function. They introduce or assert the existence of a referent that has not been previously identified in the discourse, and almost always occur in the first lines of stories or of subsections within them. The following is a typical example from the beginning of a story:

(51) şallu <sup>c</sup>a-xalîl-čim! bâķi hâna <u>tnên ḥarramîye</u> pray at-friend-cL2MP! bepartMS here two thievesMP mitrâfķîn yrûḥu u-yîgu sawa. companionedMP go3MP and-come3MP together "Pray for your friend! There were once two thieves who were inseparable, they would come and go together..." (22.1)

In the example, *bâķi* is marked in the masculine singular, although the noun phrase itself and all subsequent agreeing predicates, including the participle *mitrafķîn* "companioned, inseparable" that modifies it, and the verbs *yirûḥu* "go" and *yîğu* "come" are all marked in the masculine plural.

In the following passage, the impersonal agreement example does not occur at the beginning of the story, but rather at a juncture in which a new character is introduced, and a new course of events begins:

(52) kâmat <sup>c</sup>âwadat ğabat harimme bi-l-<sup>c</sup>akale a. rose3FS returned3FS brought3FS hair-rope with-the-peg wa-dallat-l-e u-kâlat "urbuț hâl-ak yyâ-ha and-lowered3FS<sup>-</sup>to-cl3MScarr-cl3FS and-said3FS tieIMP self-cl2MS bî-ha." haða rabat hâl-e u-sârat il-bint with-cl3FS this3MS tied3MS self-cl3MS and-began3FS the-girlFS tishab fi-h hifft il-maţmûra kâm ta-wisil

pull3FS on-cl3MS UNTIL-reached3MS edge the-grainpit rose3MS bi-riğil-ha ta- vitla<sup>c</sup> hâði zakat ğaflat grabbed3MS on-foot-cl3FS in-order-get-out3MS this3FS startled3FS u-wiķ<sup>c</sup>it hi w-iyyâ-h fi-wast il-matmûra. and-fell3FS she and-carr-cl3MS in middle the-grain-pit fi-dâr abû-ha bâki sabi<sup>c</sup> taman harratîn bepartMS in house father-CL<sup>3FSG</sup> seven eight plowmenMP fi-kâ<sup>c</sup> id-dâr illa u-hal-wâhad mârik but and-this-oneMS passpartMP in-yard the-house sim<sup>c</sup>it hiss-e u-nâdat-e heard3FS step-cL3MS and-called3FS-cL3MS

"She came back with a rope with a peg, and lowered it to him, and said 'tie yourself with it'. He tied himself and the girl started to pull until he reached the edge of the grain-pit; he grabbed onto her foot in order to climb out, and she startled, and fell her and he into the middle of the pit.

There were in her father's household seven or eight plowmen, and there was this one passing through the courtyard; she heard his footsteps and called him..." (37.2)

Two indefinites occur towards the end of the passage: *sabi<sup>c</sup> taman harratin* "seven or eight plowmen" and *hal-wâhad* "this one". "Seven or eight plowmen" introduces the set of referents into the narrative for the first time, and occurs with impersonal agreement. The second, "this one [plowman]," introduces a specific and previously unmentioned individual who is a member of this set.

#### 2.4.1 Summary

To summarize, impersonal agreement is only felicitous with an indefinite NP occupying a position following both the verb and any VP-adjoined adverbial modifiers. These include possessive, locative, or temporal PPs (headed by *cind-* "at, to", *la-* "to, toward", *fi-* "in"), or the particles *hanâk* "there" or *hân/hanâ* "here". In contrast, full agreement is possible in all positions, and is required or felicitous with definite noun phrases.

#### 2.5 **Chapter Summary**

In this chapter, I have presented the essential facts that this thesis is concerned with. Existential constructions (loosely construing the term) consist either of a post-verbal noun phrase preceded either by an inverted complex Preposition Phrase, or by the existential particle *fih*. In both types of construction (referred to as locative-inversion existentials and *fih*-existentials respectively), full agreement with the noun phrase "subject" or impersonal agreement marking on the verb are largely in free variation, subject to certain conditions that create a preference or necessity for one or the other. Impersonal agreement only occurs in existential constructions with unaccusative verbs, and is used to signal the introduction of a new referent into a discourse.

# Chapter 3

# Theoretical Preliminaries and the Structure of the Arabic Clause

# 3.1 Introduction

In Chapter 3, I introduce the theoretical framework I will use in formulating my analysis. This includes a sketch of the Minimalist Program (Chomsky 1995; Collins 1997; Bowers 1998, 1999) as I will use it, including some theoretical as well as notational modifications. Then I provide arguments in support of some of my assumptions regarding the phrase structure of Palestinian Arabic. In section 3.5, I outline a derivation for preposition phrases. Lastly, in Section 3.6, I present an analysis of the structure of noun phrases in Palestinian Arabic, according to which determiners are *external* to the nominal heads they dominate, such that indefinite noun phrases may lack a determiner layer.

# 3.2 The Minimalist Program

I assume a syntactic framework based on Chomsky (1995), Collins (1997), Bowers (1991, 1993, 1997a, 1997b, 1998, 1999), and Kratzer (1996). Syntactic derivation is conceived of as a computational system that takes recursively defined *syntactic objects* and combines them by means of a small number of operations to form syntactic structures, referred to variously as *structural descriptions, phrase markers,* or *trees.* These operations include *Merge, Copy,* and *Delete,* and a complex operation, *Move.* Merge simply takes two syntactic objects (which can be lexical items from the Numeration, or segments of a syntactic tree already constructed) and creates from them a third: (1) *Merge*: For any two syntactic objects  $\alpha$  and  $\beta$ , Merge $(\alpha,\beta) = [\alpha,\beta]$ Copy takes a piece of a syntactic tree and makes a "copy" of it (represented as a *t*) which is coindexed with the original item:

(2) *Copy*: For any segment of a syntactic tree  $\alpha$ , Copy( $\alpha$ ) = { $\alpha$ ,  $t_{\alpha}$ } Delete matches an uninterpretable feature F in a syntactic object  $\alpha$  against a feature F<sub>1</sub> part of a syntactic object  $\beta$ , and "deletes" F (deletion being represented by a "strike-through":

(3) *Delete*: For any uninterpretable feature F, Delete(F) = FFollowing Collins (1997), Copy and Merge together form the complex operation Move, which makes a copy of a part of a syntactic tree, and merges the original object with a new node of the existing tree.

The application of these operations is constrained by several wellformedness conditions, including:

(4)	Attract:	A node <i>K</i> attracts a feature <i>F</i> iff <i>F</i> is the closest feature that can enter a checking relation with a sub-feature of <i>K</i> .
(5)	Last Resort:	An operation <i>OP</i> involving $\alpha$ may apply only if some property of $\alpha$ is satisfied.
(6)	Minimal Link	<i>Condition</i> : Move $\alpha$ can target <i>K</i> only if there is no legitimate operation Move $\beta$ targeting <i>K</i> , where

 $\beta$  is closer to *K*.

Derivation begins with a set of syntactic objects that have been selected from the lexicon and assigned indices. This set of indexed objects is the *Numeration* (Chomsky 1995), from which objects are selected and merged into the derivation.

Trees have to satisfy "output conditions" at two "interfaces": *Spell-out*, at which features related to phonological performance systems are "eliminated" from the tree; and *Logical Form* (LF), at which the terminal output of the derivation is applied to translation rules feeding the interpretation. The most important

output condition is *Full Interpretation*, which says that a structure is well-formed at a given interface (i.e., Spell-Out or LF) if and only if the structure consists of "legitimate objects." Legitimate objects are interpretable at that interface. The Spell-Out cycle, the set of operations that must take place before Spell-Out, concludes when there are no strong features left unchecked in either the phrase marker or the Numeration. The LF cycle concludes when all weak uninterpretable features have been checked.

#### 3.2.1 *Lexical Items and Features*

Lexical items are "sets" of features: *phonological* features, *formal* features (such as *phi-features*: person, gender and number), *structural features* (such as abstract case- or D-features), and *lexical features* (such as *categorial* and *selectional* features). Features are distinguished as *strong* vs. *weak*, and *interpretable* vs. *uninterpretable*. According to *Full Interpretation*, uninterpretable features must be "checked" by Spell-Out or LF, while interpretable features provide information to the phonetic or semantic "interpretive systems," and are not checked. *Strong* features must be checked by Spell-Out; *weak uninterpretable* features must be checked by LF; *weak interpretable* features are not checked at all.

# Table 3.1Lexical Categories, Category Features, and Interpretable ("I") vs.Uninterpretable ("UI") Features

Lexical	Category	Phi-S	Structural S	Selectional
Category	Features	features	features	features
V <sub>erb</sub>	({+v, -n, -D})	Ι	n/a	UI
N <sub>oun</sub>	$(\{-v, +n, -D\})$	Ι	n/a	n/a
P <sub>reposition</sub>	$(\{+v, +n, -D\})$	n/a	n/a	UI
D <sub>eterminer</sub>	$(\{-v, +n, +D\})$	n/a	UI	UI
Pr <sub>edication</sub>	$(\{+v, -n, +D\})$	UI	UI	UI
T <sub>ense</sub>	$(\{+v, -n, +D\})$	n/a	UI	UI
F <sub>ocus</sub>	$(\{+V, -N, +D\})$	n/a	UI	UI

Features must be checked against like features (e.g., *phi*-features against *phi*-features, D-features against D-features, etc.). Features enter checking relationships with one another by means of *Merge* and *Move*.

	Table 3.2         Lexical Items and their Feature Specificat
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		Lexical Features		Formal Features	
Lexical	PF	Lexical	Selectional	Phi-	Structural
Item	Features	Category	Category	Features	Features
<i>baka "be,"</i>	weak	V	N, V, C,	{person, gender	-
			D, P	number} (W)	
ulâd "children"	weak	N	-	{gender, number}	-
<i>bêt "</i> house"				(W)	
<i>fi- "in,"</i>	weak	Р	N, C, Pr	-	-
<sup>c</sup> ind-"at					
<i>l-</i> "the,"	weak	D	N	-	Case (W)
hal- "this,"					
pronouns,	weak	D	N	{person, number}	D (S, W)
clitics				(W)	
Predication	strong	Pr	V, A, P,	{person,gender	Case (S, W)
			N, D	number} (W)	D (S)
Tense	strong	Т	Pr	-	D(S/W)
Focus	strong	F	Т	-	Case (S/W)

#### 3.2.2 *A Note on the Use of the Term* Case

The term *case* is used in traditional Arabic grammar to refer to morphological case as is sometimes used in Modern Standard Arabic (MSA), but which is entirely absent in Rural Palestinian Arabic (as well as most other dialects of colloquial Arabic; see Blau 1960: 161). The examples in (7) illustrate this contrast; (7a), in MSA, shows case endings on the noun phrases: -u(n) (nominative), -a(n) (accusative), and -i(n) for genative. (7b), in Rural Palestinian Arabic, has no such case endings:

- (7) a. kasarat l-bint-u šibbâk-an fi-bayt-i stole3FS the-girlFS-NOM window-acc in-house-GEN ax-î-ha l-<sup>3</sup>akbar-i l-ams brother-GEN-CL3FS the-olderMS-GEN yesterday "The girl broke a window in her older brother's house yesterday."
  - b. časrat il-bint šibbâč fi bêt axû-ha l-ačbar stole3FS the-girlFS window in house brother-cL3MS the-olderMS imberiḥ yesterday "Same."

An assumption in syntactic theory is that in (7b), the noun phrases are "marked" with abstract case, even though morphological case is not present:

In some languages, Case is morphologically realized, in others not, but we assume that it is assigned in a uniform way whether morphologically realized or not (Chomsky 1986: 74).

*Abstract case* in this sense refers to a grammatical property of noun phrases (regardless of whether morphological case is expressed in relation to them) which makes them "visible" for receiving thematic roles from verbs and other predicates (cf. Chomsky 1986: 135, 1995: 110; Haegeman 1994: 155-158). In other words, syntax theory claims that, in a native speakers' knowledge of their language, the noun phrases in (7b) have, at some abstract level of representation, unpronounced affixes or features corresponding to the those pronounced in (7a).

Additionally, Arabic grammar and syntactic theory make use of similar names for different cases, including *nominative*, *accusative* and *genetive*. In the interest of avoiding confusion, unless otherwise stated, mentions of case will be intended to refer to the theoretical notion of abstract case, and will generatally be couched in terms of *case-features*, as opposed to *case-marking*, which I will reserve for the expression of morphological case.
## 3.3 **Predication Phrase**

I adopt Bowers' (1993) claim that a functional projection *Predication Phrase* (PrP) occurs in any clausal structure (including finite, infinitive, and "small clauses")<sup>1</sup>. PrP selects a lexical projection (Verb Phrase, Adjective Phrase, Prepositional Phrase, Noun Phrase), and an argument, which is predicated of the lexical projection. Bowers' PrP proposal is similar to a number of proposals that have been made, including Agr<sup>o</sup> (Agr<sup>o</sup>P: Chomsky 1993; Collins and Thrainssón 1995), "Little-*v*" (vP: Chomsky 1995), Transitivity (TrP: Collins 1997), Voice (VoiP: Kratzer 1996), Aspect (AspP: Carstens and Kinyalolo 1989; Ramchand 1997; Khalaily 1997; Kortobi 1998), Event (EventP: Harley 1995), and  $\mu$  ( $\mu$ P: Pesetsky 1989; Johnson 1991; Diesing and Jelinek 1994).

What distinguishes Bowers' proposal from these others is that Predication is not limited to the clausal position immediately dominating Verb Phrase (VP). Instead, Pr<sup>0</sup> appears in any syntactic context in which a predication relation obtains between a given argument-predicate pair:

(3-1) Structure of Predication Phrase



In a sense, Bowers' Predication proposal builds on Stowell's (1981) argument that small clause constituents are generalized across all categories. Under this view, small clause predication is the default form of predication, with predication in a tensed clause simply being a case of a small clause embedded under an

<sup>1</sup>For similar proposals, see Collins (1997), and Kratzer (1996).

inflectional head (see Chung and McCloskey 1987, McCloskey 1991, Ramchand 1997). Therefore, in addition to appearing between IP and VP in a tensed clause, PrP and its complement can also appear as adjunct modifiers (as depictive modifiers, manner or locative adverbs), as embedded small clause complements, as resultitive complement clauses (Bowers 1997a) and possibly also nominal modifiers.

In addition to the formulations of PrP in Bowers (1993, 1997, 1998, 1999), I assume several refinements of the PrP proposal:  $Pr^{0}$  is also the locus of abstract case- and agreement-feature checking; any agreement that takes place it does so in PrP, so that if an NP occurs in PrP, the NP will check its agreement features. It follows from this that NPs that do not control agreement do not occur in PrP. Also, I follow Chomsky (1995: 350-352), Collins (1997: 15, 17) and Bowers (1999) in arguing that Pr has a (strong) D-feature.

#### 3.3.1 *Predication Phrase and Agreement*

In addition to properties already attributed to Pr by Bowers, I argue that it is the locus of agreement marking: in effect, that it should also be treated as an agreement projection (AgrP; c.f. Pollock 1989, Chomsky 1993, 1995). The facts in question can be seen in embedded clauses in which a syntactic analysis would predict (on analogy with English) that there would be no T (or I) projection. A theory in which agreement marking is licensed in the specifier of TP would predict there to be no agreement in non-tensed embedded clauses (as is indeed the case in English).

#### 3.3.1.1 Agreement in Non-Finite Clauses

In Arabic, verb stems, both "tensed" and participial, are marked for agreement in a variety of different non-finite syntactic positions. Arabic verbal morphology does not have distinctions corresponding to that found between English infinitives and gerunds; the equivalents of such English expressions are represented in Arabic by the "imperfect" stem of the verb, which inflects for person, gender, and number. Arabic does have both active and passive participles, which are inflected for gender and number only. Verb stems in both the imperfect and and participial forms occur with agreement marking in a number of different types of complement clause:

## (8) Infinitive-like Complements

- a. bâķi hâna xawâğa ġani, ṭaķķat fi-bâl-e bepartMS here gentlemanMS richMS, fell3FS in-mind-cL3MS yrûḥ iḥiğğ go3MS pilger3MS "There was a rich gentleman there; it fell into his head to go perform the Hajj." (36.1)
- b. u-hu illi b-ikba xâyif b-i<sup>c</sup>rif inâm? and-he REL INDIC-be3MS scaredMS INDIC-know3MS sleep3MS "And he who is afraid, is he able to sleep [lit. 'does he know to sleep']?" (50.7)
- c. u-<sup>3</sup>amar-e yi<sup>c</sup>mal-l-ha wâḥad miṯl-e and-ordered3MS-cL3MS make3MS-to-cL3FS one like-cL3MS "And he ordered him to make her one like it." (52.10)
- d. int bakêt min il-farz u-barra, ma<sup>c</sup>lûm you were3MS from the cut and-outside, knowpasspartMS bidd-ak takê<sup>c</sup> intent-cL2MS fall2MS "You were out past the cut, of course you were going to fall!" (29.2)

## (9) Exeptional Case-Marking Complements

- a. kâl "yâ-ba allâh ixallî-**k tištrî-l**-i has-si<sup>c</sup>dân" *said3MS 'oh-father God let3MS-cLMS buy2MS-to-cL1S this-monkey* "He said, 'Father, may God let you buy me this monkey'." (35.2)
- b. ma-ķâm-iš ixallî-**hin iţla<sup>c</sup>in** min il-bâb u-barra *not-rose3MS-NEG let3MS-cL3FP leave3FP from the door and-outside* "He never let them go out beyond the door." (46.1)

## (10) Small Clause Complements

- a. u-xalla **uxt-e nâyme**  *let3MS sister-cL3MS sleeppARtFS* "He left his sister sleeping." (49.4)
- b. u-mât u-xallâ-**ni ḥibla**  *and-died3MS and-left3MS-cL1S pregnantFS* "...and he died and left me pregnant." (51.9)
- c. kâl: "ma-šuftû-š **il-maskôb hâğmîn** <sup>c</sup>alê-na?" *said3MS 'not-saw2MP-NEG the-Muscovites attackpartMP upon-cL1P* "He said, 'didn't you see the Russians attacking us?'" (19.4)
- d. zallat **rakbat-e m<sup>c</sup>allaka** bi-šurš *remained3FS neckFS-cL3MS hangPASSPARTFS by-sinew* "His neck remained hanging by a sinew." (42.4)
- e. u-čill il-<sup>c</sup>asčar maḥsūbîn ulâd is-sulțân and-all the-soldiers consideredMP sons the-Sultan' "He said, 'the Army is an honor, and all the soldiers are considered the Sultan's sons'." (15.1)

Furthermore, when the thematic predicate of a main clause in the present tense is a participle, no overt consituent occupies the head of Tense; this is because on the one hand, participles cannot raise to host the "sentential" negation morpheme *ma*-...-*š*, and because they must occur with an overt subject noun phrase (cf. Eid 1993). However, they cannot occur lower than PrP because they can host pronoun clitics, "assign" accusative abstract case to arguments to their right, and license telic aspectual readings. These properties have been widely argued to be characteristic of verb raising (cf. *Holmberg's Generalization;* Holmberg 1986). Therefore, given that participles occur in PrP, and no higher, agreement must be licensed there.

#### 3.4 **Phrase Structure of the Arabic Clause**

In order to illustrate the basic structure that I assume for a matrix clause in Arabic, let us take as an example a clause with a simple transitive verb:

- (11) a. časrat il-bint iš-šibbâč
   broke3FS the-girlFS the-window
   "The girl broke the window."
- (3-2) *Clause Structure for (11)*



#### 3.4.1 *Topic, Focus, and the Left Periphery*

In addition to the sequence of projections VP, PrP, and TP, I also assume that the "left periphery" of the clause can include at least two additional projections associated with the pragmatic functions of topic and focus. The first of these projections, Focus Phrase (FP: cf. Ouhalla 1997), immediately dominates TP, and is associated with Negation, Focus Movement, and Wh-movement (see Ouhalla 1997 for detailed arguments). In particular, I argue that, in a tensed clause, the verb raises to F<sup>0</sup>, deriving VS order. SV word order is derived by the subject NP raising to the specifier of FP.

## 3.4.1.1 Focus Positions

I follow Ouhalla (1997) in assuming that there is a position at the left edge of the Arabic clause associated with contrastive focus (see also Laka 1990; Kiss 1996, 1998; Lopez 1994). Constituents that can occur in this position include noun phrases as well as prepositional phrases, and are argued to be preposed there by means of a movement operation. This argument is based on the fact that a focus-preposed noun phrase binds a gap or trace in its "base" position:

- (12) a. **riwâyat-an** <sup>°</sup>allafat Zaynab-u (lâ qasîdat-an) *novel-acc wrote3FS ZaynabFS-NOM not poem-acc "*it was a NOVEL that Zeinab wrote (not a poem)."
  - b. **Zaynab-un** <sup>°</sup>allafat l-qasîdat-a lâ Laylâ ZaynabFS-NOM wrote3FS the-poem-ACC, not Layla "ZEINAB wrote the poem, not Layla."
  - c. Layl-an waṣalata Zaynab-un lâ nahâr-an
     *night-Acc arrived3FS Zaynab-NOM not day-Acc* "It was AT NIGHT that Zeinab arrived, not during the day."
  - d. **fî l-bayt-i** Zaynab-un lâ fî l-madrasa *in the-house-GEN Zaynab-NOM not in the-school* "Zeinab is in THE HOUSE, not at school." (*MSA*: Ouhalla 1998)

I assume that the position targeted by preposing is Focus Phrase, a position dominating TP, but below CP. This is supported by the fact that preposed constituents occur to the right of an overt complementizer:

- (13) a. ðanantu <sup>°</sup>anna-hu kitâb-an qara<sup>°</sup>at Zaynab
   *believed1S that-cL3MS book-Acc read3FS Zaynab* "I believe that it was A BOOK that Zeinab read."
  - b. yabdû <sup>°</sup>anna-hu **qasîdat-an** <sup>°</sup>alqâ Zayd seems3MS that-cL3MS poem-ACC read3MS Zayd "It seems that it is A POEM that Zeid read." (MSA: Ouhalla 1998)

Ouhalla argues that FP is the locus of not only focus-preposing, but also whmovement, interrogative particles (in those dialects that have them, such as Moroccan, Lebanese, and Iraqi Arabic), and negation:

- (14) a. ya-mma sâylî-ha inčân bidd-ha titğawwaz oh-Mama ask<sup>IMP</sup>-cL3FS if wish-cL3FS marry3FS u-mîn bidd-ha tôxið and-who wish-cL3FS take3FS "Mother, ask her if she intends to marry, and who she wants to take." (38.9)
  - b. **š**-râdat Mona <sup>c</sup>âli ygâbal **meno**? *Q*-wanted3FS Mona Ali meet3MS who "Who did Mona want Ali to meet?" (Iraqi Arabic)
- (15) a. êšma ğâb il-wâḥad *what-ever brought3MS the-one*  "...whatever anyone brought." (22.1)
  - in-nuşş ma kbilna w-tiltên ma kbilna nirða b-wâhde wâhde?
     the-half not-taken1P and-third<sup>DUAL</sup> not-taken1P suffice1P with-one one
     "Half we have not taken, and two thirds we have not taken; shall we be satisfied each one with one?" (76.14)

Following Ouhalla, the head of FP has a focus feature (+*f*) which must be checked by a constituent that also has a focus feature, whether it be due to contrastive focus marking, wh-focus marking, or negation. I also assume that verbal heads raise to  $F^0$  to derive unmarked VS word order.

3.4.1.2 Topic Positions

Above Focus Phrase, I assume that there is a Topic Phrase (TopP), in which Clitic-Left-Dislocated noun phrases are located (cf. Rizzi 1997, Lalami 1996, Doron and Heycock 1999). Clitic Left Dislocation describes a construction in which a definite or specific noun phrase occurs at the left-periphery of the clause, binding either a resumptive pronoun or a trace in a position within the thematic portion of the clause.

- (16) a. il-bint itbayyaõ <sup>c</sup>ariõ-ha kuddâm ahil-ha the-girlFS whitened3MS reputation3MS-cL3FS before family-cL3FS w-ğīzân-ha and-husbands-cL3FS
  "The girl, her reputation was cleared before her family and her husbands." (38.24)
  - b. illa w-has-sufra mamdûde w-ma-ḥadâ-š hanâk but and-this table setpasspartFS and-not-one-NEG there u-calê-ha arbcîn şaḥin u-čill şaḥin fi-h ruzz and-upon-cL3FS 40 bowl and-every bowl on-cL3MS rice u-calê-h laḥme and-upon-cL3MS meat "And there was this table laid out and no one there, and upon it 40 bowls, and in every bowl there was rice and upon it meat." (42.3)
- (17) a. Nâdya šêf-a karîm mbêriḥ Nadia saw3MS-cL3FS Karim yesterday "Nadia, Karim saw her yesterday."
   (Aoun and Benmamoun 1998: 570)
  - hal-məžrim fakkarto `ənno l-bolisiyye la'aţû-h this-criminal thought2P that the-police caught3P-cL3MS "This criminal, you thought that the police caught him." (LA: Aoun, Choueiri and Hornstein 1998: 3)

According to Aoun and Choueiri (1998, 1999), Aoun, Choueiri and Hornstein (1998), and Choueiri (2000), Clitic Left-Dislocated NPs are base generated in TopP when they bind a resumptive pronoun, and are moved there from their "thematic" positions when they bind a trace. This can be demonstrated by the fact that when the left-dislocated noun phrase binds a resumptive pronoun, the structure is insensitive to a variety of extraction islands, such as complex NP islands, nominative islands, adjunct islands, and wh-islands (cf., Aoun and Choueiri 1996; Lalami 1996; Aoun and Benmamoun 1998; Aoun and Choueiri 1999), and does not display reconstruction effects, while left-dislocation structures derived by movement do obey island constraints and allow reconstruction:

- (18) Adjunct Islands
  - a. smə<sup>c</sup>t <sup>2</sup>ənno Nâdya rəḥt mən-dûn-ma təḥke ma<sup>c</sup>-\*(a) *heard1S that NadiaFS went2MS without speak2MS with-cL3FS* "Nadya, I heard that you left without talking to her." (*LA*: Aoun and Benmamoun 1998: 571)
- (19) *Complex-NP Islands* 
  - a. smə<sup>c</sup>t <sup>o</sup>ənno hal-ktêb ḥkît ma<sup>c</sup> l-walad yalli katab <sup>c</sup>al-\*(êh) *heard1S that this-bookMS spoke2MS with the-boy REL wrote on-cL3MS* "This book, I heard that you spoke with the boy that wrote on it." (*LA*: Aoun and Benmamoun 1998: 571)
- (20) Wh-Islands
  - a. smə<sup>c</sup>t <sup>°</sup>ənno **Nâdya** b-ya<sup>c</sup>rfo <sup>°</sup>ayya walad šêf-**a** *heard1S that Nadya* INDIC-*know3P which boy saw3MS-cL3FS* "Nadya, I heard that they know which boy saw her." (*LA*: Aoun and Benmamoun 1998: 572)

I assume that TopP has an interpretable nominative abstract case feature against which topicalized NPs can check their abstract case feature. Since this abstract case feature is interpretable, it is not deleted by the checking procedure with a topic NP, allowing there to be more than one topic per clause; Rural Palestinian Arabic frequently has two, as in the following examples:

- (21) a. ana marat-i<sub>i</sub> f-êd-ha<sub>j</sub> mît lêra *I* wife-cL1S in-hand-cL3FS 100 lira
  "My wife had gotten 100 lira [lit. 'I, my wife, in her hand 100 lira']." (86.9)
  - b. ğâr-ak il-mislim abû<sub>j</sub>-h il-e<sub>j</sub> neighbor-cL2MS the-Muslim father-cL3MS to-cL3MS
    <sup>c</sup>ala abû-k <sup>c</sup>išrîn alf upon father-cL2MS twenty thousand "Your neighbor the Muslim, your father owes his father 20 thousand [lit. 'your neighbor the muslim, his father, to him upon you father is 20 thousand']." (100.5)

- c. ana had-dîn<sub>j</sub> l-i<sup>c</sup>wâğ ma bidd-i yyâ-h<sub>j</sub> *I this-religion the-crooked not wish-cL1S CAR-CL3MS*"This crooked religion, I don't want it [lit. 'I, this crooked religion, I don't want it']." (107.7)
- d. ana arba<sup>c</sup> xams niswân<sub>j</sub> țallaķt-hin<sub>j</sub> *I four five women divorced1S-cL3FP*"4 or 5 women I have divorced [lit. 'I, 4-5 women, I divorced them']." (130.14)

Each NP "inherits" a theta-role from the resumptive pronoun which it binds. As we saw above, NPs that can be topicalized in this manner have to be "specific"; this includes those with strong quantificational determiners (such as *čill* "all, each, every"), the definite article (see above), proper names (see above), pronouns (see above), "strong" wh-words (such as *ayy* "which" or *mîn* "who"), and 'specific' indefinites:

- (22) a. kəll məžrim fakkarto 'ənno l-bolisiyye la'atû-h every criminalMS thought2P that the-police caught3P-cL3MS "Every criminal, you thought that the police caught him." (LA: Aoun, Choueiri and Hornstein 1998: 3)
  - b. bass xațîye wâḥade ančart-ha only sinFS oneFS committed1S-cL3FS
    w-ma <sup>c</sup>taraft-iš ib-ha and-not confessed1S-NEG with-cL3FS
    "Only one sin have I committed and not confessed (it)." (86.18)

Examples with 'non-specific' wh-words (such as  $\check{s}u$  "what") are ungrammatical, even simple ones in which the binding relation between the wh-word and the resumptive pronoun obeys subjacency (see pp. 22, 40-42):

 (23) a. \*šu štarayt-û imbêriḥ *what bought2P-cL3MS yesterday*  "What did you buy (it) yesterday?" (LA: Aoun and Benmamoun 1998: 572ff)

#### 3.4.1.3 Focus and Clitic Left Dislocation

Clauses in which both focal movement and clitic left dislocation occur show that the latter precedes the former. That is, a left-dislocated topic will precede a focus-preposed constituent, whether it is pronounced with intonational focus or is a negated consituent:

- (24) *Clitic-Left-Dislocation with Negation* 
  - a. **hal-ķaţî<sup>c</sup>a** ma-ðall-iš ma<sup>c</sup>â-**h** darâhim *this-only-child not-remained3MS-NEG with-cL3MS dirhams* "This only child, he didn't have any money left." (34.2)
  - b. ya sîd-i, int ma-<sup>c</sup>ind-ak sab<sup>c</sup> izyâr mâl oh Lord-cL1S you not at-cL2MS seven jars money "My Lord, you do not have seven jars of gold." (73.18)

Aoun and Choueiri (1998) show that when wh-movement and CLLD-dislocation co-occur, the wh-element can either precede or follow the left-dislocated element:

(25)	a.	<b>w-ana</b> šu <b>°âmla</b> ? and-I what dopartFS "and I, what am I to do?" (27.4)			
	b.	<b>int</b> la-lêš <b>ğibt</b> -ni hân? <i>you for-why brought2MS-cL1S here</i> "You, for what reason did you bring me here?" (36.13)			
(26)	a.	<b>nâdya</b> šu <sup>°</sup> âlə-l- <b>a</b> l-m <sup>c</sup> allme? <i>Nadia, what said3FS-to-c13FS the-professorFS</i> "Nadya, what did the professor say to her?"			
	b.	šu <b>nâdya</b> <sup>°</sup> âlət-l- <b>a</b> l-m <sup>c</sup> allme? what Nadya said3FS-to-cL3FS the-professorFS			

Aoun and Choueiri also show that wh-structures can be derived by means of clitic left-dislocation, as the displaced wh-phrase can bind a resumptive pronoun as well as a trace, in which case it violates island constraints and fails to license reconstruction.

"Same." (LA: Aoun and Benmamoun 1998: 570)

- (27) a. **mîn** b-ta<sup>c</sup>rafo l-mara yalli sêfit-**o** b-l-maț<sup>c</sup>am? *who INDIC-know2P the-womanFS REL saw3FS-cL3MS in-the-restaurant "Who*<sup>*i*</sup> do you know the woman that saw him<sup>*i*</sup> in the restaurant?"
  - b. <sup>a</sup>ayya ktêb bidd-kun ta<sup>c</sup>rafo <sup>a</sup>əza Zêna štarit-o which bookMS wish-cL2P know2P whether Zena bought3FS-cL3MS mən l-maktabe? from the-bookstore "Which book<sub>j</sub> did you say that Zena bought it<sub>j</sub> at the bookstore?" (LA: Aoun and Choueri 1999b: 7)

I conclude that wh-movement can target positions both above and belowTopP, in both FocP and CP (c.f. Rizzi 1997). Likewise, left-dislocation can be derived either by base-generation, in which case the dislocated element binds a resumptive pronoun, or by movement, in which case the left-dislocated element can bind a trace and be interpreted via reconstruction.

#### 3.4.1.4 Summary

Based on the preceding discussions, I conclude that the left-periphery of the Arabic clause has the following structure:



#### 3.4.2 *The Thematic Domain of the Clause*

As I argued above, the thematic domain of the clause consists of a Predication phrase and a lexical predicate, usually a Verb Phrase. Since argumentation in support of this is provided elsewhere, I will not argue for this here, but merely assume it, and illustrate it as follows:



#### 3.5 **Derivation of Prepositional Phrases**

In this sub-section, I present an analysis of the structure of prepositional phrases as they occur in locative inversion structures. I propose that the locative prepositional phrase consists of a small clause headed by Pr, which has as its "external" argument a null pronoun (PRO), which is either bound by the noun phrase argument in VP (as we shall see in the case of *fih*-constructions in Chapter 5), or by existential closure over the small clause (in the case of locative inversion). According to this analysis, locative prepositions are "transitive" in the sense that they are associated with two arguments; one being the noun phrase denoting the location, and the other being the variable (Wunderlich 1991 calls these the *relatum* and the *theme* respectively).

Therefore, a prepositional phrase is properly a Predication Phrase (PrP), and its Prepositional Phrase (PP) complement<sup>2</sup>:

<sup>&</sup>lt;sup>2</sup>This analysis is largely based on observations in Heim and Kratzer (1998: 221-230), who cite May (1977) in arguing that prepositions bind their arguments in a clause-like structure. den Dikken and Næss (1994: 226) have argued that prepositional phrases contain a functional projection which assigns case to the external argument of the preposition. Wunderlich (1991) also provides an explicit analysis of prepositional phrases as diadic predicates, in which there is a close correspondence between their clausal syntactic structure and their intepretation.



The structure in (3-5) is derived as follows: the "internal" argument of the preposition is *merged* into the PP projected by the preposition, checking the selectional features of P:



PP then merges with Pr<sup>0</sup>, checking its selectional features and projecting PrP:



In the case of a bare preposition, the preposition then raises and adjoins to the head of Pr, checking the latter's strong PF-features:



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	п	-	w	-
il-	"the"	w	d	$\mathbf{N}$	-	c,d
fî-	"in"	w	р	Ð	-	-
$\Pr_1^0$		S	Pr	₽	w	c,D

A PRO argument is merged into the PrP, checking the abstract case, phi and D-features of Pr<sup>0</sup> and re-projecting PrP:



(3-8)



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	п	-	w	-
il-	"the"	w	d	$\mathbf{N}$	-	c,d
fî-	"in"	w	р	Ð	-	-
$Pr_1^0$		S	Pr	₽	w	€,Ð
PRO		w	d	-	w	€,d

Finally, at LF, the formal features of the NP *l-dâr* "the house" raise and adjoin to PrP, checking its abstract case and phi-features:

(3-10) fī d-dâr *in the-house* "in the house"



		PF-F	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	п	-	w	-
il-	"the"	w	d	N	-	€,d
fî-	"in"	w	р	Ð	-	-
$\operatorname{Pr}_{1}^{0}$		S	Pr	₽	w	€,Ð
PRO		w	d	-	w	€,d

In a derivation with an inflected preposition, the clitic pronoun is incorporated into the preposition in PP, and raises with it to the head of Pr<sup>0</sup> (see Diesing and Jelinek 1994: 134-147)<sup>3</sup>. There it checks its abstract case and phi features as a "free rider" in the overt syntax, rather than at LF (as was the case in (3-10)). Otherwise, the derivation proceeds just as with bare PPs:

<sup>&</sup>lt;sup>3</sup>There are two possible ways to analyze inflected prepositions; in one, the pronoun clitic is merged as a discrete constituent, but is incorporated into the verbal head and therefore raises with it (see Diesing and Jelinek 1994: 134-147) In the other approach (cf. Shlonsky 1997: 175-203), the clitic is an agreement marker generated on the preposition which corresponds to a PRO argument merged into the argument position. I will assume the first approach, although the choice has no bearing on the analysis.



I argue that the "external" argument of the prepositional phrase is a null pronoun PRO, rather than a trace left by NP-raising (c.f. Heim and Kratzer 1998: 221-228). This is a trivial distinction in terms of the semantics, as both the pro and the trace would be interpreted as syntactically bound variables. However, positing a trace in the external argument position of the prepositional phrase would require motivating the raising of the NP. As we will see in the next chapter, the lack of features that would motivate such an operation is precisely what explains the derivation of impersonal agreement in existential constructions. Therefore, I will assume that the external argument of the preposition in a PRO.

Either way, one undesired predication of this analysis is that a pronoun within the prepositional phrase could be semantically bound by the NP in a locative inversion construction, producing a reading in which the NP and the pronoun are coreferential. This is a problem because such coreference is ruled out in locative inversion constructions, as shown in (28):

- (28) a. baka fih **ulâd** fi-dâr-**him** *was3MS there childrenMP in-house-cL3MP "*There were children, in their house<sub>1/i</sub>."
  - b. baka fi-dâr-him ulâd was3MS in-house-cL3MP childrenMP
    "There were in their<sub>i/\*i</sub> house children<sub>i</sub>."

In (28a), the prepositional phrase *fi-dâr-him* "in their house" follows the NP *ulâd* "children," and has a reading in which the clitic *-him* "their" is bound by the NP. This would mean that the children in question were in their own house. Alternately, the clitic can be bound via discourse anaphora, and be understood with disjoint reference, meaning that the children are in someone else's house. This is illustrated in the structural description and logical forms below (given in an English paraphrase):

(29) a.  $\left[ _{VP} \left[ _{NP} u \hat{a} d_{i} \right] \left[ _{V'} ba ka \left[ _{PrP} t_{i} \left[ _{Pr'} f i_{k} - \left[ _{PP} \left[ _{DP} d \hat{a} r - h i m_{i/i} \right] t_{k} \right] \right] \right] \right]$ 

- b. »children...( $\lambda x [x \in D_e. x \text{ is in } x' \text{ s house}]$ )
- c. »children...( $\lambda x [x \in D_e. x \text{ is in pro's house}]$ )

However, in (29b), in which the prepositional phrase is inverted and precedes the NP, coreference is not available in a reading, indicating the the clitic cannot be bound by the NP, contrary to what is predicted by the structure I have proposed.

This might be explained by appealing to a diacritic placed on the clitic and associated with the locative inversion operation. Intuitively, locative inversion 'marks' the clitic as a discourse anaphor. This would rule out a reading in which the NP semantically binds the clitic (in the sense of Heim and Kratzer 1998: 263). Likewise, discourse binding of the clitic by the NP would be impossible, since the NP would be novel and not satisfy the clitic's uniqueness/familiarity presupposition. Therefore, only a disjoint reading between the NP and the clitic would be available.

#### 3.6 Structure of Noun Phrases

In this sub-section, I will discuss the structure of noun phrases, to the extent that the derivation of this structure results in feature specifications that feed clausal movement operations. My principal claim is that noun phrases which license impersonal agreement in locative-inversion structures (and, as we shall see, *fih*-constructions as well) are unspecified for abstract case features, which would otherwise motivate A-movement to the PrP. This case feature, I will argue, is associated with the head of the Determiner Phrase (DP). Noun phrases that occur with impersonal agreement lack a determiner layer, and therefore also lack a case feature that would feed a movement operation raising them into PrP, the position in which both case and agreement are checked. Modified indefinites are assumed to include a Number Phrase (NumP) layer, which dominates the NP projection (cf. Ritter 1991; Fassi Fehri 1993; Mohammad 1997b).

As we have seen, locative inversion constructions occur with noun phrases of varying complexity. They include bare NPs (both singular and plural), NPs modified by a variety of adjectives, relative clauses and numerals, and NPs with the "indefinite determiner" *hal-* "this". In the following examples, (30a-c) show noun phrases modified by numeral quantifiers (including *axên* "two brothers", which is inflected for dual number):

 (31) a. bâķi fi dâr abû-ha sabi<sup>c</sup> taman ḥarrātîn bepartMS in house father-cLFS seven eight plowmenMP "In her father's house were seven or eight plowmen." (37.3)

- b. ana bāķî-l-i **axên w-uxt** *I bepartMS-to-cL1S brothersDL and-sister* "I had two brothers and a sister." (62.4)
- c. bâķi fi dâr abû-ha ačam ḥarrâṯ *bepartMP in house father-cLFS some plowmanMS*"In her father's house were several plowmen." (*RPA*: elicited data)

(31d) shows a noun phrase modified by an adjective:

- d. bâķi hanâk iţnên ḥaramîyye mitrâfķîn
   *bepartMS there two thieves companionedMP* "There were two thieves there [who were] inseparable." (22.1)
- e. bâķi fi haðîk il-balad **tuğğâr mafhūmîn** *bepartMS in thatFS the-village merchantsMP understoodMP* "In that village were 'understood' merchants." (34.3)

(31e) a noun phrase modified by an adjective as well as indefinite *hal*-:

f. čân tiḥt sêr-e haṭ-ṭabanǧe was3MS under belt-cL3MS this-pistolFS
"There was under his belt this pistol." (RPA: elicited data)

I assume that the noun phrases in the examples in (31a-d) have structures

like the following:

(3-11) iṯnên ḥaramîyye mitrâfķîn *two thievesMP companionedMP* "two inseparable thieves"



The adjectival quantifier (c.f. Higgenbotham 1987) *itnên* "two" occurs as a specifer of Number Phrase (following Ritter 1991), and the attributive modifier *mitrâfķîn* "inseperable" is an adjunct to NP. The noun head raises and adjoins to the head of NumP, checking a categorial feature there<sup>4</sup>.

My analysis of the structure of definite noun phrases departs considerably from what has come to be the 'standard' analysis<sup>5</sup>, according to which the head noun raises to the head of D, incorporating with the definite article, or with a null head in the case of construct state nominals.

(3-12) il-bêt il-kbîr the-house the-big "the big house"



This derives the relative ordering of the head nouns and modifiers, which are assumed to be left-adjuncts in the NP projection. It also derives the fact that

<sup>4</sup>This is similar to Borer's (1996: 49) proposal regarding measure noun phrases in Hebrew. According to Borer, the measure noun phrase in the following example is a bare NumP:

 (i) dan rac šloša kilometrim <sup>3</sup>arukim Dan ran three kilometers long
 "Dan ran three kilometers."

Borer cites Longobardi (1994) to the effect that noun phrases that lack determiners are non-referential, as is the case in (i) above.

<sup>5</sup>See Benmamoun (1993), Borer (1996), Doron (1989), Fassi Fehri (1989, 1993), Hazout (1990, 1992, 1995), Mohammad (1988, 1997b), Ritter (1987, 1988, 1991, 1995), Shlonsky (1988, 1991), and Siloni (Siloni 1990a, 1990b, 1991, 1994, 1995, 1997, 2002). Of these authors, Fassi Fehri, Mohammad, and Siloni expressly argue that noun raising to the head of D occurs generally. Ritter (1988, 1991), on the other hand, argues that nouns which host the definite article do not raise to the head of D. Borer (1996) argues that indefinite (as opposed to construct state) noun phrases that lack a determiner also lack a DP layer in their structure.

attributive modifiers follow the head noun, as well as the "possessor" phrase in a construct state. This is illustrated in the following examples;

- (32) a. kâm hâða nadah **ulâdt-e** <u>t-talâte</u> *rose3MS thisMS called3MS children-cL3MS the-three* "Then he called his three children." (36.13)
  - b. yirǧa<sup>c</sup> naṣṣ ič-čalâm la-**xwit-ha l-<sup>c</sup>ašara** *return3MS passage the-words the-to-brothers-cL3FS the-ten* "The story returns to her ten brothers." (37.10)
  - c. bidd-i **banât-ak is-sab**<sup>c</sup>**a** la-**wlâd-i s-sab**<sup>c</sup>**a** *wish-cL1S daughters-cL2MS the-seven to-sons-cL1S the-seven* "I want your seven daughters for my seven sons." (51.3)
  - d. lammin čašaf <sup>c</sup>an <u>t</u>imm-e <sup>c</sup>irf-e š-šêx when uncovered3MS from mouth-cL3MS knew-cL3MS the-sheikh inn-e abu l<sup>i</sup>-ûlâd is-sab<sup>c</sup>a that-cL3MS father the-sons the-seven "When he uncovered his mouth, the sheikh recognized him, that he was the father of the seven sons." (51.14)
- (33) a. **n-nəswân ət-tlâte** *the-women the-three* "the three women"
  - b. **l-'aşâbe' əl-xamse** *the-fingers the-five* "the five fingers"
  - c. **d-dôltên** ət-təntên *the-countries*<sup>DUAL</sup> *the-two* "the two countries" (Syrian Arabic: Cowell 1964: 509)

# (34) a. li-**l-banât-i <u>t-t</u>ala<u>t</u>ât-i** *to-the-girlsFP-GEN the-threeFP-GEN* "to the three girls"

b. sâfara **ar-rižâl-u l-xamsat-u** <sup>•</sup>ila fransa *travelled3MS the-menMP-NOM the-five-NOM to France* "the five men travelled to France" (*MSA*: Lovell 1974: 72) Since, according to this analysis, noun heads always raise to D (cf. Fassi Fehri 1993: 217; Siloni 1991: 255; Siloni 1997: 31-34) this entails a futher assumption that indefinite noun phrases include a "null" determiner, to which the noun adjoins. This assumption is necessary to derive the correct word order facts with regard to modifiers and possessers in the construct state and with indefinite nouns, such as the following:

(3-13) bêt kbîr *house big* "a big house"



The problem with this analysis is that it fails to capture a fact that, to my knowledge, has been generally overlooked in the literature on Semitic nominal structure, concerning the position of cardinal numbers relative to the head noun (however, see Shlonsky 2000: 6). In many varieties of Arabic, when a definite noun phrase includes a cardinal numeral, the numeral usually behaves as an adjective, following the noun and "agreeing" with it in definiteness. These facts (illustrated in 32-34 above) are predicted by the standard analysis.

However, it is also possible for the numeral to precede the noun and host the article. In fact, this is the normal case with nouns hosting the definite article in RPA, with only nouns hosting pronoun clitics or in construct states being modified by a post-positioned numeral. According to Blau (1960: 56), "the article always attaches itself to the preceding numeral and not with the enumerated [noun]...however, the numeral follows the enumerated [noun], when this joined with a pronominal suffix<sup>6</sup>." Therefore, an example like that given in (32d) above is anamolous in the dialect. What seems to be the usual pattern is that the cardinal numeral will follow the NP if it hosts a pronoun clitic, and preceded the NP if does not<sup>7</sup>:

- (35) a. kal-l-ha "ya bint-i, xuði ha<u>t</u>-talât habbât" said3MS-TO-CL3FS "oh daughter-CL1S, take<sup>IMP</sup>FS these-three pills" "He said to her, 'my daughter, take these three pills'." (31.6)
  - kâm hâộa națț fi ộahr iḥsân-e u-ğâb rose3MS thisMS jumped3MS on back horse-cL3MS and-brought3MS
    il-alf yôm b-yôm the-thousand day by-day "Then he jumped on the back of his horse and passed the thousand days in a day." (46.15)
  - c. w-il-wasțâni a<sup>c</sup>țâ-h **il-mît lêra** *and-the-middleMS gave3MS-cL3MS the-hundred lera* "…and the middle [brother] gave him the hundred lera." (79.5)
- (36) a. rôḥt ma<sup>c</sup> el-xams ulâd went1S with the-five boysMP "I went with the five boys."
  - b. <sup>c</sup>ti-ni **l-**<sup>c</sup>**ašr frankât** *giveIMP-CL1S the-ten franks* "Give me the ten franks."

<sup>7</sup>Glinert (1989: 85) presents similar facts from Modern Hebrew:

- (i) ha-šlošim šékel the-three shekel "the three shekels"
- (ii) ha-méa kilo the-hundred kilo "the hundred kilos"

<sup>&</sup>lt;sup>6</sup>"Der Artikel verbindet sich immer mit der voranstehenden Zahl und nicht mit dem Gezählten...die Zahl steht jedoch dem Gezählten nach, wenn dieses mit einem Pronominalsuffix verbunden ist."

 c. <sup>a</sup>ayš <sup>c</sup>melt be-t-tlat <sup>c</sup>ğûl elli štrayt-on *what did2MS with-the-three calves REL that bought2MS-cL3P* "What did you do with the three calves that you bought?" (*Lebanese Arabic*: Feghali 1928: 187)

- (37) a. **al-xams-u qurin** *the-five-NOM villages-GEN* "the five villages"
  - b. a<u>t</u>-talâtat-u rizâl-in *the-three-NOM men-GEN* "the three men"
  - c. **a<u>t</u>-talâ<u>t</u>-u mi<sup>°</sup>at-i dînâr-in** *the-three-NOM hundred-GEN dinars-GEN* "the three hundred dinars" (*MSA*: Wright 1875, v.II: 264)
  - hâðihi <u>t-talât-u</u> şuḥuf-in
     *theseFS the-three-NOM newspapers-GEN* "these three newspapers" (*MSA*: Fassi Fehri 1998: 36)

This ordering of elements does not affect the "definiteness" of the noun phrases; even when the numeral hosts the definite article, determiner spread still takes place, as can be seen in the following example from Lebanese Arabic:

(38) a. bâ<sup>c</sup> el-<sup>3</sup>arba<sup>c</sup> <sup>3</sup>éḥṣne l-mlâḥ sold3MS the-four horses the-goodPL "He sold the four good horses." (LA: Feghali 1928: 190)

The noun phrase *el-<sup>°</sup>arba<sup>c °</sup>eḥṣne* "the four horses" is modified by the adjective *mlâ*<sup>*µ*</sup> "good", which agrees with it in both definiteness and number.

Choueiri (2000) has also provided evidence that the determiner is "external" to the common noun, rather than adjoined to or incorporated with it. Her arguments are based on relative clauses which are derived by extraction of the external head, allowing binding via reconstruction: (39) a. <sup>5</sup>iyyêm ḥayêt-**o** yalli **wala zalame** b-yinsê-hun hinne *days life-cl3MS REL no manMS INDIC-forget3MS-cL3P theyFP* <sup>5</sup>iyyêm iṭ-ṭufûle *days the-childhood* "The days of his<sub>i</sub> life that no man<sub>i</sub> forgets are the days of childhood."

b. \*<sup>5</sup>iyyêm ḥayêt-o yalli <sup>c</sup>am b-yitsê<sup>5</sup>alo <sup>5</sup>əza wala zalame<sub>i</sub> days life-cL3MS REL ASP INDIC-wonder3P whether no man b-yinsê-hun hinne <sup>5</sup>iyyêm iṭ-ṭufûle INDIC-forget3MS-cL3P they days the-childhood "The days of his<sub>i</sub> life that they are wondering whether no man<sub>\*i/j</sub> forgets are the days of his childhood." (LA: Choueiri 2000)

(39a) allows reconstruction, as the possessive clitic in *hayêt-o* "his life" can be bound by *wala zalame* "no man," which occurs below it in the surface string. In (39b), the possessive clitic cannot be bound by *wala zalame*, as the latter is inside a WH-island, indicating that reconstruction of *'iyyêm hayêt-o* is not possible. In each case, the resumptive element inside the relative clause is argued to be an appositive adjunct coreferring with either a null pronoun or a trace, the difference between them being indicated by the availability of reconstruction (cf. Aoun and Benamamoun 1998).

Choueiri then notes that noun phrases such as *ġațța* "nap" inside idiom chunks such as *`axad ġațța* "to take a nap" do not behave as independent arguments, and cannot be made definite:

- (40) a. <sup>°</sup>axad **ġaṭṭa** *took3MS nap* "He took a nap."
  - b. \*<sup>3</sup>axad **il-ġaṭṭa**/**kəll ġaṭṭa** *took3MS the-nap/every nap* "He took the nap/every nap."
  - c. \* **l-ġaṭṭa** ba<sup>c</sup>d ð-ðuhr b-itfîd ktîr *the-nap after the-noon INDIC-help3MS much* "The nap in the afternoon helps a lot."

 d. \*Sami <sup>a</sup>xad ġațța bas Laila ma-<sup>a</sup>xadit waḥde Sami took3MS napFS but Layla not-took3FS oneFS "Sami took a nap but Layla didn't take one." (LA: Choueiri 2000)

However, the noun in an idiom chunk can be relativized provided that island constraints are obeyed:

- (41) a. **l-ġaṭṭa** yalli <sup>3</sup>axad-**a** Sami ba<sup>c</sup>d ð-ðuhr **fêdit**-o *the-napFS REL tood3MS-cL3FS Sami after the-noon helped3FS-cL3MS* "The nap Sami took in the afternoon helped him."
  - kəll ġaṭṭa b-yêxid-a Sami ba<sup>c</sup>d ð-ðuhr every nap INDIC-take3MS-cL3FS Sami after the-noon raḥ tfîd-o FUT help3FS-cL3MS "Every nap that Sami takes in the afternoon will help him."
  - c. \* l-ġațța yalli b-ta<sup>c</sup>rfo ș-șabe yalli <sup>3</sup>axad-a the-napFS REL INDIC-know2P the-boy REL took-cL3FS ba<sup>c</sup>d ḍ-ḍuhr fêdit-o after the-noon helped3FS-cL3MS "The nap which you know the boy that took (it) in the afternoon helped him." (LA)

Choueiri concludes that the extracted noun phrases *l-ġațța* "the nap" and *kəll ġațța* "every nap" in (41) do not include the determiners *l-* "the" or *kəll* "every," as *l-ġațța* and *kəll ġațța* are ungrammatical in the base position within the idiom, as in (40) above. Therefore, in each case, the determiner is external to the head noun and the relative clause:

(42) a.  $\begin{bmatrix} I_{\text{DP}} & \text{il-} I_{\text{NP}} & \text{gatta}_i I_{\text{CP}} & t_i I_{\text{C'}} & \text{yalli} I_{\text{S}}^{3} & \text{axad-} t_i I_{\text{a}} \end{bmatrix}$  Sami ba<sup>c</sup>d ð-ðuhr]]]]] *the nap rel took*3*MS Sami after the-noon* "the nap Sami took in the afternoon"

Similar arguments can be made out of relativized existential constructions. As is the case in English, definite noun phrases are excluded from the existential construction when the context cannot provide a list interpretation (cf. Mohammad 1998):

- (43) a. \*kên fî **l-kətub** <sup>c</sup>a-ṭ-ṭawle *was3MS there the-booksP on-the-table* "There were the books on the table."
  - kên fî kətub <sup>c</sup>a-ṭ-ṭawle *was3MS THERE booksP on-the-table*"There were books on the table." (LA: Choueiri 2000)

Relative clauses built out of *fih*-existentials can have definite external heads, as in (44a). However, this is only possible when the chain headed by the external head noun does not violate an island, indicating the the relative clause is derived by movement:

- (44) a. **(kəll) il-kətub** yalli kên fî <sup>c</sup>a-ṭ-ṭawla ṣâro <sup>c</sup>a-r-raff (*all) the-booksP REL was3MS THERE on-the-table becameMP on-the-shelf* "All the books that there were on the table are now on the shelf."
  - \*(kəll) l-kətub yalli narfazto la<sup>°</sup>anno kên fî <sup>°</sup>a-ṭ-ṭawla all the-books rel be-upset2P because was3MS there on-the-table şâro <sup>°</sup>a-r-raff became3P on-the-shelf "All the books that you were upset because there were on the table are now on the shelf." (LA)

As definite noun phrases are restricted from the existential construction (barring a list-interpretation), *l-kətub* "the books," the head of the relative clause in (44a) must be extracted without the article, the latter taking the whole NP-relative clause constituent as its complement:

(45) a.  $[_{DP} l - [_{NP} k = t_i [_{CP} t_i [_{C'} yalli [_{S} k = fi t_i = t_i =$ 

Choueiri therefore concludes that determiners are external to their common noun complements at least in some Arabic DPs.

Based on all the arguments presented above, I follow Ritter (1991: 43) in claiming that the noun head does not raise to  $D^0$  in the Arabic DP, but rather

raises to the head of NumP, thereby deriving its order relative to the adjective *mlâ*<sup>*h*</sup> "good":

(3-14) el-<sup>°</sup>arba<sup>c</sup> <sup>°</sup>eḥṣane l-mlāḥ *the-four horses the-good*PL "the four good horses"



When the noun phrase hosts indefinite hal-, I assume that there is a

layer of DP structure just as is the case with other determiners:

(3-15) haṭ-ṭabânǧe mnazzale bi-l-fiððe *this-pistolFS decoratedFS with-the-silver* "this pistol decorated with silver"



Evidence for this structure can be seen in that determiner spread can optionally occur even when the noun is modified by indefinite *hal*- (although it does not do so obligatorily):

- (46) a. haðôla ričbu xêl-him u-sâfaru talat arba<sup>c</sup>t iyâm theseP mounted3MP horses-cL3MP and-travelled3MP three four days ağu la-hal-wâd il-xaşîb bi-hal-maiy u-wasi<sup>c</sup> came3MP to-this-valleyMS the-filled with-this-water and-wideMS "They mounted their horses and travelled three [or] four days [until] they came to this valley full of water and wide." (38.1)
  - kâmat hâði hiblit u-wildit ğâbat rose3FS thisFS got-pregnant3FS and-gave-birth3FS and-delivered3FS
    haş-şabi l-imzawwaq sibhân illi xalak-e his-babyMS the-decoratedMS praisedMS REL created3MS-cL3MS
    "Then she became pregnant and bore this pretty baby boy -Praised be He who created him." (48.1)
  - c. ağu <sup>c</sup>a-hal-dâr ič-čbîre ķâm <sup>c</sup>abar il-ķêsi came3MP to-this-houseFS the-bigFS rose3MS entered3MS the-Qesi sm-inn-e bidd-e yišḥad illa w-hal-bint il-mitbannte as-if-cL3MS wish-cL3MS beg3MS suddenly and-this girl the-virginFS "They came to this big house, then the Qesi entered as he was going to beg, and there was this young woman..." (37.1)
- (47) Indefinite hal- without Determiner Spread
  - a. ma-šâf illa hal-mara m<sup>c</sup>allaķa bi-ša<sup>c</sup>ar râs-ha not-saw3MS but this-woman hanging by-hair head-cL3FS fi saķif hal-imġâra on roof this cave "He saw nothing but this woman hanging by the hair of her head from the roof of this cave." (55.4)

Each of the noun phrases with by *hal-* in the preceding examples is new to the discourse and is not presupposed in any way, and is therefore indefinite by the relevent semantic and pragmatic criteria. Despite this, in (45) the attributive modifiers are hosting the definite article. This suggests that determiner spread is purely a syntactic process, and that whatever features are involved are therefore purely syntactic<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup>The mechanism behind determiner spread (also found in Hebrew and Modern Greek) largely remains a mystery. It is not my purpose here to propose a principled analysis of it, but rather to point out the minimum of facts to be accounted for by an analysis. In particular, as

As was shown in Chapters 1 and 2, the presence of indefinite *hal*- seems to create a slight preference for impersonal agreement. This is surprising, given that *hal*-, whatever its interpretation, seems to be a determiner, and therefore to contain an interpretable D-feature, just as the definite article *il*-does. This is supported by the previous observations regarding determiner spread. We might assume, therefore, that *hal*- has a D-feature that does not require checking in the overt syntax. Since this feature does not require checking in the overt syntax, it will not feed a movement operation that would lead to checking.

The puzzle is this: indefinite *hal-* patterns with the definite article *il-* and definite *hal-* in as much as it is possible (although not necessary; see 47 above) for attributive modifiers in the noun phrase to be marked as "definite." However, it does not pattern with the definite article in requiring full agreement on the verb in a presentational/existential construction. This suggests that the mechanisms that produce the agreement effects in question are independent of the features that *hal-* and the definite article have in common; the D-feature in particular. This makes sense if we assume that the D-feature is an interpretable feature in determiners, such that they do not require checking in the syntax.

However, we also know that indefinite noun phrases are fully specified for phi-features, since they control agreement on attributive modifiers and in relative clauses, even when they do not do so on the matrix verb. These features must be interpretable, since in the case of impersonal agreement, they do not have to be checked against the matrix verb for the derivation to converge. This suggests that the difference in agreement forms between noun phrases with the data given above have shown, determiner spread seems to be a purely syntactic process, since it occurs even when the noun phrase in question has an indefinite semantic or pragmatic interpretation. In the Minimalist Program, all processes are driven by feature content. Therefore, it follows that a Mimimalist analysis of determiner spread should involve a D-feature, or some other feature that encodes syntactic definiteness. the definite article and those with indefinite *hal*- in presentational constructions is not due to, say, a difference in the strength of phi-features. Were that the case, we would have to stipulate that phi-features are never strong when the noun phrase is modified by indefinite *hal*-.

Of the inventory of features usually assumed in the Minimalist Program, this leaves abstract case features as the only possible candidates for feeding a movement operation. Abstract case features have frequently been appealed to in order to explain correlations between word order and specificity<sup>9</sup>. For example, Belletti (1988), Lasnik (1992), de Hoop (1995), and Runner (1994, 1993, 1995) have all argued that internal argument noun phrases (of both transitive and unaccusative verbs) with narrow-scope interpretations check a different abstract case than do those with wide scope interpretations (for example, de Hoop expresses this as a distinction between "strong" and "weak" abstract case).

I will depart from most of these proposals and argue (following Vainakka and Maling 1992) that noun phrases that license impersonal agreement are not specified for case features, although they may be specified for other features, such as D-features (in the case of indefinite *hal-*) and phi-features. I propose therefore that abstract case is a property of determiner heads, and that noun phrases without a determiner layer do not take part in operations involving case-checking. Assuming that abstract case is a non-intepretable feature, this proposal has the additional desired result that a noun phrase specified for abstract case will have to raise by LF in order to check the feature, while we have seen that phi-features do not require raising of this sort. With regard to indefinite *hal-*, I will propose simply that it is a variant form of definite *hal*that is unspecified for abstract case<sup>10</sup>.

<sup>&</sup>lt;sup>9</sup>See Belletti (1988), Diesing (1992), Enč (1991), de Hoop (1989, 1995), Lasnik (1992), Runner (1992, 1993, 1994, 1995), Vainikka and Maling (1992).

So far, I have argued that noun phrases that license impersonal agreement do not check abstract case, D-features, or phi-features. In fact, they do not seem to interact with the head of V at all. One might therefore ask why they are generated in VP in the first place. According to the Minimalist program, all operations are driven by feature checking, including the insertion of lexical items. Therefore, it seems as though weak indefinites should not be allowed in the derivation at all, since they do not engage in any feature checking operations at the point of their merger:



To account for the fact that they do occur in VP, I will assume that argument-assigning lexical items (such as verbs, adjectives, and prepositions) have selectional-features which must be checked by the categorial features of

<sup>10</sup>In fact, it seems likely that *hal*- is a head of D, rather than being productively derived from a *demonstrative-article* sequence. Evidence for this can be seen in the fact that *hal*- is invariant in form, not inflecting for gender and number as proper demonstratives do. Likewise, Mohammad (1998: 21ff) notes that *hal*- can cooccur with other demonstratives:

- (i) hal-bent hây *this-girl this* "this girl"
- (ii) hal-banât haòōl *the-girls these* "these girls"

However, the demonstrative cannot precede *hal*- while it can do so with bare articles:

- (iii) \* haõol hal-banât these the-girls "these girls"
- (iv) haðol il-banât these the-girls "same"

their arguments. In other words, I am suggesting that C-selection plays an important role in building of syntactic structure. For example, verbs may have selectional features such as +N, +Pr (in the case of verbs selecting clausal complements), or +P (in the case of verbs selecting prepositional phrase complements). Assuming that feature checking takes place locally, selectional features must be checked against an argument or its trace, requiring in either case that the argument be generated in a local, feature-checking relation with the verb<sup>11</sup>.

To summarize what I have argued in this sub-section, abstract case is a property of determiners in Arabic: only noun phrases that include a determiner layer are specified for abstract case features. This means that only determiner phrases will participate in syntactic operations driven by checking of abstract case features. The indefinite determiner *hal-* "this" is a variant form of the definite determiner *hal-* which is unspecified for abstract case. Noun phrases without abstract case that are generated as internal arguments of a transitive or unaccusative verb therefore do not raise into PrP, and do not license agreement on the verb.

## 3.7 **Chapter Summary**

In this chapter, I outlined the theoretical framework I will assume in my syntactic analysis, based largely on Chomsky (1995), Collins (1997) and Bowers (1993). Important departures from these theories included that lexical heads (as opposed to functional heads) can be specified for uninterpretable features, with the consequence that both types of lexical items can trigger movement. Also, I claimed that indefinite noun phrases lack a determiner layer, which is

<sup>&</sup>lt;sup>11</sup>See Collins (1997: 65-75): Collins proposes a principle called *Integration* according to which every category in a syntactic tree must be contained within another, with the crucial exception of the root of the tree. (see Collins 1997: 89-94 for discussion).

to say that they are not Determiner Phrases (DPs), and that they are not specified for abstract case features, which is a feature characteristic of determiners.

#### Chapter 4

## The Derivation of Existential Constructions

### 4.1 Introduction

My analysis is based in large part on Bowers' (1997b, 1998, 1999) analysis of locative inversion in English. I follow Bowers, Collins (1997:15), as well as Chomsky (1995: 352) in assuming that raising of locative expressions is due to a strong D-feature in the head of PrP ("Transitivity Phrase" according to Collins 1997, or "little-v" in Chomsky 1995). I follow Bowers in arguing that this strong D-feature attracts a weak interpretable D-feature in the lexical specification of *fîh* or which is inherited by the prepositional phrase from its DP argument, causing the locative expression to adjoin to PrP, checking its strong D-feature. In effect, the claim is that locative inversion begins as a form of object-shift. Then, *fîh* or the inverted locative is in position to be attracted to T to check the EPP-feature there.

Adapting Sigler's (1996) analysis of agreement variation in Standard Western Armenian and Déprez's (1998) analysis of participle agreement in French, I claim that the difference between impersonal and full agreement is due to the properties of the NP itself: in reduced agreement constructions, the NP is a bare noun lacking a determiner shell, and therefore not specified for case; if its formal features were to raise at LF and check the phi-features of Pr<sup>0</sup>, the uninterpretable case feature of Pr<sup>0</sup> would remain unchecked, resulting in a crashed derivation (see also Deprez 1998 for similar argument regarding French participle agreement). Instead, as a last resort, a null PRO is merged with Pr<sup>0</sup>, which is able to check both the phi- and case-features of Pr<sup>0</sup>. In contrast, in the
case of full agreement, the NP has a null determiner shell, and is therefore specified for case and able to raise to check both phi- and case-features in Pr<sup>0</sup>.

# 4.2 Existential Constructions with Locative Inversion

The locative expressions in locative inversion existentials include both prepositional phrases with inflected prepositions and those with "bare" prepositions and lexical noun phrases. These are illustrated below; (1a) shows a bare preposition fi with a lexical noun phrase argument *d*-*dâr* "the house," while (1b) shows an inflected preposition *fi*-*ha* "in it":

(1) a. fî d-dâr *in the-house* "in the house"

> b. fî-ha *in-cL3FS* "in it"

I argue that locative inversion is derived in the same way in each case, the only difference being in how negation is marked. The negation morpheme *ma*-...(-*š*) attaches to its host stem as a result of the latter adjoining to the head of the negation projection. Therefore, only those stems which are able to undergo head-raising are able to host negation. Bare prepositions cannot raise to adjoin to negation because doing so would violate cyclicity. It follows that only inflected prepositions are able to host negation.

4.2.1 Locative Inversion with Bare Prepositions

In the previous chapter, I presented an analysis of the structure of complex PPs. According to that analysis, the structure of a locative inversion construction with a bare preposition is as in (4-1) below:

(4-1) baka fi-d-dâr ulâd *was3MS in-the-house childrenMP* "In the house were children."



To describe this in more detail, we begin at the stage in the derivation in which the PP *fi-d-dâr* "in the house" has been composed (as per the discussion in Chapter 2) and merged with the copula, checking the latter's selectional features, projecting VP and forming the string *baka fi-d-dâr* "be in the house":



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	{-v, + <sub>N</sub> , - <sub>D</sub> }	-	w	-
il-	"the"	w	$\{-v, +n, +d\}$	<del>{-v, +n, -d}</del>	-	€,d
fî-	"in"	w	$\{+v, +n, -d\}$	<del>{-v, +n, +d}</del>	-	-
$\Pr_1^0$		S	$\{+_{V, -N}, +_{D}\}$	$\{+v, +n, -d\}$	₩	c,₽
PRO		w	$\{-v, +n, +d\}$	-	w	€,d
baķa	"be"	w	{+ <i>v</i> , - <i>N</i> , - <i>D</i> }	<del>{+v, -n, +d}</del>	w	-

Next, the NP *ulâd* "children" is merged with VP, satisfying its selectional features. VP is merged with Pr<sup>0</sup>. Then, the copula raises and adjoins to the head of Pr, checking its strong PF-feature. The phi- and case-features of the matrix Pr are weak, and so do not need to be checked until LF. However, its D-feature is strong, and must be checked before Spell-Out. The nearest constituent with a D-feature is the prepositional phrase, which inherits the strong D-feature of its DP argument. Therefore, the prepositional phrase is attracted by the matrix Pr, and raises and merges into PrP, checking its D-feature, and forming the string *fi-d-dâr baķa ulâd* "in the house be children":

(4-3)



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	$\{-v, +n, -d\}$	-	w	-
il-	"the"	w	$\{-v, +n, +d\}$	<del>{-v, +n, -d}</del>	-	€,d
fî-	"in"	w	$\{+v, +n, -d\}$	<del>{-v, +n, +d}</del>	-	-
$\Pr_1^0$		S	$\{+_{V, -N, +_{D}}\}$	<del>{+v, +n, -d}</del>	₩	c,₽
PRO		w	$\{-v, +n, +d\}$	-	w	€,d
baķa	"be"	w	$\{+V, -N, -D\}$	<del>{+v, -n, +d}</del>	w	-
$\mathrm{Pr}_{2}^{0}$		S	$\{+v, -n, +d\}$	<del>{+v, -n, -d}</del>	w	с, <b>Đ</b>

Then, Pr<sup>2</sup>P is merged with T, checking its selectional features and projecting TP. The Pr-copula head complex raises to adjoin to T, checking its PF-feature. T has a strong EPP-feature to be checked. Once again, Pr<sub>1</sub>P has the closest D-feature to T, so it raises and merges into TP, checking the EPP feature:



Lastly, a Focus head is merged with TP, projecting FP, and the head of FP attracts the T-Pr-copula head, resulting in the word order *baka fi-d-dâr ulâd* "were in the house children":



At LF, the formal features of the DP *l-dâr* "the house" raise and adjoin to PrP, checking the case-feature of the determiner head, and an expletive null pronoun (PRO<sup>2</sup>) is merged into the matrix PrP, checking the phi- and case features of Pr:



This derives the final word order *baka fi-d-dâr ulâd* "in the house were children."4.2.2 *Derivations with Inflected Prepositions* 

Derivations with inflected prepositions proceed in much the same way as those with bare prepositions. Assuming that the prepositional phrase has been composed and merged with Pr as described in Chapter 1, the D-feature of Pr must be checked. Here, the only NP within the minimal domain of the copula is *ulâd* "children," which is not specified for case or D-features, and therefore ineligible for movement. Therefore, the prepositional phrase raises and checks the D-feature, producing the string *fi-ha baka ulâd* "in it be children":



The PrP then merges with T, projecting TP, and the Pr-copula head raises and adjoins to it, checking its PF feature. Then, as is the case with bare PPs, the fronted prepositional phrase raises and merges into TP, checking T's D-feature:



Then, TP merges with F, projecting FP. The T-Pr-copula head raises and adjoins to F. Then, a Topic node (Top) is merged with FP, checking selectional features, and the topic NP *id-dâr* "the house" is merged with TopP, checking its case feature. This gives us our final word order *id-dâr*, *baķa fî-ha ulâd* "the house, in it were children":



#### 4.3 **Derivations with Existential Fîh**

Derivations with existential *fih* differ from those with locative inversion in that *fih* is merged with the matrix Predication Phrase, instead of the prepositional complement raising to do so. I argue that *fih* has an interpretable D-feature which checks the strong D-feature in PrP (c.f. Chomsky 1995). Otherwise, the derivation proceeds as in the case of locative inversion existentials. According to my analysis, *fih* (and perhaps English *there*) is not an expletive element (as is commonly assumed; c.f. Halila 1992; Mohammad 1998), but instead is selected from the lexicon based on its contribution to the meaning of the clause<sup>1</sup>.

A central part of my claim is that *fîh* behaves largely like an inflected preposition (from which it is historically derived), differing only in its semantic contribution, and the position in which it is base-generated. I argue that *fîh* and inflected prepositions have in common that they are *non-projecting* (or perhaps more accurately, *non-branching*) categories, meaning that they function simultaneously as heads and maximal projections (cf. Chomsky 1995: 337). As we have seen at various stages in this exposition, *fîh* and inflected prepositions have largely the same syntactic distribution and behavior. In particular, *fîh* and inflected PPs can either precede or follow the verb; both *fîh* and inverted inflected PPs preceding the copula can host negation<sup>2</sup>.

In all, the distribution of *fîh* is very much like that of inflected prepositions in "locative inversion" constructions. Compare the examples below; (2) shows the distribution of negation in a *fîh*-existential:

- (2) a. **ma-fîh-š** baka kuţmit lahme fi-ţ-ţanğare *not-there-neg was3MS cutFS meat in-the-pot* "There wasn't a piece of meat in the pot."
  - b. **ma**-bakâ-**š fîh** kuţmit lahme fi-ţ-ţanğare *not-was3MS-NEG THERE cutFS meat in-the-pot* "Same."

<sup>1</sup>I assume for the purposes of this discussion that an expletive is a lexical item which is semantically vacuous, but which may be specified for various formal features.

<sup>2</sup>Native speaker judgements do indicate some exceptions to this. For example, the following, which is directly parallel to the grammatical (1b) and (1b) in structure, was judged ungrammatical:

 (i) \*ma-fi-ha-š baka kuţmit lahme not-in-CL3FS-NEG was3MS cutFS meat "There was not a cut of meat in the pot."

- (3) a. **ma**-baķâ-**š cind-ha** ḥitta ķirš *not-bepartMS-Neg at-cl3FS even qurush* "She didn't have even a qurush."
  - b. **ma-<sup>c</sup>ind-hâ-š** baka ḥitta ķirš not-at-cL3FS-NEG bePARTMS even qurush "Same."
- (4) a. xawâğa, ma-bakâ-š il-e walad gentlemanMS, not-was3MS-NEG to-CL3MS sonMS
   "A gentleman, he didn't have a son."
  - xawâğa, ma-l-i-šš baka walad gentlemanMS, not-to-cL3MS-NEG was3MS sonMS
     "Same." (RPA: elicited data)

Likewise, with both, the copula can either be marked with full argument or impersonal agreement in both existential and locative inversion constructions:

- (5) a. **baķa** / **baķu** fîh **ulâd** fi-d-dâr *was3MS*/*was3MP THERE childrenMP in-the-house* "There were children in the house."
  - b. baka /baku fi-d-dâr ulâd was3MS/were3MP in-the-house childrenMP
    "In the house were children." (RPA: elicited data)

Based on these similarities, I argue that *fih* is an adverbial element belonging to the determiner category, which I will refer to as an "demonstrative adverb" (cf. Chomsky 1995: 249; Collins 1997: 21). I will venture the suggestion that its particular properties have their historical origin in an inflected preposition, which lost its thematic denotation through semantic "bleaching," acquiring the D-feature from its clitic pronoun, but retaining essentially verbal lexical properties. In terms of its syntactic properties, I assume *fih* to have an interpretable D-feature, as was indicated above. It is not specified for case or phi-features, as it is not nominal. I also assume that it has selectional features, which select for a Predication Phrase ( $\{+v,-n,+d\}$ ). This is necessary to derive the fact that *fîh* occurs with a very limited set of verbs in RPA. To illustrate how a derivation including *fîh* is derived, let us a structure in which the prepositional phrase has been merged with the copula, checking the latter's selectional features and projecting VP:



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	$\{-v, +n, -d\}$	-	w	-
il-	"the"	w	$\{-v, +n, +d\}$	<del>{-v, +n, -d}</del>	-	€,d
fî-	"in"	w	$\{+v, +n, -d\}$	<del>{-v, +n, +d}</del>	-	-
$\Pr_1^0$		S	$\{+v, -n, +d\}$	<del>{+v, +n, -d}</del>	₩	c,₽
PRO		w	$\{-v, +n, +d\}$	-	w	€,d
baķa	"be"	w	{+ <i>v</i> , - <i>n</i> , - <i>d</i> }	<del>{+v, -n, +d}</del>	w	-
ulâd	"children"	w	$\{-v, +n, -d\}$	-	w	-

Then, VP is merged with  $Pr_{2}^{0}$ , checking its selectional features and projecting PrP. The verbal head *baka* raises and adjoins to  $Pr_{2}^{0}$ , checking its strong PF-feature. As before,  $Pr^{0}$  has a strong D-feature to be checked. This time, however, instead of the prepositional phrase raising, *fîh* is merged into PrP, checking the strong D-feature of PrP:

(4-10)			PrP			
	2	DP <b>fîh</b>	Pr Pr Pr baķa <sub>j</sub> NP	VP V'		
			ulâ	$\mathbf{d}$ $t_j$	PrP fi l-dâ	r
		PF-F	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	{-v, +n, -d}	-	w	-
il-	"the"	w	$\{-v, +n, +d\}$	<del>{-v, +n, -d}</del>	-	€,d
fî-	"in"	w	$\{+v, +n, -d\}$	<del>{-v, +n, +d}</del>	-	-
$\Pr_{1}^{0}$		S	$\{+v, -n, +d\}$	<del>{+v, +n, -d}</del>	₩	c,₽
PRO		w	$\{-v, +n, +d\}$	-	w	€,d
baķa	"be"	w	{+ <i>v</i> , - <i>n</i> , - <i>d</i> }	<del>{+v, -n, +d}</del>	w	-
ulâd	"children"	w	{-v, +n, -d}	-	w	-
$Pr_{2}^{0}$		S	$\{+v, -n, +d\}$	<del>{+v, -n, -d}</del>	W	с, <del>D</del>
fìh		w	$\{-v, -n, +d\}$	-	-	d

The derivation proceeds much as with locative inversion existentials; the matrix PrP is merged with a Tense head, checking T's selectional features, and projecting TP. The compound Pr-V head raises to the head of T, checking its strong PF-features. Then, the strong D-feature in T must be checked. *Fîh* is the closest constituent with a D-feature, and so it is attracted and raises to TP, checking the D-feature.



Lastly, TP is merged with a Focus head, checking its selectional features and projecting FP. Then the T-Pr-V head raises to F<sup>0</sup>, checking its strong PF-features and deriving the final word order *baķa fîh ulâd fi-d-dâr* "there were children in the house":



At LF, an expletive PRO is merged into the matrix PrP, checking its uninterpretable case feature. Likewise, the formal features (case and phi-features) of the noun phase *d*-*dâr* "the house" raise and adjoin to  $Pr_1P$ , checking the weak uninterpretable features of the determiner *il*- "the" and  $Pr_1^0$  (which are case and phi-features respectively).

#### 4.3.1 Why is Fîh base Generated in PrP and not TP?

In the analysis given above, I argue that *fih* is base-generated in PrP, checking the latter's strong D-feature. In addition to arguments for this given above, this is a key to explaining why Arabic does not have transitive expletive constructions, as do Icelandic and Dutch (cf. Bowers 1997, 1998). If *fih* were generated in TP, then it would in principle be possible for it to coccur with an external argument of transitive or unergative verbs, as in the following ungrammatical examples:

- (6) a. \* fîh b-ôçilin iç-çbēbât içlâb there INDIC-eat3FP the-meatballs dogsP
   "There are eating the meatballs dogs."
  - b. \*fîh b-itḥammamu fi-n-nahr ulâd there INDIC-bath3MP in-the-river boysP
    "There are bathing in the river boys." (RPA: elicited data)

However, if *fih* is generated in PrP, checking its D-feature and selectional feature, then generation of an argument NP would be blocked.

4.3.2 Why Does Fîh Appear in TP, and not just in PrP?

Evidence that *fîh*, having been generated in PrP, must raise to TP can be found in its availability in complement clauses of certain verbs (c.f. Maalej 1984: 80-85). For example, *fîh* can occur in the complement of verbs that take propositional complements, such as the following with the verbs *ḥasab* "believe, consider, think" or *fakkar* "think, believe":

- (7) a. b-aḥsib fîh kanînit ḥalîb fi-t-tallâğe
   INDIC-believe1S THERE bottle milk in-the-refrigerator
   "I believe there's a bottle of milk in the refrigerator."
  - b. b-aḥsib innu fîh kanînit ḥalîb fi-t-tallâğe *indic-believe1S that THERE bottle milk in-the-refrigerator*"I believe that there's a bottle of milk in the refrigerator."

- (8) a. munîr b-ifakkir mumkin fîh ulâd nâymîn fi-ṣ-ṣaff
   *Munir INDIC-think3MS perhaps THERE boys sleepPARTMP in-the-class* "Munir believes there may be boys sleeping in class."
  - b. munîr b-ifakkir innu mumkin fîh ulâd nâymîn Munir INDIC-believes3MS that perhaps THERE boys sleeppartMP fi-ş-şaff in-the-class "Munir believes that there may be boys sleeping in the class." (Urban Palestinian; Nablus dialect: elicited data)

However, a so-called exceptional case-marking (ECM) verb like *xalla* "let, leave, allow" does not permit *fih* in its complement:

- (9) a. farîd ma-xallâ-š ḥalîb fi-t-tallâğe
   *Farid not-left3MS-NEG milk in-the-refrigerator* "Farid didn't leave (any) milk in the refrigerator."
  - b. farîd ma-xallâ-š fi-<u>t</u>-<u>t</u>allâğe ḥalîb *Farid not-left3MS-NEG in-the-refrigerator milk* "Same."
  - c. \* farîd ma-xallâ-š fîh ḥalîb fi-t-tallâğe
     *Farid not-left3MS-NEG THERE milk in-the-refrigerator* "Same." (Urban Palestinian; Nablus dialect: elicited data)

These data suggest that verbs that select full clauses as complements allow *fih* to occur in the clause, while verbs that select small clause complements (such as *xalla* "let") do not. This fact would follow from an analysis in which *fih* raises to TP. Alternately, if an ECM verb like *xalla* were to select a small clause complement containing *fih*, the presence of *fih* would exclude a thematic (as opposed to expletive) PRO from occuring in the "subject" position of Pr, preventing coreference between the object verb and the complement clause. Either way, the data show that *fih* is excluded from complement clauses which are not "full" clauses (in the sense of lacking a tense projection).

### 4.4 **Derivation with Non-Prepositional Predicates**

The analysis is also supported by examples in which impersonal agreement occurs with a non-prepositional constituent, such as participial predicates containing a prepositional phrase (as in 10a), or verb hosting pronoun clitics:

(10) a. u-bâķi **rāyiḥ-l-e** ǧmâl *and-bepARTMS gopARTMS-to-cL3MS camalsFPL* "...and he had camels missing." (38.21)

- b. abû-i w-<sup>c</sup>amm-i ma-bakâ-š *father-cL1S and-uncle-cL1S not-was3MS-NEG*yīğî-him ulâd *come3MS-cL3MP childrenMP*"My father and uncle, they didn't have any children." (51.9)
- c. hâða bâķi çill lêle yīğî-h mêde *thisMS be PARTMS each night come-cL3MS tableFS*"Every night, a table [set with food] would appear to him." (61.4)

In (10a), the fronted constituent is a participial small clause containing a dative clitic *l-e* "to him." If we assume that the pronoun in *l-e* "to him" has a D-feature that percolates up to the maximal projection of the small clause, then fronting of the whole consituent checks the D-feature in Pr and the EPP feature in T:

(4-12) u-bâķi **rāyíḥ-l-e** ğmâl and-bepartMS gopartMS-to-cL3MS camalsFP "...and he had camels missing." (38.21)



In (25b-c) there is no fronted constituent at all. Instead, the verb *yîği* "come" hosts a pronoun clitic. It does not matter whether the clitic's D-feature is strong or not, as the clitic will raise with the verb stem either way, and will therefore check the strong D-feature in PrP:

(4-13) abû-i w-<sup>c</sup>amm-i ma bakâ-š father-cL1S and-uncle-cL1S not-was3MS-NEG yīğî-him ulâd come3MS-cL3MP childrenMP "My father and uncle, they didn't have any children." (51.9)



According to this argument, locative inversion is driven not by the properties of the preposed constituent but by the morphological requirements of PrP and TP. If the strong D-feature in PrP can be checked without preposing - as is the case when the verb hosts a pronoun clitic - then preposing will not occur. What makes this construction possible is the fact that *yiği* "come," an unaccusative verb, can host an object clitic, interpreted as a dative object (a goal argument).

### 4.5 **Derivation With Full Agreement**

In the derivations discussed above, impersonal agreement is due to the NP *ulâd* "children" not being specified for the features needed to feed raising to PrP, where agreement is licensed. Instead, an expletive PRO was merged into PrP, checking its phi-features. In the case of full agreement, the formal features of the noun phrase undergo LF-raising, adjoining to PrP, rather than an expletive PRO being inserted, checking the formal features of Pr:

(4-14) ğirân-na, **baķu** fi-dâr-him **ulâd** *neighbors-cL1P, was3MP in-house-cL3MP childrenMP* "Our neighbors, in their house were children."



		$P_{F-F}$	Lex-cat-f	Select-cat-f	Φ	Struct-f
dâr	"house"	w	$\{-V, +N, -D\}$	-	w	-
-him	"their	w	$\{-V, +N, +D\}$	<del>{-v, +n, -d}</del>	-	€,d
fî-	"in"	w	$\{+_{V}, +_{N},{D}\}$	<del>{-v, +n, +d}</del>	-	-
$\Pr_1^0$		Ş	$\{+_V,N, +_D\}$	<del>{+v, +n, -d}</del>	w	c,Ð
PRO		w	$\{-V, +N, +D\}$	-	w	€,d
baķa	"be"	w	$\{+_{V},{N},{D}\}$	<del>{+v, -n, +d}</del>	w	-
$\Pr_2^0$		Ş	$\{+v, -n, +d\}$	<del>{+v, -n, -d}</del>	w	с, <del>D</del>
Т		Ş	$\{+_{V, -N}, +_{D}\}$	<del>{+v, -n, +d}</del>	-	₽
F		S	$\{+_{V},{N}, +_{D})$	<del>{+v, -n, +d}</del>	-	focus

Otherwise, the two derivations are largely identical. The difference between them is derived from the properties of the noun phrases: assuming that only determiners are specified for case features, only DPs can engage in syntactic raising and other contingent operations such as feature checking. Bare NPs are therefore not syntactic arguments, but rather behave more like adjunct modifiers, although they are able to control agreement on constituents within their ccommand domain (such as relative clauses).

### 4.6 Existential Constructions with Negation

As was discussed above, locative inversion existentials with bare prepositions are distinguished from those with inflected prepositions by the ability of the latter to host negation. Locative inversion constructions with full lexical NPS cannot be negated at all in the present tense; only those in the past or future can, since there is a tensed verb stem available in those cases to host negation. Existential *fih* patterns like inflected prepositions in being able to host negations. In what follows, I will argue that these facts follow from the fact that *fih* and inflected prepositions are able to undergo head raising, while bare prepositions are not. Central to my claim is the assumption that the negation morpheme *ma*-... is a determiner-like category<sup>3</sup>; I shall refer to its projection as QP rather than NegP (as is commonly assumed; see Kratzer 1989 for arguments to the effect that clausal negation is interpreted quantificationally). The head of negative QP has a weak PF-feature, which requires that another head with PF-features adjoin to it before Spell-Out. Therefore, negation is only compatible with constituents the head of which is free to raise before Spell-Out.

For example, take the case of inflected prepositions. As I have argued previously, they "incorporate" with the clitics they host (or alternately, the clitic is an affix agreeing with a null pronoun in the argument position). As such, the clitic raises with the preposition as the latter adjoins to the prepositional PrP, checking both its own case feature, as well as the strong D-feature and the weak phi-features of the latter (the weak features are checked as "free riders"). This means that all the morphological requirements of both the clitic and the prepositional PrP have been satisfied in the overt syntax, and the complex preposition-Pr head is free to move further:



<sup>&</sup>lt;sup>3</sup>The status of the *-š* segment of the *ma-…-š* morpheme will discussed in Chapter 5.

Embedding this within a clause gives us a structure like the following, in which the PrP constituent is negated:



As before, the matrix PrP has strong D-feature to be checked. As before, I assume that the interpretable D-feature associated with the pronoun clitic affixed to the preposition percolates up to the maximal projection of Q. Therefore, QP is attracted by the D-feature in PrP, and raises to adjoin to it:

(4-17)



Similarly, after the matrix PrP has been merged with Tense, QP is attracted by the EPP feature, and raises and adjoins to TP to check it. Next, TP is merged with a Focus projection. Now, following Ouhalla (1997), I assume that negation has a focus feature that must be checked by the interpretable focus feature in  $F^0$ , so QP raises into FP, checking this feature:



#### 4.7 Derivations with Definite Noun Phrases

As we saw in Chapter 2, existential constructions with definite noun phrases (in this case more properly called presentational constructions) are only acceptable or felicitous with full agreement. Impersonal agreement is found to be either ungrammatical or infelicitous. In terms of the analysis developed here, this suggests the definite noun phrases must raise to PrP by LF, in order to check some uninterpretable feature. I have assumed that the crucial feature involved here is that of abstract case. I have also assumed the definite NPs are specified with an interpretable D-feature, as well as the phi-features that they inherit from the common noun they are built on.

Given that definite NPs are specified for abstract case as well as for D-features, the analysis I have presented might predict that locative inversion should not take place in such cases, because the NP should be able to raise to check the strong D-feature in PrP. Alternately, both the NP and the prepositional

phrase are equidistant to PrP, and each has the requisite set of features, so both possibilities should arise simultaneously. This is exactly the state of affairs that Collins (1997: 13-14) describes, with reference to the following example:

- (11) a. Down the hill ran John.
  - b. John ran down the hill.

Assuming the analysis discussed above, both of (11a-b) are derived from the intermediate stage shown in (4-19):



In the derivation in yielding (11a), the PP *down the hill* raises to PrP to check its D-feature, while in the case of (11b), *John* raises. This is possible given the definition of the Minimal Link Condition given in Chapter 3:

(12) Minimal Link Condition

α can raise to target *K* only if there is no legitimate operation Move β targeting *K*, where β is closer to *K*.

As formulated, (12) does not require that a given object be the *unique* object that is closest to the target of movement. Assuming that *down the hill* and *John* are equidistant from PrP, neither is closer to it than the other. Hence, raising either *John* or *down the hill* to PrP would satisfy (12).

Applying this to Arabic, the derivation proceeds in much the same way:

(13) a. bâkye hanâk marat iḥmad id-dibbâç
 *bepartFS there wifeFS Ahmad the-Dibbak* "Ahmad il-Dibbak's wife was there." (16.4)

Let us assume a stage in which the VP has merged with PrP, as above:



As in the examples in (11), both *marat iḥmad id-dabbâç* "Ahmad il-Dabbak's wife" and the locative adverb *hanâk* "there" are equidistant from PrP, and both have a D-feature that can check the strong D-feature in PrP. Therefore, the possibility of either operation taking place is available. In one, *hanâk* raises, ultimately yielding the following representation:



In the other, the DP raises, giving:

(4-22) bâkye marat iḥmad id-dabbâç hanâk bepartFS wifeFS Ahmad il-Dabbak there "Ahmad il-Dabbak's wife was here."



I follow Collins in assuming that the choice between which constituent raises is free.

# 4.8 Chapter Summary

In this chapter, I have proposed that existential constructions in Rural Palestinian Arabic are derived either by the inversion of a locative expression, or by the insertion of the existential particle *fih*. The former process is driven by a strong D-feature in the head of the matrix PrP; this feature is checking by the D-feature of the prepositional complement, which percolates up the the maximal projection of the locative expression. In the case of *fih*-existentials, the strong D-feature in PrP is checked by a D-feature in *fih*. In both kinds of constructions, the locative expression or *fih* then raises to T to check the EPP-feature.

I also argued that differences in agreement marking to differences in NP structure; NPs occurring with impersonal agreement lack a determiner layer, and so are not specified for case. Case is checked in PrP, so an NP which does not raise to PrP to check case will not check agreement. NPs that license full agreement do have a determiner layer, and so are specified for case and can raise into PrP, where agreement features are checked. Negation marking was argued to be expressed by constituent negation; the negation marker *ma*-...-š either onto *fih* or the locative expression, or onto the copula (if one is expressed in the clause). Existential constructions with definite noun phrases are analyzed in terms of Collins' (1997) analysis of locative inversion; when both a locative expression or an argument noun phrase can satisfy the D-feature in PrP, both options are available to the grammar.

### Chapter 5

# Previous Analyses of Arabic Existential Constructions

#### 5.1 Introduction

In this chapter, I will examine previous analyses of Arabic existential constructions in terms of the analyses presented in the last chapter. In particular, I argue, contra Halila (1992: 232-242) and Eid (1993), that locative prepositional phrases (both those with inflected pronouns as well as those with full lexical noun phrases) as well as existential *fih* undergo raising as maximal projections. This is obscured by their behaviour with regard to negation morphology, which makes their constituency ambiguous between X<sup>0</sup> and XP; since inflected prepositions incorporate their object arguments, they project XP directly from their heads, and are able to undergo head-raising.

Similarly, existential *fih* also is ambiguous between being an  $X^0$  and an XP constituent. I argue that it, like inflected prepositions (from which it is historically derived), is a non-projecting (or perhaps more accurately, non-branching) category, which can be simultaneously a maximal and minimal projection. Like an inflected preposition, it raises as an XP, but hosts negation as an  $X^0$ , which applies to them as a form of constituent negation. As such, they appear to be negated with the same form of negation as applies to verbal heads. The apparent ambiguity therefore reduces to the observation that negation morphology applies to  $X^0$ -level constituents.

I also examine arguments made by Mohammad (1998), to the effect that *fîh* is member of a special, closed class of nominal polarity items which can exceptionally host sentential negation. I argue that treating *fîh* as a nominal

overlooks parallels between its word-order distribution and that of inflected prepositions. Instead, I claim that *fih* is a form of locative adverb (cf. Lumsden 1988), and that analyzing it as such allows us to develop a unified analysis the for the structure of *fih*- and locative inversion existentials.

The main thrust of my critique of Halila's, Eid's, and Mohammad's proposals will concern their assumption that the *ma*-…-š negation morpheme is a diagnostic for verbal category. I will show that, in Bir Zeit RPA at least, *ma*- on its own is the most widely distributed morphological exponent of negation, and that it therefore is inconclusive as a diagnostic for a particular category. The -š segment, it will be shown, is a diagnostic of sorts: its appearance is mostly optional, but the set of morphological environments in which it can occur is restricted to a certain set of X<sup>0</sup> constituents, of which verbal heads are only one member.

The chapter is organized as follows: in Section 5.2, I discuss previous analyses of the categorial status of *fih* and inflected prepositions, arguing that they employ diagnostic techniques which are inconclusive. In Section 5.3, I discuss problems presented by these previous analyses, focusing on the analysis of negation morphology which underlies them. In section 5.4 I briefly respond to Halila's (1992) arguments that *fih* and inflected prepositions license gapping and ellipsis, again arguing that the diagnostics used to make these arguments are inconclusive.

#### 5.2 **Previous Analyses**

The analysis that I have presented in Chapter 4 is very different from previous analyses of existential constructions in Arabic. In particular, Halila (1992:233-234) and Eid (1993) argue that inflected prepositions act like verbal predicates, while Mohammad (1998) claims that existential *fih* is an expletive

nominal, like existential *there* in English. I build on Mohammad's analysis, but refine it by claiming that *fih*, rather than being a nominal, is an adverbial particle belonging to the determiner category (determiners therefore being taken as not limited to taking nominal complements, or having nominal denotations). Furthermore, I follow suggestions in Chomsky (1995: 249, 337) to the effect that *fih*, like an inflected preposition, is a "non-projecting" category, in that it projects no farther than its root, such that its categorial status is ambiguous between a phrasal head (X<sup>0</sup>) and a maximal projection (XP).

### 5.2.1 Existential Fih as a Verbal Category

Halila (1992) and Eid (1993) base their arguments on the following diagnostics: inflected prepositions and existential *fih* host *ma…š*, which is the "sentential negation" morpheme; they license verb gapping and ellipses; they license pro-drop. Based on these facts, they conclude that inflected prepositions behave syntactically as though they were verbs, undergoing head-raising out of the head of the prepositional phrase into the head of the verb phrase, and raising further into a negation projection, when negation is expressed in a clause.

# 5.2.1.1 Halila (1992)

Halila (1992: 232-249, 265-279) claims that both *fih* (and *famma* or *tamma*, its counterpart in Tunisian Arabic) and inflected prepositions act as verbal predicates, occupying the head of VP, and assigning accusative case to an NP under syntactic government. They do so as a "last resort" operation that is necessary to assign abstract case to the post-verbal NP, which would not otherwise have a case-assigner. As evidence for this claim, Halila presents the following: (i) inflected prepositions and *fih* can host *ma*-...-š, the "sentential negation" morpheme, which he claims to be otherwise restricted to verbal heads, and (ii), they both license verb gapping and ellipsis.

First, comparing negation in clauses with tensed verb forms with those that have non-tensed forms (such as participles) or nominal predicates, Halila observes observes that, in Tunisian and Egyptian (as well as Rural Palestinian) Arabic, tensed verb stems (i.e., stems in the imperfect or perfect forms) host the negation morpheme  $m\hat{a}$ -...-š:

- a. ma-katab-š /\*miš katab
   not-wrote3MS-NEG / not wrote3MS
   "He didn't write."
  - b. aḥsan inn-u ma-yiktib-š /\*miš yiktib better that-cL3MS not-write3MS-NEG / not write3MS
    "It's better that he not write." (Egyptian Arabic; Eid 1993)

In contrast, non-tensed verbal categories (such as participles), as well as nonverbal predicates (such as adjectives, "predicational" prepositional phrases, and noun phrases) are negated by *miš/muš/maš* or the "negative pronoun":

- (2) a. hâða <sup>c</sup>umr-e **ma-hu šâyif** il-maṣâyib *thisMS age-cL3MS not-pro3MS seepartMS the-misfortunes* "This guy, he has never seen misfortune." (62.3)
  - kal-l-i wâḥad 'miš šâyif han-niğim illi warâ l-kamar?" said-to-cL1S one 'not seepartMS this-star REL behind the-moon?'
    "One said to me, 'don't you see this star behind the moon?'" (64.1)
  - c. \* ana ma-šâyf-iš
     *I* not-seepartMS-NEG
     "I don't see/I am not seeing/have not seen..." (*RPA*: elicited data)

However, *fîh* (and Tunisian *famma*) and inflected prepositions can host *ma*-...-*š*, indicating that they pattern with verbs in terms of negation marking.

(3) a. ana **ma**-<sup>c</sup>ind-**î**-**š** mi<u>t</u>l-e *I* not-at-cL1S-NEG like-cL3MS "I don't have anything like it." (52.9)

- b. ulâd-e **ma**-ma<sup>c</sup>-himm-**iš** iši aflas min ṭambûra *children-cL3MS not-with-cL3MP-NEG thing bankrupt than tambourine* "His children are as poor as gypsies [i.e., 'his children don't have anything more valuable than a tambourine']." (35.6)
- (4) a. **ma-fîh-š** baka ulâd fi-l-bêt<sup>1</sup> *not-there-neg was3MS childrenMP in-the-house* "There weren't [any] children in the house."
  - b. ma-fîh-š halîb fi-t-talâğe
     *not-there-neg milk in-the-refrigerator* "There's no milk in the fridge." (*RPA*: elicited data)

Halila also claims that inflected prepositions and *fîh* license gapping and ellipsis, behavior usually associated with verbs. In the following examples from Tunisian Arabic, *qrâti* "read (past)" and *taqra* "read (present), reading" license a gap in the second conjunct clause:

(5)	a.	su <sup>c</sup> âd <b>qrâti</b> ktâb w-karîm žarîda						
		Souad read3FS book and-Karim newspaper						
		"Souad read a book and Karim a newspaper."						
	b.	su <sup>c</sup> âd <b>taqra</b> fî ktâb w-karîm fî žarîda <i>Souad read</i> 3F <i>S in book and-Karim in newspaper</i> "Souad is reading a book and Karim a newspaper." (TA)						
Simi	larly, in	(6), the inflected prepositions <i>cand-ha</i> "at her" and <i>quddâm-ha</i> "in						
front	of her"	also license gaps in the second conjunct:						

- a. su<sup>c</sup>âd <sup>c</sup>and-ha karhba w-karîm bisklet Souad at-cL3FS car and-Karim bicycle
   "Souad has a car and Karim a bicycle."
  - b. su°âd quddâm-ha raḥma w-karîm nawâl
     *Souad before-cL3FS Rahma and-Karim Nawal* "Rahma is in front of Souad and Nawal Karim." (TA: 237)

<sup>&</sup>lt;sup>1</sup>According to Mohammad (1998), examples of this form are ungrammatical in Northern Palestinian: a negated *fîh* cannot precede the copula. Instead, it is the copula that must be negated. However, a native speaker of West Bank RPA indicates that it is grammatical, and it is this judgement that I will follow.

Lastly, *fih* and Tunisian *famma* also seem to license gaps in the second conjunct:

- (7) a. famma barša nâs fi-s-sûq w-barša țalaba *THERE many people in-the-market and-many students* fi-l-žam<sup>c</sup>a *in-the-university* "There are many people in the market and many students at the university." (*TA*: Halila 1992: 271)
  - b. baka fîh midbare fi-l-mizbale was3MS THERE hornets-nestFS in-the-trashheap w-firân fi-l-maţbax and-mice in-the-kitchen "There was a hornet's nest in the trash heap, and mice in the kitchen."
  - c. ma-fîh-š ḥalîb fi-ṯ-ṯalâğe, w-laçin buçra not-there-neg milk in-the-refrigerator, and-but tomorrow
    b-içûn fîh INDIC-be3MS there "There's no milk in the refrigerator, but tomorrow there will be." (RPA; elicited data)

The data shown above contrast with examples which include prepositional phrases with lexical NPs (which Halila refers to as predicational prepositional phrases), such as *cand Sucâd* "at Souad," or *quddâm Raḥma* "in front of Rahma." In these examples, the preposition does not license a gap in the second conjunct clause:

- (8) a. \*l-karhba <sup>c</sup>and su<sup>c</sup>âd w-l-bisklet karîm the-car at Souad and-the-bicycle Karim "Souad has the car and Karim the bicycle."
  - b. \*su<sup>c</sup>âd quddâm raḥma w-karîm nawâl
    Souad before Rahma and Karim Nawal
    "Souad is in front of Rahma and Karim Nawal." (TA)

Halila concludes that, as was the case with negation marking, *fîh* (or Tunisian *famma*/ *tamma*) and inflected prepositions patterns with verbs in terms

of licensing gaps and ellipsis. To summarize Halila's arguments, inflected PPs and existential *fih* host sentential negation and license gapping and ellipsis, and so pattern with verbal categories in their syntactic behavior. Therefore, they must behave as verbal category themselves (at least in certain contexts).

# 5.2.1.2 Eid (1993)

Eid (1993) agrees with Halila in arguing that the crucial fact identifying inflected prepositions as verbal categories is that they host the ma-...-š negation morpheme, which she considers to be "sentential" negation:

...under certain conditions, non-verbal predicate heads (specifically, prepositional and nominal heads) behave like verbs in carrying negation. I propose the attachment of the negative to these nonverbal heads proceeds in much the same way it does for verbs; via what one may call a 'generalized V-I movement', or just head-to-head movement (138).

Eid (1993) focuses on the fact that inflected prepositions and existential *fih* are inflected for person features, by virtue of hosting a pronoun clitic (*fih* being derived from an inflected preposition *fi-h* "in it"). In support of this, she notes that in present tense equational clauses, there is no overtly expressed verb. In such clauses, predicates not inflected for person must appear with an overt "subject" noun phrase. For example, in each of the following, an overt (pronominal) subject *ana* "I" appears with adjectival, prepositional, and NP predicates. Omission of this noun phrase is ungrammatical:

- (9) a. \*(**ana**) nabîḥa *I intelligentFS* "I am intelligent."
  - b. \*(**ana**) fi-l-maktab *I in-the-office* "I am in the office."

c. \* (**ana**) doktôr *I doctorMS* "I am a doctor." (*EA*)

Equational sentences with inflected prepositional predicates are also "verbless" in the sense that they do not have an (overt) copula in the present tense, but they do allow "null" subjects. The difference between the predicates in (9) and those in (10-11) is that the latter are inflected for person, suggesting that inflection for the person feature is what licenses pro-drop<sup>2</sup>:

- (10) a. ma-sm-ak illa abu l-ḥaçîm w-ixtyâr il-balad what-name-cL2MS but father the-doctor and elder the-village "What are you but the father of the doctor, and the elder of the village?" (20.1)
  - ana ma-sm-i illa laḥm-ak u-damm-ak
     *I* what-name-cL1S but flesh-cL2MS and-blood-cL2MS
     "What am I but your own flesh and blood?" (38.11)
- (11) a. **°and-i** migalla *at-cL1S journalFS* "I have a journal."
  - b. ism-i Farîd name-cl1S Farid
    "My name is Farid/I am Farid." (EA)

Similarly, stems that are inflected for person features can also host the *ma*-...-š negation morpheme:

(12) a. wallâhi ma-fî-çim atyas min-ni
 *by-God not-in-cL2MP stupider than-cL1S* "By God, there's no one among you stupider than me!" (20.1)

<sup>&</sup>lt;sup>2</sup>The predicate *ism*- shown in (10) is clearly derived from the noun *ism* "name," but, at least in RPA, seems to have been bleached of its nominal denotation, and instead functions as a copular element. What syntactic structure should be assigned to it is not clear; it might be either a psuedo-verb like *bidd*- "wish, intent," which functions as an auxiliary; or it might be reanalyzed as a prepositional head, in which case it would behave as if it were a locative inversion construction. The former seems more plausible.
- b. kâlat "**ma**-nî-š **kâdir**, waddî-l-i wara l-ḥaçîm" *said3FS* 'NOT-PRO1S-NEG able, *sendIMP-to-cL1S after the-doctor* "She said, 'I'm not well, send after the doctor for me'." (53.4)
- (13) a. (ana) **ma**-<sup>c</sup>and-î-**š** migalla *I not-at-cL1S-NEG journal* "I don't have a journal."
  - b. (ana) ma-kân-š <sup>c</sup>and-i migalla *I not-was3MS-NEG at-c<sup>L</sup>1S journal*"I didn't have a journal." (*EA*; Eid 1993: 149-150)
- (14) a. (ana) **ma**-nî-**š** nabîḥa *I not-cL1S-NEG happyFS* "I'm not happy."
  - b. (iḥna) ma-ḥnâ-š fi-l-maktab
     we not-cl1P-NEG in-the-office
     "We're not in the office."
  - c. (inti) **ma**-ntî-**š** doktôra *youFS not-cl2FS-neg doctorFS* "You're not a doctor." (*EA*; Eid 1993: 142-143)

However, agreement facts in tensed clauses indicate that the pre-verbal NP in each of the immediately preceding examples above is not in fact a "subject," to the extent that the subject of a clause can be identified by agreement marking on the main predicate. For example, in (15) the pre-verbal NP is the pronoun *ana* "I." Were this pronoun in the subject position, and hence in a position to license agreement on the verb, the verb should be marked in the first-person-singular. However, as we see in (15b), this is not the case; the verb is marked in the third person singular. Therefore, Eid reasons, it is not the subject of the clause, and neither is the post-verbal NP *migalla* "journal," which has feminine singular agreement features (note that 15c would be fully acceptable in Rural Palestinian Arabic):

- (15) a. (ana) **kân** <sup>c</sup>and-i migalla *I was3MSat-cL1S journalFS* "I had a journal."
  - b. \*(ana) **kunt** <sup>c</sup>and-i migalla *I1S* was1S at-cL1S journalFS "Same."
  - c. \* (ana) **kânat** <sup>c</sup>and-i **migalla** *I was*3*FS at-cL1S articleFS* "Same." (*EA*; Eid 1993: 144-145)

Since the "subject" in (15a-c) is neither *ana* "I" nor *migalla* "journal," Eid concludes that it must be an "expletive" null pronoun specified for 3rd-person-singular agreement features (145). Since the examples in (10-15) allow null subjects (expletive or otherwise), it must be the case that pro-drop as well as sentential negation are licensed by a verbal head inflected for person features (regardless of whether this head is inflected with features that match those of the subject).

To account for this, Eid argues that inflected prepositions raise from the head of PP to the head of INFL to "support" empty person features in the latter. "Support" seems to mean only that the raising predicate by specified for person features, not that these features have an particular inventory. This is necessary because expletive PRO is "empty" of features, and therefore cannot "share" its features with the AGR feature in INFL. Thus, in order for AGR to be supported, the stem hosting the clitic pronoun, which is therefore inflected for person features, undergoes syntactic head raising. This is how inflected prepositions come to act like verbs.



#### 5.2.2 Summary of Halila's (1992) and Eid's (1993) Arguments

According to Halila and Eid, inflected prepositions and existential *fih* behave as verbal heads, in the sense that they host sentential negation, they license ellipsis and gapping, and they are inflected for person features. According to Halila, inflected prepositions and *fih* raise to INFL in order to assign case to the post-verbal NP under syntactic government. Existential *fih* or Tunisian *famma* are inserted as "expletive verbs" for the same reason, namely to assign case to the post-verbal NP. According to Eid, they are inflected for person features by virtue of hosting pronoun clitics. They raise to INFL in order to "support" the AGR features in INFL, which would otherwise go unsupported by the expletive PRO in the specifier of INFL.

## 5.2.3 Fîh as a Nominal Element

Mohammad (1998) points out a severe problem for the "verbal" analysis of inflected prepositions and existential *fih* favored by Halila and Eid. If inflected prepositions and *fih* behave as verbal heads, then they should obey restrictions on head movement that are to be observed in Arabic, in particular, the Head Movement Constraint (Travis 1984). However, Mohammad points out that this prediction is apparently incorrect, in that inflected prepositions and *fih* can both precede or follow the copula (illustrated below with data from both Rural Palestinian and Northern Palestinian Arabic):

- (16) a. kân fîh ktâb ma<sup>c</sup> môna was3MS there bookMS with Mona
   "Mona had a book with her."
  - b. **fîh** kân ktâb ma<sup>c</sup> môna *THERE was3MS bookMS with Mona* "Same." (NPA; Mohammad 1998)
- (17) a. **baka fih** kuṭmit laḥme fi-ṭ-ṭanǧare *was3MS THERE cutFS meat in-the-pot* "There was a piece of meat in the pot."
  - b. **fih baka** kutmit lahme fi-t-tanğare *THERE Was3MS cutFS meat in-the-pot* "Same."
- (18) a. t-tanğare, **baka fî-ha** kutmit lahme *the-potFS was3MS in-cL3FS cutFS meat* "The pot, in it was a piece of meat."
  - b. t-tanğare, fî-ha baka kutmit lahme the-potFS in-cL3FS was3MS cutFS meat "Same."
- (18) c. **baka fi-ṭ-ṭanǧare** kuṭmit laḥme *was3MS in-the-pot pieceFS meat* "In the pot was a piece of meat."
  - d. ? **fi-ṭ-ṭanǧara baķa** kuṭmit laḥme *in-the-pot was3MS pieceFS meat* "Same."
  - e. **fi-ț-țanğara baka** fih kuțmit lahme *in-the-pot was3MS THERE pieceFS meat* "Same."
- (19) a. ma-**baķâ**-š **fi-ṭ-ṭanǧare** kuṭmit laḥme *not-was3MS-NEG in-the-pot pieceFS meat* "In the pot was not a piece of meat."

b. **fi-ț-țanğare,** ma-**baķâ**-s kuțmit lahme *in-the-pot not-was3MS-NEG pieceFS meat* "Same." (*RPA*: elicited data)

If we substitute the inflected preposition *fi-ha* "in it" for the expression *fi-ț-țanǧara*, we get the same results:

- (20) a. **iț-țânğare**, ma-bakâ-š **fî-ha** kuțmit lahme *the-potFS*, *not-was3MS-NEG in-CL3FS pieceFS meat* "The pot, there was not a piece of meat in it."
  - b. iț-țanğare, fî-ha, ma-bakâ-š kuțmit lahme the-potFS, in-cL3FS not-was3MS-NEG pieceFS meat "The pot, in it was not a piece of meat." (RPA: elicited data)

We also get similar results with different prepositions. (21) show locatives with *cind* "at" (frequently used to indicate possession):

- (21) a. **bâķi cind-ha** <u>t</u>al<u>t</u> mît ķurûš bepartMS at-cL3FS three hundred qirsh "She had three hundred kurush."
  - b. **cind-ha bâķi** <u>t</u>al<u>t</u> mît ķurûš *at-cL3FS bepartMS three hundred qirsh* "Same."
- (22) a. ma-bakâ-š **`ind-ha** wala kirš *not-was3MS-NEG at-cL3FS even kurush* "She didn't have even a kurush."
  - b. ma-<sup>c</sup>ind-hâ-š bâķi ḥitta ķirš not-at-cl3FS-NEG bepARTMS even kurush "Same." (RPA: elicited data)

The examples in (23) show similar examples with *l*- "to" (also used to indicate possession or the "ethical" dative<sup>3</sup>):

<sup>&</sup>lt;sup>3</sup>See Borer and Grodzinsky (1986), Authier and Reed (1992) for discussions of ethical and possessive dative marking in Modern Hebrew and French. For descriptive analyses of such phenomena in Arabic, see Blau (1960: 168-170), Wright (1875, v.2: 160-164), and Cowell (1964: 479-484).

- (23) a. il-xawâğa ma-bakâ-š **il-e** walad *gentleman, not-was3MS-NEG to-cL3MS sonMS* "The gentleman did not have a son."
  - b. **il-e** bâķi walad *to-cL3MS bepartMS sonMS* "He had a son."
- (24) a. ma-**l-i-š**š bâķi walad *not-to-cL3MS-NEG be PARTMS sonMS* "He didn't have a son."
  - b. il-e, ma-baķî-š walad to-cL3MS not-was3MS-NEG sonMS
     "Same." (RPA: elicited data)

Now, genuine verb stems in Arabic do obey the Head Movement Con-

straint, and are unable to precede the copula in the way that inflected prepositions

and *fih* are shown to be able to in the preceding examples:

- (25) a. el-walad kân **b-el<sup>c</sup>ab** be-l-ḥakôra *the-boyMS was3MS INDIC-play3MS in-the-garden* "The boy was playing in the garden."
  - b. \*el-walad **b-el`ab** kân be-l-ḥakôra *the-boyMS INDIC-play3MS was3MS in-the-garden "Same."* (Northern Palestinian)
- (26) a. **kân** el-walad **b-el<sup>c</sup>ab** be-l-ḥakôra *was3MS the-boyMS INDIC-play3MS in-the-garden* "Same."
  - b. **\*b-el<sup>c</sup>ab** el-walad **kân** be-l-ḥakôra *INDIC-play3MS the-boyMS was3MS in-the-garden "Same."* (*NPA*)

Because of this, Mohammad concludes that neither *fih* nor inflected prepositions are to be analyzed as verbs. If they were to be, the word orders shown above would violate the Head Movement Constraint (Travis 1984), because main verbs cannot raise "around" the auxiliary.



Therefore, the word order configurations in which *fih* and inflected PPs appear rule out the possibility of their being verbal heads.

Mohammad then goes on the argue that since the Head Movement Constraint precludes the possibility that inflected prepositions and existential *fîh* undergo head movement, there must be a flaw in the assumption that the *ma*-...-*š* negation morpheme is a diagnostic for verbal headedness. As evidence of this, he points out that in addition to inflected prepositions and existential *fîh*, the polarity item *hada* "someone, anyone" can also host *ma*-...-*š*:

- (27) a. ma-**ḥadâ**-š be-d-dâr not-anyone-NEG in-the-house "No one is in the house."
  - b. ma-**fîh**-š ḥada be-d-dâr *not-there-neg anyone in-the-house* "There's no one in the house." (*NPA*)

Polarity *hada* is clearly a nominal element, because it can both precede and follow the verb, on which it seems to control agreement:

(28) a. ma-**ḥadâ**-š b-e<sup>c</sup>raf <sup>c</sup>arabi not-anyone-NEG INDIC-know3MS Arabic "No one knows Arabic." b. ma-b-e<sup>c</sup>raf-iš **hada** <sup>c</sup>arabi not-iNDIC-know3MS-NEG anyone Arabic "Same." (NPA)

Mohammad then notes, as we have seen, that agreement in clauses with existential *fîh* is either full agreement with the NP or impersonal agreement:

(29) a. fîh **kân** / **kânen** xams bagarât be-d-dâr *THERE WAS3MS / WERE3FP five cowsFP in-the-house* "There were five cows in the house." (NPA)

Mohammad concludes that in the case of impersonal agreement, agreement is with *fîh*, rather than the post-verbal noun phrase. *Fîh* is therefore a nominal category, since it can license agreement; *fîh*-existentials have "two subjects," either one of which can control agreement on the verb (Mohammad 1998: 51). *Fîh* and *ḥada* belong to a small clause of nominal polarity items, which are able exceptionally to host *ma*-...-š negation by virtue of the fact that they are "intimately related with negation...*ḥada* owes its existence to negation, so to speak" (44).

## 5.2.4 *Summary*

Halila (1992) and Eid (1993) argue that inflected prepositions and existential *fîh* raise to or are generated in the head of VP because (i) they host "sentential" negation, (ii) they license gapping and ellipses, and (ii) they license pro-drop. Mohammad (1998) counters that claiming that *fîh* behaves as a verbal head underpredicts the word order permutations between *fîh* and the matrix verb. Instead, to account for the negation facts, Mohammad claims that *fîh* and *hada*, which also hosts *ma*-...-*š* negation, are nominal elements that exceptionally host sentential negation. Along with *hada* "someone, anyone," *fîh* is a nominal polarity item, similar to English *there*, which can exceptionally host sentential negation.

# 5.3 **Problems for Previous Analyses**

The arguments made by Halila, Eid and Mohammad pose several problems. In particular, all three rely on the assumption that ma-...- $\check{s}$  is used exclusively to negate tensed verbs in matrix clauses. In this section, I build on Mohammad's analysis, agreeing that fih and hada are exceptions in being able to host ma-...- $\check{s}$ . However, I depart from Mohammad in arguing that fih is an adverbial demonstrative, and that it's distribution resembles that of inflected prepositions more than it does other nominals. The fact that it and hada can host ma-...- $\check{s}$  is due to the fact that both are "non-projecting" categories, which are ambiguous between X<sup>0</sup> and XP constituents. I argue that ma-...- $\check{s}$  is hosted by X<sup>0</sup> constituents, and as such, it can be hosted by fih and hada.

## 5.3.1 Negation Reexamined

In formulating their arguments, Halila, Eid, and Mohammad have all relied on the assumption that ma-...-š is the "sentential" or "verbal" form of negation; in other words, that it is the form of negation used with tensed verbs in matrix clauses. Therefore, the ability to host ma-...-š is a diagnostic for verbal category. Halila and Eid locate the exception in the behavior of fih / tamma and inflected prepositions, which exceptionally "act as verbs," and assume that the negation-marking paradigm is completely regular. Mohammad locates the exception in negation marking; while usually reserved for negating verbal heads, ma-...-š will exceptionally cliticize onto fih and hada, because they require binding by monotone-decreasing operators, and therefore have a close semantic affiliation with negation.

To rephrase the issue in terms of Mohammad's analysis, the assumption is that for *fih* and *ḥada* to host *ma*-...-*š* negation is an exception to a rule. This being established, it follows that what verbal heads, inflected prepositions, *fih* 

and *hada* all have in common is that they are able to move into a syntactic position in which negation marking is licensed. In a sense, all negation will be a form of constituent negation: in the case of verbal negation, the matrix Predication Phrase is negated, its head raising to host *ma*-...-š. In the case of inflected prepositions, the "prepositional" Predication Phrase is negated (López 1994: 338-339 makes a similar suggestion regarding English *not*). And, in the case of *fîh* and *hada*, which I assume to belong to the category of determiners, negation applies to DP. The so-called "nominal" negation morpheme *miš/maš/muš* and the "pronouns of negation" are "Spell-outs" of a null copula that hosts negation of a matrix clause in which the predicate is unable to raise.

### 5.3.2 An Overview of Negation in Spoken Arabic

Before we continue, it would be helpful to examine how negation is marked in Rural Palestinian Arabic, as well as in the other dialects of Arabic to which we are comparing it<sup>4</sup>. Significant differences in usage can occur across dialects, and so an analysis that applies to, say, Egyptian or Moroccan Arabic might not apply to Rural Palestinian.

## 5.3.2.3 Negation in Rural Palestinian Arabic

Most dialects of spoken Arabic express negation by means of some combination of *ma*- and -*š* (cf. Benmamoun 2000). Some dialects (such as Jordanian or Syrian) employ only *ma*- (cf. Cowell 1964), while others employ *ma*-...-*š*. The -*š* segment itself (or allomorphs thereof) is also used on its own in various ways in different dialects; for example, in Lebanese and Iraqi Arabic, -*š* is used as a question marker (cf. Feghali 1924; Cowell 1964; Wahba 1991), while Ouhalla

<sup>&</sup>lt;sup>4</sup>For discussion and analyses of negation in Arabic, see Benmamoun (1991b; 1992: 1995, 1997), Diesing and Jelinek (1994: 140-145), Eid (1993), Fassi Fehri (1993: 161-172), Halila (1992: 34-43, 233-235, 265), Mohammad (1997: 55-63, 190-195), Mohamed and Ouhalla (1995), Ouhalla (1990; 1993; 1997), Rahhali and Souâli (1997: 333-336), and Schlonsky (1997: 15-17, 94-108).

(1996, 1997) and Benmamoun (1995b, 1997b, 2000) argue that in Moroccan Arabic,  $-\dot{s}$  is used as a "predicate variable" bound by the negation operator.

Certain dialects, such as Egyptian, Lebanese, or Urban Palestinian require both segments of the *ma*-...- $\check{s}$  morpheme to be used. RPA, on the other hand, seems to allow both options, although there is variation between regions within the dialect area. For example, according to native speaker judgements, RPA as spoken in the Jenin-area of the West Bank employs *ma*-...- $\check{s}$  as the default expression of negation; *ma*- used without - $\check{s}$  strongly implies some kind of contrastive focus, and therefore a difference in meaning. Additionally, the lack of - $\check{s}$  frequently corresponds to pronounced prominence on the *ma*- segment itself, resulting in the vowel /a/ being pronounced long, as *mâ*- (Munther Younes, p.c.; see also Schmidt and Kahle 1918: 92\*-93\*; Blau 1960: 193-195).

These facts contrast with those as reported in Schmidt and Kahle (1918, 1930) and Blau (1960); negation with *ma*- and with *ma*-...- $\check{s}$  are considered to be optional variants, although the two sources differ on whether there is a difference in meaning with the presence of - $\check{s}$  . Schmidt and Kahle (1918: §29g) state that:

Frequently a - $\vec{s}$  shortened from - $\vec{s}i$  is added to the negation particle. This - $\vec{s}$  is attached to verbs, to prepositions with suffixes that have verbal force, and to personal pronouns and  $\underline{h}ada$  "someone" when they are subjects...Very often negation occurs without - $\vec{s}$  in the text, and in fact it tends to be absent when emphasis is placed on the negative *ma*-.... There is always a different nuance to be found in the clause, depending on whether - $\vec{s}$  is present or not<sup>5</sup>.

In contrast, Blau (1960: 193) notes that

The negation *ma*- can be continued with *-š*, in as much as it is attached to the word following *ma*-. Its continuation is always

<sup>&</sup>lt;sup>5</sup>"Den Partikeln der Verneinung wird häufig ein aus (šai<sup>2</sup> >) *ši* verkürtztes -*š* zugefügt. Beim Verbum, bei einer Präpasition mit Suffix, wenn sie verbale Kraft hat, beim Personalpronomen und bei *ḥada* "einer", wenn sie Subjekte sind, wird das -*š* hinten angehängt...Sehr oft findet sich in den Texten die Negation ohne das angehängte -*š*, und zwar pflegt das -*š* zu fehlen, wenn im Satze der Nachdruck auf der Negation ruht...Es liegt stets eine etwas andere Nüance im Satz, je nackdem das -*š* fehlt oder dasteht."

optional,, and seems (contra Schmidt and Kahle 1918: §29g), not to express any particular nuance. In general, it appears that the addition to  $-\check{s}$  to after the y- and in particular the b-imperfect is less frequent than after the perfect...however, a difference in meaning between ma-...- $\check{s}$  and simple ma- does not seem to exist<sup>6</sup>.

Given these two sources, it is unclear whether the omission of - $\check{s}$  is truly optional, or whether it entails some difference in meaning (see table below). It seems likely that there is a significant difference between RPA as spoken in Bir Zeit and further north in the expression of negation. This conclusion is supported by the frequency of occurrence of - $\check{s}$  in negation marking in Bir Zeit RPA. Table Table 5.1 indicates the frequency of - $\check{s}$  in negation in Schmidt and Kahle (1918).

	with -š	% of Total	% of Category	w/out -š	% of Total	% of Category	Total for Category
Perfect Stem	86	47%	45%	107	35%	55%	193
B-imperfect Stem	26	14%	24%	82	27%	76%	108
Y-imperfect Stem	10	5%	23%	33	11%	77%	43
Inflected Preposition	39	21%	62%	24	8%	38%	63
ḥâda <i>or</i> wâḥad	15	8%	52%	14	5%	48%	29
Negative Pronoun	5	3%	25%	15	5%	75%	20
<i>Existential</i> Fîh	3	2%	30%	7	2%	70%	10
Psuedo-verb	1	1%	33%	2	1%	66%	3
With Bare Noun Phrase	-	-		10	3%	100%	10
With Frozen Expression	-	-		8	3%	100%	8
Totals	185	35%		302	65%		487
Long Vowel in mâ-	16	9%	22%	56	18%	77%	72

 Table 5.1:
 Occurrence of Negation Morphology in Bir Zeit RPA

<sup>&</sup>lt;sup>6</sup>"Die Negation *ma*- mag durch -*š* (*<šay*) fortgesetzt werden, indem es an das *ma*folgende Wort (Verb, Pronomen, inklusive *ḥada* "jemand," Präpositionalausdruck) angehängt wird. Seine Hinzufügung ist immer fakultativ, und scheint (im Gegensatz zu Schmidt and Kahle 1918: §29g) keine besondere Nuance auszudrücken. Im Allgemeinen hat es den Anschein, daß der Zusatz von -*š* nach dem *j*- und insbesondere nach dem *b-imperfekt*seltener ist als nach dem Perfekt."

In the text of Schmidt and Kahle (1918), there are some 487 tokens (out of 40,000 words) of negation involving *ma*-. Of those, 185 (or 35% of the total number of tokens) include - $\check{s}$ . Of the 302 tokens of *ma*- occurring without - $\check{s}$ , 56 (or 18%) are transcribed with a long vowel. To the extent that pronunciation of a long /a/ in *mâ*- is indicative of prominence associated with some kind of focus, focus marking therefore can only be identified on 18% of the tokens of negation lacking - $\check{s}$ . On the other hand, *ma*- is pronounced with a long vowel overwhelmingly more frequently when - $\check{s}$  is lacking.

The question here would be whether the lack of - $\check{s}$  is in-and-of itself indicative of contrastive focus, or whether focus prominence pronounced on *ma*- affects the prosodic conditioning of the negated stem, such that - $\check{s}$  is omitted. Blau (1960: 194) suggests that prosodic factors may condition the occurrence of - $\check{s}$ . For example, the only instance in which - $\check{s}$  is required is when the *ma*-segment is reduced to *a*- preceding a /b/; "- $\check{s}$  is obligatory in these cases, both on prosodic grounds as well as on account of the reduced weight of *a*-, which for its own part affects the sentence prosody" (Blau 1960: 195):

- (30) a. **a**-b-awaṣṣl-ak-**š** *not-ındıc-deliver1S-cl2MS-neg* "I can't deliver you." (86.11)
  - b. **a**-bidd-î-**š** axassr-ak *not-wish-cL1S-NEG do-harm1S-cL2MS* "I don't mean you any harm." (129.4)

Moreover, -š is disallowed when negation is preceded by an exclamative expression such as *wallâhi* "by God!" or *cumr* "never" (cf. Blau 1960: 193), or when *ma*- is pronounced with interrogative intonation (Blau 1960: 194) In these cases, however, it is unclear whether -š is actually subject to a prohibition, or is simply not used due to prosodic factors.

- b. <sup>c</sup>umr ma wâḥad kidr inam fi-hal-<sup>o</sup>arḍ never not oneMS ableMS sleepMS in-this-land
  "No one was ever able to sleep on this land." (41.1)
- c. ya ğâr-na, ma t-ôxið haz-zalame ma<sup>c</sup>-ak Oh neighbor-cl1P, not take2MS this-man with-cl2MS "Hey neighbor of ours, won't you take this man with you?" (30.5)

To summarize, *ma*- occurs more often than not without -š in Bir Zeit RPA, and focus (to the extent that it can be identified in textual data) is only present in a small fraction of the tokens without it. This agrees with the observations by Blau (1960: 193) noted above, to the effect that the presence of -š has no discernable effect on meaning in Bir Zeit RPA. Needless to say, a statistical analysis cannot substitute for native speaker judgements, and so more study will be needed to resolve this question. For the purposes of the present discussion, I will assume that the statistics are correct; that there is a difference between Bir Zeit and Jenin-area RPA with respect to how negation is expressed, and that in Bir Zeit, the use of -š is largely free.

# 5.3.2.4 The Structure of Negation in Spoken Arabic

According to a widely held assumption in the literature on Arabic syntax, Arabic verbs raise out of VP "whenever possible", and in doing so, they provide a host for the negation morphemes located between Tense Phrase and the verb phrase complex. When verb raising is not possible - in sentences lacking an (overt) verb or auxiliary - negation is realized by either one of the so-called "negative pronouns", proforms that host the *ma*-…-š morpheme, or the independent negation morpheme *miš/maš/muš*. These free-standing negation morphemes are licensed "only in contexts where verb raising becomes impossible." Therefore, their presence indicates that the predicate being negated is not a verbal head or is not inflected for person features.

For example, in the following examples, clauses with participial, adjectival and prepositional predicates are negated. These predicates are inflected neither for tense nor for person features, and as such they cannot host *ma*-...š:

- (32) a. kâlat "**ma-nî-š** kâdir, waddî-l-i wara l-ḥaçîm *said3FS 'not-pro1S-NEG ablepARTMS, sendIMP-to-cL1S after the-doctor* "She said, 'I'm not well, send after the doctor for me'." (53.4)
  - kâl il-xawâğa "ana şurt ixtyâr, u-miš kâdir said the-gentleman 'I became1S oldMS, and-not ablepartMS aštġil açtar" work1S more "The gentleman said, 'I am getting old, and am not able to work anymore'." (35.8)
  - c. \* ana ma-kâdr-iš aštġil açtar
     *I not-ablepartMS-neg work1S more* "I am not able to work anymore."
- (33) a. hâða <sup>c</sup>umr-e **ma-hu šâyif** il-maṣâyib *thisMS age-cL3MS not-pro3MS seepartMS the-misfortunes* "This fellow, he has never seen misfortune." (62.3)
  - kal-l-i wâḥad "miš šâyif han-niğim illi wara l-kamar?" said-to-cL1S one 'not seePARTMS this-star REL behind the-moon?'
    "One said to me, 'don't you see this star that is behind the moon?'" (64.1)
    - \* ana **ma-šâyf-iš** *I not-seepartMS-neg* "I don't see/I am not seeing."
- (33) d. ana firḥân *I happyMS* "I am happy."

c.

- e. ana **miš/ma-nî-š** firḥân /\***ma**-firḥân-**š** *I not /not-pro1S-neg happyMS/ not-happy-neg* "I am not happy."
- (34) a. l-iktâb fûq ṭ-ṭawla *the-book on the-table* "The book is under the table."
  - b. l-iktâb miš/ma-hû-š fûq ṭ-ṭawla/\*ma-fûq-š ṭ-tawla the-book not/not-pro3MS-NEG on the-table/not-on-NEG the-table "The book is not on the table." (TA; Halila 1992)
- (35) a. ana **miš/ma-nî-š** nabîh /\***ma**-nabîh-**š**  *I not /not-pro1S-NEG intelligent/ not-intelligent-NEG* "I am not intelligent."
  - b. Fred **miš/ma-hû-š** <sup>°</sup>ism <sup>°</sup>arabi/\***ma**-<sup>°</sup>ism-**š** <sup>°</sup>arabi Fred not / not-pro3MS-NEG name Arabic/ not-name-neg Arabic "Fred isn't an Arabic name."
  - c. il-xawâga **miš**/**ma-hû-š** ganb /\***ma**-ganb**-š** il-<sup>c</sup>arabiyya *the-tourist not* /*not-pro3MS-Neg next-to* / *not-next-to-Neg the-car* "The tourist isn't by the car." (*EA*: Eid 1993)

In Egyptian, *miš* also occurs with verbs inflected for future tense, while *ma-š* occurs with the past and non-finite forms. Both can be used (apparently interchangeably) in the present:

- (36) a. **ma**-katab-**š** /\***miš** katab not-wrote3MS-NEG/ not wrote3MS "He didn't write."
  - b. ma-b-yiktib-š /miš bi-yiktib not-pres-write3MS-neg / not pres-write3MS "He isn't writing."
  - c. \* ma-ḥa-yiktib-š / miš ḥa-yiktib not-fut-write3MS-NEG / not fut-write3MS "He won't write."

d. aḥsan inn-u ma-yiktib-š /\*miš yiktib better that-cL3MS not-write3MS-NEG / not write3MS "It's better that he not write." (EA; Eid 1993)

In all three dialects, the *ma-š* negation morpheme can appear on a nonverbal category that hosts pronominal features, usually in the form of a pronoun clitic. This is most common with inflected prepositions (illustrated below with *cind-* "at," *ma<sup>c</sup>* "with," *fi-* "in," and *l-* "to"), but can also occur with some nouns like *cism* "name," which, in these cases, may have been bleached of their usual meaning and come to function more as a copular pseudo-verb:

- (36) e. ana **ma**-<sup>c</sup>ind-**î**-**š** mi<u>t</u>l-e *I not-at-cL*1*S*-*NEG like-cL*3*MS* "I don't have anything like it." (52.9)
  - f. ulâd-e **ma**-ma<sup>c</sup>-himm-**iš** iši aflas min ṭambûra *children-cL3MS not-with-cL3MP-NEG thing bankrupt than tambourine* "His children are as poor as gypsies [i.e., 'his children don't have anything more valuable than a tambourine']." (35.6)
  - g. wallâhi ma-fî-çim atyas min-ni *by-God not-in-cL2MP stupider than-cL1S*"By God, there's none among you stupider than me!" (20.1)
  - h. u-sa<sup>c</sup>îd **ma**-l-î-**š** <sup>c</sup>ilm ib-e *and-Said, not-to-cL3MS-NEG knowledge with-cL3MS* "...and Said, I have no knowledge of him." (39.10)
- (37) a. **ana ma ism-i** illa laḥm-ak u-damm-ak I not name-cL1S but flesh-cL2MS and-blood-cL2MS "What am I but your own flesh and blood?" (38.11)
  - b. lêš abu skandar, ma ism-ak illa abu l-ḥaçîm why Abu Skandar, not name-cL2MS but father the-doctor w-ixtyâr il-balad and elder the-village "Why, Abu Skandar, what are you but the father of the doctor, and the elder of the village?" (20.1)

(38)	a.	ṭ-ṭawla, <b>ma</b> -fûq-hâ- <b>š</b>	ktâb
		the-table, not-on-cl3FS-N	eg <b>book</b>
		"The table, there isn't a	book under it."

- t-tawla, ma-hyâ-š/\*miš fûq-ha ktâb the-table, not-pro3FS-NEG on-cL3FS book "Same." (TA)
- (39) a. **ma**-<sup>c</sup>and-î-**š** migalla *not-at-cL1S-NEG journal* "I don't have a journal."
  - b. il-maktab, ma-fû<sup>2</sup>-û-š migalla the-deskMS, not-on-cL3MS-NEG journal "The desk, there isn't a journal on it."
  - c. **ma-**<sup>°</sup>ism-**î-š** Farîd *not-name-*CL1*S-NEG Farid* "My name is not Farid/I am not Farid." (EA)

As we have seen, Halila, Eid and Mohammad conclude on the basis of these facts that inflected prepositions and nouns undergo head movement into Negation Phrase, where they adjoin to the *ma*- segment. The -*š* segment is generated in the specifier of NegP, and as the verb raises to Tense, -*š* appears to its right:

(5-3) <u>t</u>-tawla, ma-<sup>c</sup>alê-hâ-š ktâb *the-tableFS, not-on-cL3FS-NEG book* "The table, there is not a book on it."



Assuming such a derivation, the ability to host *ma*-...-*š* indicates the ability to undergo head-raising

## 5.3.3 Negation without the / - š / Segment

The generality of the use of ma-...- $\check{s}$  for negation is more apparent if we exclude the - $\check{s}$  segment of the morpheme. As we shall see, the use of - $\check{s}$  seems to be largely optional in RPA, and a number of different, possibly unrelated factors (some syntactic, some not) can condition its appearance. I argue that, in general, the ma- segment must be hosted by a head-level (X<sup>0</sup>) category. For example, clausal negation is negation of the uppermost inflected head<sup>7</sup> within the clausal structure, such as the verbal head  $\check{s}\hat{a}f$ -hu "he saw him" in the following example:

(40) a. **ma**-šāf-hû**-š** Musa *not-saw3MS-cL1S-Neg Musa* "Musa didn't see him."

<sup>&</sup>lt;sup>7</sup>As we have seen, in Rural Palestinian Arabic, the participle of the copula *bâki* is used as an exponent of tense, contributing slightly different aspectual information than the "tensed" copula *baka*. That being given, note the following contrast:

(i)	*il-xawâğa,	ma-bāķî-š	il-e	walad
	the-gentlemar	ı, not-bepartMS-	NEG to-cl31	MS childMS
	"The gentler	nan, he didn't h	ave a son.	"
(ii)	il-xawâğa,	ma-bāķî-l-iš-š	š	walad
	the-gentlemar	ı, not-bepartMS-	-to-cl3MS-n	NEG childMS
	"Same."			

- (iii) il-xawâğa, ma-bakâ-š il-e walad the-gentleman, not-was3MS-NEG to-CL3MS childMS "Same."
- (iv) il-xawâğa, ma-bakâ-l-iš-š walad the-gentleman not-was3MS-to-cL3MS-NEG childMS "Same."

While  $b\hat{a}ki$  is used as a tense-expressing auxiliary, (i), in which  $b\hat{a}ki$  hosts ma-...- $\check{s}$  negation, is ungrammatical. Its counterpart with the tensed auxiliary baka (iii) is fine. However (ii), in which  $b\hat{a}ki$  hosts the dative clitic *il-e* "to him," is also acceptable, the difference between (i) and (ii) being that the latter is marked for person features, by virtue of hosting the dative clitic. This may support Eid's (1993) generalization that inflection for person features is a necessary condition for hosting ma-...- $\check{s}$ .

In (40), the negation morpheme brackets both the verb and the object pronoun clitic. This follows from the commonly held analysis that clitics are attached to the verb stem, and raise with it as a complex head. When the verb has a lexical noun phrase argument, the noun phrase doesn't raise with the verb, and negation applies only to the verb stem itself:

(41) a. **ma-**šâf-i**š** Musa axû-h not-saw3MS-NEG Musa brother-cL3MS "Musa didn't see his brother."

As was discussed above, the choice of whether or not to use -*š* seems largely free, as is suggested by the following examples, in which identical stems occur both with and without -*š*:

- (42) Negation of Auxiliary Verb
  - a. **ma**-ķidir ifiçç-ha *not-able3MS untie3MS-cL3FS* "He could not untie her." (39.7)
  - b. ma-ķidir-š ifiçç il-ķêd not-able3MS-NEG untie3MS the-fetter
    "He was not able to untie the fetter." (39.7)
- (43) Negation of Main Verb
  - a. ma-w<sup>c</sup>ît illa-w-in-niğme şârat imġarrbe not-woke1S but-and-the-starFS became3FS westerlyFS "I didn't awake until the star had begun to set."(17.2)
  - kâm nadâ-ha ma-wi<sup>c</sup>it-iš
     *rose3MS called3MS-cL3FS not-woke3FS-neg* "...then he called her, [but] she didn't wake up." (41.6)
- (44) Negation with Inflected Prepositions
  - a. abu xalîl bari, ma-cind-e wala calê-h *Abu Khalil innocentMS, not-at-cL3MS or upon-cL3MS*"Abu Khalil is innocent, there is nothing on him or against him " (10.5)

- b. **ma**-<sup>c</sup>ind-î-**š** mi<u>t</u>l-e *not-at-cL1S-NEG like-cL3MS* "I have nothing like it." (52.9)
- (45) *Pronoun of Negation* 
  - a. **mâ-**ni mitḥammin, u-mitdahhin <sup>c</sup>a-arba<sup>c</sup>a w-<sup>c</sup>išrîn ķīrât? *not-cL1S bathpartMS, and-anointpartMS to-four and-twenty karat* "Have I not bathed and anointed myself to 24-carats?" (54.10)
  - b. kâlat "**ma**-nî-**š** kâdir, waddî-l-i wara l-ḥaçîm" said3FS 'not-cl1S-NEG ablePARTMS, sendIMP-TO-cl1S after the-doctor "She said 'I am not well; send after the doctor for me'." (53.4)

# (46) Negation with Polarity hada

- a. **ma**-ḥada min-him yidri <sup>c</sup>an axû-h iši *not-one from-cL3MP know3MS about brother-cL3MS thing* "Neither knew anything about his brother." (38.21)
- ma-ḥadâ-š min-him kâyil "su hâða?"
   *not-one-NEG from-CL3MP sayPARTMS 'what that'* "Not one of them asking, 'what is that'?"(34.1)

# (47) Negation with Existential Fîh

- a. hâði bi-tķûl: "wallah **ma**-fîh mi<u>t</u>l jôz-i fi-hal-balad" *thisFS* INDIC-say3FS 'by-God not-THERE like spouse-CL1S in-this-town' "She would say, 'by God, there's none like my husband in this village!" (26.1)
- b. wi<sup>c</sup>it kâmat tnâdi <sup>a</sup>axû-ha, mâ fih hiss wala niss *woke3FS rose3FS call3FS brother-cL3FS, not-there talk nor reply* "She awoke, and began to call her brother, [but] there was [neither] talking nor response." (36.11)
- c. šuft-l-ak talt banât maxzûnât, ma-fiš-š fi-d-dinya saw1S-to-cl2MS three girls storedFP not-there-neg in-the-world miţil-hin like-cl3FP "I saw three girls locked away; there's none in the world like them!" (46.4)

 d. ma-fih-š šurbit siķâra illa-w-uxt-i not-there-neg drinking cigarette but-and-sister-cl1S râyḥa warâ-h gopARtFS behind-cl3MS "There was not [time for a] a cigarette's smoke, but there was my sister going behind him." (62.4)

Also, the -*š* segment can be used, in informal speech, to mark negation without *ma*-, in parallel with the use of *pas* in lieu of *ne...pas* to mark negation in colloquial French (cf. Blau 1960: 195; Shlonsky 1997: 237ff):

- (48) a. **ma**-šuft-û-**š** *not-saw1S-cL3MS-neg* "I didn't see him."
  - b. šuft-û-š saw1S-cL3MS-NEG "Same."
- (49) a. Je **ne** l'ai **pas** vois *I not cLMS-have1S NEG seen* "I didn't see him."
  - b. Je l'ai **pas** vois I cLMS-have1S <sub>NEG</sub> seen "Same."

The apparent optionality of -*š* or of *ma*- suggests that in this dialect, the two segments may have become entirely redundant, such that speakers (especially in informal speech) may "economize" by leaving one out. It also would suggest, given that -*š* does not carry any semantic load, that it might come to be used for phonological purposes, such as manipulating the prosodic weight of its host stem, or contributing to a stress-shift that lends a particular emphasis.

If we for the moment exclude -*š* from consideration, and examine only the *ma*- portion of the *ma*-...-*š* morpheme, then it becomes apparent that it is used for negating a variety of constituents, rather than just verbs with clausal

scope. For example, in each of the following, *ma*- is hosted by a nominal constituent, although it is interpreted with clausal scope. This is the most apparent in (50), where the noun phrases *ma ğaddâd* "no picker," *ma badawi* "no Bedouin," *ma bint* "no daughter," and *ma rāsmâl* "no capital" are understood quantificationally. For example, in (50a), the clause means "for no picker was it the case that he could hear the sound of another":

- (50) a. lammin istawat ațla<sup>c</sup> iz-zalame arb<sup>c</sup>în ğaddâd when ripened3FS made-climb3MS the-man 40 picker
  <sup>c</sup>a-ðahir-ha u-ma ğaddâd yisma<sup>c</sup> la-ğaddâd țaķķ on-back-cL3FS and-no picker hear3MS to-picker knock
  "When it had ripened, the man had 40 pickers climb to its crown, and no picker heard the sound of another." (33.9)
  - b. u-min yôm-ha la-l-yôm ma badawi b-ikdar yuk<sup>c</sup>ud and-from day-cL3FS to-the-day no bedouin INDIC-BE-able3MS sit3MS <sup>c</sup>a-hêl-e, illa mağ<sup>c</sup>i <sup>c</sup>a-ğanb-e willa <sup>c</sup>a-buțn-e upright, but liepARTMS on-side-cl3MS or on-stomach-cl3MS "...and from that day to this, no bedouin is able to sit upright, but lies on his side or on his stomach." (116.7)
  - c. aḥsan **ma bint** min banât-na tit<sup>c</sup>allaḥ fî-h *better no daughter from daughters-cL3MS hang3FS in-cL3MS* "It's better [that] no daughter of ours gets infatuated with him [lit., 'no daughter of ours gets hung up on him']." (43.5)
  - d. **ma rāsmâl** illa illi b-nunufķ-e fi sabîli-llah w-in-nâs not capital but REL INDIC-spend1P-CL3MS in-path God and-the-people "...[there is] no capital but what we spend on the Path of God and Man." (71.8)

*Ma*- also negates nominals in a variety of expression which may be frozen or idiomatic, as in the following:

(51) a. kâlat "**ma-ḥalâl** b-iṣîr harâm" said3FS 'no-sacred INDIC-become3MS sin "She said, 'nothing sacred becomes a sin'." (37.9)

- b. ma ḥurra bala ṣurra not lady without purse "No lady is without money" or "There is no lady without money." (36.4)
  ) a. baka <sup>c</sup>ind-i faddân bakar badawīyât
- (52) a. baka <sup>c</sup>ind-i faddân bakar badawīyât was3MS at-cL1S yoke cattle bedouinFP
   <sup>c</sup>umur ma wâḥad ḥâl <sup>c</sup>alê-hin never no oneMS catch3MS upon-cL3FP
   "I had a pair of wild cattle that no one had ever caught." (18.2)
  - ma-šey și<sup>c</sup>ib
     *no-thing heavy* "Nothing is heavy." (91.11)
  - c. țaiyib haòôla ķa<sup>c</sup>adu ma ḥeiy yxârrif axû-h OK theseP sit3MP no one tell3MS brother-cl3MS
    "OK, these sat, no one spoke to another [lit. 'no one spoke to his brother']." (30.10)

In the examples above which are productively derived, *ma*- seems to function

as a negative quantificational determiner, like English *no*:

(5-4) **ma ğaddâd** yisma<sup>c</sup> la-ğaddâd ṭaḥḥ *neg picker hear3MS to-picker knock* "No picker heard the sound of another."



A Determiner Phrase, in contrast, cannot be negated in this way<sup>8</sup>:

(53) a. \* **ma-l-ğaddâd** yisma<sup>c</sup> la-ğaddâd takk not-the-picker hear3MS to-picker sound "?"

These facts suggest that only morphologically indefinite NPs can be negated with *ma*-, while DPs cannot be. These facts support the analysis of DP structure presented in Chapter 3, according to which a definite noun is not a single complex head in which the noun head has adjoined and incorporated into the determiner head. It is, rather, a phrasal constituent in which the determiner and its bare noun complement occupy different positions in the phrase structure:

(5-5) DP il- NP ğaddâd

Embedding this structure under negation leaves no head free to raise to the head of NegP, the position in which negation morphology is licensed. This may be because of selectional restrictions on negation; for example, NegP may select for lexical categories, rather than a functional category like D. Therefore, in situations in which no head is available to host negation morphology, negation is not possible.

Based on these assumptions, the restrictions on the negation of locative phrases can be derived as follows. As I argued above, locatives with lexical NP arguments have a structure like the following:

<sup>&</sup>lt;sup>8</sup>Blau (1960: 192) notes an exception to this:

<sup>(</sup>i) ma-s-samâr b-iḥibb iðall yit<sup>c</sup>allak not-the-goats INDIC-love3MS remain3MS hang3MS "Goats prefer to go forwards." (56.3)



In the structure in (5-6), the preposition is unable to raise further than the head of PrP. This may be due to cyclicity; the uninterpretable phi-features of the complex Pr-preposition head will not be checked by the DP argument until LF. Assuming that feature checking is done in a strictly local relation between the "checker" and "checkee," the head is unable to move in the surface syntax without leaving these features unchecked at LF, and hence resulting in ungrammaticality. Alternately, we could follow a suggestion by Eid (1993: 141) and stipulate that only stems which are specified for person features are able to undergo raising out of their projection system (c.f. Grimshaw 1991). However we would choose to represent the restriction, it has the consequence that it cannot provide a head to host negation morphology, and because of this, locatives with lexical NP arguments cannot be negated<sup>9</sup>.

Inflected prepositions are both inflected for person features (by virtue of hosting an object clitic pronoun) and have had their formal features checked before Spell-Out. Therefore, they are able to raise in the overt syntax and host negation morphology, which I will represent as a Quantifier Phrase dominating the NP:

<sup>&</sup>lt;sup>9</sup>This also supports the idea of a null copula. If there were no such constituent, and *miš* is simply spelled out as a free morpheme when there's nothing else to host it, then we would predict that miš could be used for contituent negation: *\*miš ğaddād yisma<sup>c</sup> la-ğaddād takk*. However, if we allow for the existence of a null copula, then *miš* can be seen as being hosted by the copula raising out of PrP. Given that there is no reason to think that there is a counterpart to the null copula in nominal structure, the restriction of consituent negation to bare heads follows immediately.



5.3.4 Nominal Negation: miš/maš/muš and the "Pronoun of Negation"

In comparison to the ma-...- $\check{s}$  negation morpheme, the so-called "nominal" negation morphemes have the more restricted use. These include  $mi\check{s}$  (and its allomorphs  $ma\check{s}$  and  $mu\check{s}$ )<sup>10</sup> and the "pronouns of negation":

(54) *Pronouns of Negation* 

	Singular		Plural	!	
	Masculine	Feminine	Masculine	Feminine	
1st Person	ma-nî-(š)		ma-ḥnâ-(š)		
2nd Person	ma-ntî-(š)		ma-ntû-(š)		
3rd Person	ma-hû-(š)	ma-hâ-(š)	ma-himm-(iš)	ma-hinn-(iš)	

The paradigm in (54) shows that the "pronouns of negation" consist of object pronoun clitics affixed to the *ma*- negation morpheme, and that it therefore is part of a natural class with the other uses of *ma*-, and contrasts with *miš*. Both the latter and the pronouns of negation are used to negate clauses in which the predicate is not inflected for person features (c.f. Eid 1993), and while they seem to be largely interchangeable, certain subregularities can be noted.

In particular, *miš* and its allomorphs precede participles in roughly 70% of their occurrences, while the negative pronouns appear in front of participles in some 50% of their occurrences (the other instances including adjectival,

<sup>&</sup>lt;sup>10</sup>Blau (1960) notes the morphological similarities between *miš* and its allomorphs *muš* and *maš* on one hand and the negated pronouns of separation on the other hand: *ma-hû-š*, *ma-hî-š* (or *ma-him-š*) and *ma-hâ-š*. It seems likely that the former forms developed from the latter, especially since the distribution of the *miš* forms seems to correlate closely with that of the negated pronouns of separation.

nominal, or prepositional predicates). Blau (1960) indicates that *miš* "always precedes a single word<sup>11</sup>" (199), while *ma*- is the "generally used negation" (191) and that in opposition to *miš*, it always negates "a clause rather than a single word" (192). And, as was observed above, it also serves to negate non-verbal or non-clausal categories as well. Therefore, in general, *ma*- seems to be the default form of negation, while *miš* is restricted to fairly predictable environments.

(55) *With* miš, *etc*.

- a. **miš** <sup>c</sup>ârif inâm ta-ysriķ-l-e ši not knowpartMS sleep3MS until-steal3MS-to-cL3MS something "He couldn't sleep until he could steal himself something." (22.2)
- kâlat "ana, mşîbt-i zaiy mşîbt-ak inçan miš açbar said3FS 'I, misfortune-cL1S like misfortune-cL2MS if not larger "She said, 'as for me, my misfortune is like yours, if not greater'." (51.8)
- c. il-mara bâķye mizawwķa w-ğôz-ha the-woman bepartFS prettyFS and-spouse-cL3FS muš imţallik-ha not divorcepartMS-cL3FS "The woman was pretty, and her husband hadn't divorced her." (31.2)
- d. hâða <sup>c</sup>ilim **muš** hilim *thisMS knowledge not dream*"This is reality, not a dream!" (42.1)

<sup>&</sup>lt;sup>11</sup>This seems to include prepositional phrases, such as *maš min-ni, min niswân-ak* "I didn't do it, your wives did [lit. 'not from me, from your wives']." (46.18).

### (56) With Negative Pronoun

- a. ya ḥaǧǧ, mâ-l-ak ma-ntî-š <sup>c</sup>a-sawa l-yôm oh Hajj, what-to-you? not-you-<sup>NEG</sup> at-equal the-day ma-ntî-š imṣalli not-you-NEG prayPARTMS? "Hey Hajj, what's with you? You're not your usual self today. Didn't you pray?" (58.2)
- kâlat "ma-nî-š kâdir, waddî-l-i wara l-ḥaçîm" said3FS not-cL1S-NEG ableMS, callIMP-to-cL1S after the-doctor "She said, 'I'm not well, call after the doctor for me'." (53.4)
- c. ķâl "lêš, ma-himm ḥaramîye?" said3MS 'why, not-they thieves?' "He said, 'why, aren't they thieves?'" (61.5)
- d. w-in-nâbi, hal-badâwi fi ni<sup>c</sup>m-e! hâða <sup>c</sup>umr-e and-the-prophet, this-bedu in-blessing! thisMS age-cL3MS
  mâ-hu šâyif il-maşâyib not-he seepartMS the-misfortunes
  "...and the Prophet, this Bedouin is blessed! He's never seen any misfortune." (62.3)

To summarize, the "nominal" negation exponent *miš* only appears in a restricted set of contexts; clauses whose predicates lack specification for person, and in particular, clauses with participial predicates. A form of negation including the *ma*- morpheme freely alternates with *miš* in every environment in which the latter can occur. *Ma*- is also used with constituents of other categories. Altogether, this shows that *ma*- is the "default" form of negation, which is applied generally, while miš has the most restricted distribution. Most importantly, if *ma*- is the most generally used form of negation, then it is inadaquate as a diagnostic for a particular syntactic category, such as verbs serving as matrix clausal predicates, as has been assumed by Halila (1992), Eid (1993), and Mohammad (1998).

The "nominal" negation forms (*miš* and the negative pronouns) only appear in present tense copular clauses. It is commonly assumed that in the present tense, Arabic has a "null copula" that corresponds to its lexical counterpart in all respects except a phonological matrix. When present tense copular constructions are negated, it is this null copula that raises and hosts negation morphology, which is spelled out as *miš*.

(57) a. Abu Musa miš kâdir
 *Abu Musa not ableMS* "Abu Musa is not well."

Alternately, the null copula can be spelled out in the form of a pronoun which hosts negation, producing the pronoun of negation forms (*ma-hû-š*, *ma-hâ-š*, *ma-nî-š*, *ma-ntî-š*, etc).

(58) a. ya ḥaǧǧ, **ma-ntî-š** <sup>c</sup>a-s-sawa Oh Hajj, not-pro2S-NEG at-the-equal "Hey Hajj, you're not yourself." (RPA)

Therefore, the generalization that only heads host negation can be maintained.

To summarize, we have seen that the *ma*- portion of the *ma*-...- $\check{s}$  negation morpheme is not limited to negating verbal heads, but instead is used to negate a variety of constituents. This contrasts with the "nominal" negation morphemes *miš*/*maš*/*muš* and the negative pronouns, which are in fact limited to negation with clausal scope. We can therefore conclude that the *ma*- segment is irrelevant to the diagnostic for verbal headedness assumed by Halila, Eid, Mohammad. Rather, it turns out to the the - $\check{s}$  which presents the relevant contrasts.

5.3.5 What is the -s Segment?

An issue left unaddressed by the analysis of negation that I have sketched here concerns what is to be made of the -*š* segment of the *ma*-...-*š*. After all that has been said in the preceding discussion, Mohammad's original observation still seems to be correct, which is that of the non-verbal categories to which *ma*-

applies, only *fih*, *hada*, and inflected prepositions host the full sequence *ma*-...-š. Why don't other nominals do so? So while -š is optional in the contexts in which it can appear, these contexts are in fact quite restricted, and it is in this respect that the diagnostic for verbal heads has some force. Our task is therefore to try to identify what defines the categories that can host -š as a natural class.

The categories that can host  $-\check{s}$  include tensed verb stems, pseudo-verbs, pronouns of negation, inflected prepositions (and some nouns), as well as nominal elements such as *hada* "someone/anyone" and *fîh* "there is...." It is-sharply ungrammatical modifying lexical NPs:

 (59) a. ma-ğaddâd/\*-š yisma<sup>c</sup> la-ğaddâd takk not-picker hear3MS to-picker sound
 "No picker could hear the sound of another." (RPA)

The different constituents with which it appears are difficult to define as a natural class. What they have in common cannot be so broad as undergoing head movement, as this would (given the standard assumptions) include bare NPs. Nor can it be limited to verbal-type predicates (such as verbs and prepositions), since *hada* and (as will be seen) *fih* have the distribution of nominals. 5.3.6 *Is* -š *the Specifier of Negation Phrase*?

The most frequent analysis of negation in Arabic compares ma-...-š with French ne...pas, suggesting that in each language, negation is expressed through Negation Phrase, of which ma- is the head, and -š a variable in its specifier (c.f. Ouhalla 1990; Mohamad and Ouhala 1995). A verb raises through NegP, incorporating into ma- and hosting -š as a clitic. This is illustrated in (5-8) with the string ma- $yisma^c$ -š gaddad takk "no picker would hear a sound":



The problem with this analysis is that it relies on head raising past the projection in order to derive the correct word order (for other problems, see Benmamoun 2000: 73-76). When we have non-verbal negation, there is no independent reason to argue that the head raises higher than the head position of NegP, and so we have no way of accounting for the position of *-š* when it does appear, as in the case of inflected prepositions or the polarity item *hada*: (5-9)



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Benmamoun (1992; 1997; 2000: 71) also notes that in Moroccan Arabic, -*š*, when used as a quantifier, is in complementary distribution with negative polarity items such as *hetta* "even," or *had* "anyone":

(60) a. ma-ža-(\*š) hətta wahəd
 *not-came3MS-neg even one* "No one came." (Moroccan Arabic; Benmamoun 2000: 71)

Benmamoun's observations regarding  $-\check{s}$  do not seem to hold true in Rural Palestinian Arabic. For example,  $-\check{s}$  and the polarity item *hada* do co-occur, when negation is applied to to inflected prepositions or control verbs:

- (61) a. **ma**-ma<sup>c</sup>-î**-š hada** *not-with-cL1S-NEG anyone* "There isn't anyone with me." (50.4)
  - b. **ma**-xallâ-**š hada** yiðrib-ha *not-let3MS-NEG anyone hit3MS-cL3FS* "He didn't let anyone hit her." (43.7)

Benmamoun (2000: 73) notes that similar facts are to be found in Egyptian Arabic:

(62) **ma**-šuft-**iš h**ad *not-saw*1*S*-*NEG anyone* "I didn't see anyone." (*EA*)

It does seem that -*š* does not occur when *hada* is the direct object of the verb.

(63) a. **ma**-bi-timna<sup>c</sup> ḥada <sup>c</sup>an-ha not-INDIC-refuse3FS anyone at-cL3FS "She doesn't refuse anyone." (38.12)

However, if *hada* is the object of a control verb or of a preposition, it occurs with *-š*, as in (61) above. This distinguishes it from other indefinite NP objects, which are freely preceded by negated verbs carrying the *-š* segment. Furthermore, the polarity item *iši* "something, anything" also occurs with negation with *-š*, unlike in Moroccan Arabic:

- (64) a. iṣ-ṣubiḥ dawwaru ma-laqû-š iši the-morning searched3MP not-found3mpl-neg anything "In the morning, they searched [but] didn't find anything." (52.12)
  - b. **ma**-ṣâr-l-i-š**š iši** *not-became3MS-to-cL1S-NEG anything* "I didn't get anything." (10.5)

Therefore, it seems as though Benmamoun's and Ouhalla's generalization, that -*š* is in complementary distribution with *ḥada*, does not apply to to Rural Palestinian Arabic.

5.3.7 Non-syntactic factors affecting the distribution of -š

While I do not have a detailed analysis to present, I suggest that the distribution of -*š* may not be a syntactic matter at all, or at least not directly<sup>12</sup>. Instead, -*š* is attached to the pronounced string at or after the PF-interface. As we have seen, the distribution of -*š* in RPA lacks the regularity found in Moroccan or Egyptian Arabic, in which -*š* can be identified with certain syntactic or intepretive effects. In RPA, the only directly syntactic evidence we have for its distribution is the set of categories with which it can appear. These are syntactic objects which either undergo head movement (such as tensed verb stems) or which are ambiguous between being heads or maximal projections (such as inflected prepositions, existential *fîh*, *hada*, or copular pronouns).

Therefore, I will make a set of assumptions about the PF-interface, and how it interprets syntactic structure. In particular, I assume that the PF-operations only recognize heads and maximal projections, applying certain rules to each. For example, rules placing stress, eliding vowels, or assimilating place (as in the assimilation that takes place between the Arabic definite article and coronal consonant onsets of adjecent words) will make reference to maximal projections,

<sup>12</sup>I am obliged to Wayne Harbert and John Bowers for suggesting this line of argument.

while rules such as ordering of clitics (i.e. determining whether a clitic is a proclitic or an enclitic) make reference to heads. Let us suppose that the affixation of -*š* applies only to heads. Then, given that *fîh*, inflected prepositions, *ḥada*, and copular pronouns are non-projecting categories, the PF component might interpret them as heads, even though syntactic operations treat them as maximal projections. Noun phrases might be excluded from hosting -*š* because the PF-component only interprets them as maximal projections.

Now, as we have seen, Blau (1960: 193-195) suggests that the distribution of -š in RPA is affected by prosodic factors. For example, he notes that -š never follows a negated stem preceded by *wallâhi* "by God" or <sup>c</sup>*umr*- "never", both of which "strengthen negation" and "carry the stress" (193: see also Benmamoun 2000: 73).

- (65) a. ķâl "**wallâhi ma**-b-tōxið-hin illa tḥutt nuṣs lêra <sup>c</sup>ên *said3MS 'by God not INDIC-take2MS-cL3FP but put2MS half lera eye* "He said, 'by God, you won't take them without paying a good half lera!" (18.4)
  - hâða <sup>c</sup>umr-e ma-nâm bala sirka thisMS never-cL3MS not slept3MS without stealing "He never slept without stealing." (22.2)

On the other hand,  $-\check{s}$  is obliged to appear when *ma*- is reduced to *a*before another bilabial stop, or when it is eliminated altogether. A possibility might be that  $-\check{s}$  in RPA has taken on the function of "supporting" or "reinforcing" certain kinds of emphasis. For example, the presence of  $-\check{s}$  attracts stress towards the right edge of the word to which it is attached. Given that the placement of stress and related vowel length can affect the type of focus associated with negation, it may be that  $-\check{s}$  is used as a phonological cue for certain interpretation of negation, or perhaps as a counterbalance to other prosodic rules that affect stress placement in RPA. If a verb is being negated,  $-\check{s}$  will attract stress away from *ma*- and toward the verb stem (c.f. Schmidt and Kahle 1918: 92\*; Younes 1995). For example, if a mono-syllabic verb stem such as *radd* "he answered" is negated, rules of stress placement (cf. Younes 1997) will automatically place stress on the negation marker, lengthening the vowel, and triggering a focused reading:

(66) a.  $/m\hat{a}/ + /radd/ \rightarrow m\hat{a}$ -radd "He didn't answer." However, affixation of -š (and subsequent insertion of an epenthetic vowel) will allow stress to be shifted back to the verb stem, and avoiding a focussed interpretation:

(67) a. 
$$/m\hat{a}/ + /radd/ + /-\check{s}/ \rightarrow$$

 $/m\hat{a}$ -radd-š/  $\rightarrow$  mā-radd-iš "He didn't answer."

Similarly, taking a verb *ðarab-ni* "he hit me," application of *ma*- results in stress being placed on the penultimate syllable:

(68) a. 
$$/m\hat{a}/ + /\bar{a}arab/ + /-n\hat{i}/ \rightarrow m\bar{a}-\bar{a}arab-ni$$
  
"He didn't hit me."

However, addition of  $-\dot{s}$  would close the final syllable, allowing the vowel to be pronounced long, and drawing the stress to the final syllable:

(69) a. 
$$/m\hat{a}/ + /\tilde{a}arab/ + /-n\hat{i}/ + /-\check{s}/ \rightarrow m\bar{a}-\tilde{a}arab-n\hat{i}-\check{s}$$
  
"He didn't hit me."

The interesting question would therefore be whether there is any contrast in interpretation to be found be *ma-ðarab-ni* and *ma-ðarab-nî-š*, for example as contrastive or new information focus on the pronoun clitic. This question will have to wait for further research.

These suggestions are necessarily very preliminary, and for verification would require close study of the interaction between stress placement, negation, and interpretation. However, should it prove to be true, it would reveal that the negation system in RPA is in fact quite regular, and moreover, it would
support the analysis of existential constructions that I have presented, in that regularity in the negation system would point up the parallels in distribution between existential *fih* and inflected prepositions.

# 5.4 **Gapping and Ellipsis**

In this section, I return to Halila's (1992) arguments in support of his claim that *fih* and inflected prepositions acts as verbal heads. Halila claims that verb gapping is possible with verbs and inflected prepositions, but not with predicative prepositions. He takes this as evidence that inflected prepositions behave as though they were verbal heads by undergoing head raising in the functional domain of the clause. In this subsection, I will examine this claim, and conclude that evidence that Halila cites to support it is inconclusive. Instead, I will sketch a possible analysis of ellipsis and gapping which is compatible with my proposal.

The examples in (70) show gapping licensed by verbs:

- (70) a. su<sup>c</sup>âd taqra fî ktâb w-karîm ø fî žarîda
   *Souad read3FS in book and-Karim in newspaper* "Souad is reading a book and Karim a newspaper."
  - b. famma barša nâs fi-s-sûq w-barša țalaba *THERE many people in-the-market and-many students* fi-l-žam<sup>c</sup>a *in-the-university* "There are many people in the market and many students at the university." (*TA*)

(70a) shows gapping with a verb *qrâti* "she read" in the perfect/past-tense, while (70b) shows gapping with the same verb in the imperfect/present.

Similarly, in (71), gapping occurs with inflected prepositions *cand-ha* "at her, possessed by her" and *quddâm-ha* "in front of her":

- (71) a. su<sup>c</sup>âd <sup>c</sup>and-ha karhba w-karîm ø bisklet *Souad at-cL3FS car and-Karim bicycle*"Souad has a car, and Karim a bicycle [lit. 'Souad, at her is a car, and Karim a bicycle']."
  - b. su<sup>c</sup>âd quddâm-ha raḥma w-karîm ø nawâl Souad before-cL3FS Rahma and-Karim Nawal
    "Rahma is in front of Souad, and Nawal Karim." (TA)

In constrast, predicative PPs cannot license gapping:

- (72) a. \*l-karhba <sup>c</sup>and su<sup>c</sup>âd w-l-bisklet ø karîm
   *the-car at Souad and-the-bicycle Karim* "Souad has the car, and Karim the bicycle."
  - b. \*su<sup>c</sup>âd quddâm raḥma w-karîm ø nawâl
     *Souad before Rahma and Karim Nawal* "Souad is in front of Rahma, and Karim Nawal." (TA)

Halila follows the common assumption that gapping involves VP-deletion<sup>13</sup> under identity with another VP that acts as an antecedent. He concludes that the inflected preposition must be in VP (since it is deleted) and, because it is a head, it must be the head of VP.

Furthermore, it is questionable whether his assumption regarding ellipsis licensing was correct to begin with. Kiss (1996: 135) argues that ellipsis involves deletion of the IP-domain of the clause (which corresponds to the PrP used in the present framework), and that expletives - including existential *there* - occur outside of IP in her Reference Phrase (RefP) (equivalent to the TP used here). Therefore, *there* gives an appearance of licensing the ellipse because it occurs in a position adjacent to the ellipsis site:

(73) a. There were quarrels in the committee, and there still are.b. There shouldn't be any quarrels in the committee, should there?

<sup>&</sup>lt;sup>13</sup>See Kortobi (1998) for a discussion of gapping and VP-deletion in Moroccan Arabic.

The same observation applies to preposed prepositional phrases or right-node raising, which seems to involve similar constituents:

(74) a. On her shoes, and on her socks, were bells.

This model could account for Halila's facts given above, if we allow gapping to include deletion of TP, as shown in (5-10):

(5-10) **su**<sup>c</sup>**â**d <sup>c</sup>and-ha **karhba** w-**karîm bisklet** *Souad at-cL3FS car and-Karim bicycle* "Souad has a car, and Karim a bicycle."



According to this analysis, *Su<sup>c</sup>âd* and *Karîm* are broad subjects (as per Doron and Heycock 1999), generated in FP. The rest of the clause(s) shows locative inversion as described in Ch. 4. The redundant material, which consists of TP and PrP, is reduced<sup>14</sup>.

<sup>&</sup>lt;sup>14</sup>One interesting fact to be noted here is that in order to be properly interpreted, the inflected preposition in the gapped clause could not be a copy of its antecedent in the first conjunct, as copying would result in a mismatch of gender features. In the first conjunct, the pronoun clitic in *cand-ha* "at her" is bound by *Sucâd*, a woman's name. If this were copied by the second conjunct, it would be bound by *Karîm*, a man's name, which would result in a feature mismatch with *cand-ha*. In order to be properly interpreted, the inflected preposition in the second conjunct should be filled in as *cand-hu* "at him". This would support a reduction or

Similarly, some instances of apparent ellipsis can be analyzed as VPconjunction. In the following examples, two coordinated clausal predicates are applied to one subject:

- (75) a. Emily bought chocolate and rented a movie.
  - b. Fred bought chocolate and a pound of smoked salmon.

In (75a), the clausal predicates *bought chocolate* and *rented a movie* are applied to the subject *Emily*. (75b) could be analyzed in the same way, with additional deletion of the (redundant) verb *bought*:

- (76) a. Emily bought chocolate and Emily rented a movie.
  - b. Fred bought chocolate and Fred bought a pound of smoked salmon.

In each case, the external argument of the clause is left unexpressed. According to my analysis of prepositional phrase fronting, the prepositional expression occupies the same syntactic position associated with the "subject" of an English clause, and as such, Halila's examples given above could be analyzed as acrossthe-board movement as well.

In fact, it seems as though different constituents can undergo gapping and ellipsis, rather than just the VP, as evidenced by the following examples, which could be analyzed as PP-conjunction just as easily as they could gapping:

- (77) a. On her fingers were rings, and on her shoes bells.
  - b. [There were quarrels] in the committee, and [ø] among the staff.
  - c. There were [quarrels in the committee], and there still are [ø].
  - d. There shouldn't [be any quarrels in the committee], should there[ø]?

de-stressing analysis of gapping, rather than one that involved some form of copying.

This is supported by the indexing process. Assuming that broad subjects are basegenerated in their surface position, they cannot be coindexed with the clitic as a result of a syntactic operation. Therefore, what we have is pragmatic coreference, in which the broad subject and the clitic may have distinct indexes but share the same referent. Therefore, a copying analysis of gapping would predict that the clitic hosted by the inflected preposition *cand-cl* in each conjunct would have *Sucâd* as a referent. As this is not the case, the clitic "filled in" in the second conjunct must have an index distinct from the clitic in the first conjunct. The same observations apply to preposed prepositional phrases or right-node raising, which seems to involve similar constituents:

- (78) a. On her shoes  $[ \phi ]$  and on her socks were bells.
  - b. On her shoes [were bells] and on her socks [were bells]
  - c. On her fingers [were [rings]] and on her shoes [ ø [bells]]

### 5.5 **Conclusion**

In this chapter, I have examined arguments made by other authors to the effect that inflected prepositions behave as verbal heads. I conclude that the diagnostic techniques used to make this claim are inconclusive, and moreover, that a such claim leads to minimality violations when confronted by some less-common data involving locative fronting. Therefore, my analysis both provides a better account of the facts mentioned by these other authors, as well as extending coverage to some previously unaccounted for data.

## Chapter 6

## Inverted Word Order, Focus, and Scrambling

# 6.1 Introduction

In this chapter, I will examine some data that present possible complications for the theory developed in Chapters 3 and 4. These involve instances of post-verbal word order inversions in existential constructions, which I will refer to as prepositional phrase scrambling ("PP-scrambling"), after Belletti and Shlonsky (1995). In these constructions, two prepositional phrases precede the post-verbal noun phrase:

- a. ğâr-ak il-muslim abû-h il-e neighbor-cL3MS the-muslim father-cL3MS to-cL3MS
   <sup>c</sup>ala abû-k <sup>c</sup>išrîn alf against father-cL2MS twenty thousand "Your neighbor the Muslim, his father, your father owes him twenty thousand [lit. 'he has against your father 20,000']." (100.5)
  - il-i arba<sup>c</sup>t alâf lêra <sup>c</sup>a-l-bank to-cL1S four thousand lera on-the-bank
    "The bank owes me four thousand lera [lit., 'I have four thousand against the bank']." (113.8)

In (1a) above, the NP argument *cišrîn alf* "twenty thousand [lera]" follows two prepositional expressions, *il-e* "to him" and *cala abû-k* "against your father". This contrasts with (1b), in which the NP *arbct alâf* "four thousand" precedes the second prepositional phrase, and which I take to represent the unmarked word order. These facts, if they are derived by syntactic movement, present a challenge to my proposal as presented thus far, because the mechanisms I have proposed should only allow for preposing of one locative constituent.

However, I will adopt analyses by Aoun and Benmamoun (1998), Neeleman and Reinhart (1998) and Zubizarreta (1998), according to whom such word order inversions result from PF-scrambling, operations which satisfy conditions on a well-formed PF-representation, rather than from syntactic operations proper. Following Reinhart's (1983, 1986, 1993) theory of coreference and binding, I argue that obligatory disjoint reference between a pronoun in the scrambled constituent and the post-posed noun phrase, although it suggests properties of A-movement, is in fact due to pragmatic conditions on theme-rheme structure. Therefore, this restriction is not due to syntactic processes at all, and is in fact allowed in other constructions which are syntactically similar but which do not have the same pragmatic theme-rheme interpretation.

The chapter is organized as follows: in section 6.1, I present the word order facts, including a comparison with clauses with transitive verbs, which show similar inversions between the NP and the locative. In section 6.2, I present my analysis; in 6.3, I examine and reject other possible analyses, particularly an analysis proposed by Belletti and Shlonsky (1995). And, in section 6.4, I show that my theory is supported by examples of accent placement in recorded speech samples from Rural Palestinian Arabic.

### 6.2 **Post-Verbal Scrambling**

In the last chapter, I discussed existential constructions with a word order of *Copula-Locative-NP*, and proposed a model of syntactic derivation that derives these orders. The crucial part of my proposal (based in large part on Collins 1997) is that the locative expression raises first to PrP and then to T, in order to check strong features in each of these heads (a D-feature and the EPP feature respectively). However, the data to be presented in this chapter involve locative preposing constructions with additional word order inversions within the post-verbal field of the clause. In particular, this occurs when there are two locative expressions (usually prepositional phrases) in the clause, both preceding the noun phrase (including the dative clitic *l-i* "to me" in 2d):

- (2) a. mayyal fi-hal-hôš fîh hanâk yaxôr la-°afandi turned3MS in-this-yard THERE there stall to-Efendi "He turned into this yard; there was a stall there belonging to some Efendi." (118.4)
  - b. mâ l-ak <sup>c</sup>ind-i bâb la-l-fatwa not to-cL2MS at-cL1S door to-the-law "I don't have any ruling for you." (121.3)
  - kâl "kult-l-ak ruhin kuttēnât-ak w-inçân <sup>c</sup>ind-ak c. said3MS "said1S-to-cl2MS went3FP figs-cl2MS and-if at-cl2MS šârib min-hin habbe, b-akûs u-b-axalli šârib from-cL3FP seedFS, INDIC-shave1S moustache and-leave1S moustache "He said, 'I told you your figs are gone, and if you have [even] a piece [left] of them, I'll shave half my moustache and leave half'." (20.7)
  - d. ya sîd-i rațîl-ak izġîr, bidd-i tsawwî-l-i oh lord-cL1S ratils-cL2MS small, wish-cL1S make2MS-to-cL1S min hal-ḥâǧar <sup>c</sup>iyârât from this stone weights "My lord, your ratil<sup>1</sup> is small; I want to make myself weights from this stone."(30.9)

If these post-verbal word order inversions are derived by syntactic movement, then there must be some derivational machinery that drives such movement, in addition to what I have proposed up to this point. The problem is that once the first prepositional expression has been preposed, there are no mechanisms left to motivate the additional inversion. As I described in Chapter 3 (following Collins 1997), the process begins with the strong D-feature in PrP. This is checked either by the raising of the locative PrP (in case it contains a

<sup>&</sup>lt;sup>1</sup>A *ratil* is a measure of weight equal to 2.88kg (Schmidt and Kahle 1918: p.74, ff.7).

strong D-feature), or by the merging of *fih*. Once this strong D-feature is checked, it can no longer attract another constituent, removing the motivation for scrambling of the PP. Therefore, either the analysis developed so far is inadaquate, or there is some other process at work which produces an illusion of a secondary inversion structure. I will argue that the latter is the case.

#### 6.3 Analysis

The analysis I propose for these data follows Aoun and Benmamoun (1998), Neeleman and Reinhart (1998) and Zubizarreta (1998), according to whom word order inversions in the post-verbal field of the clause are the result of prosodically driven relinearization operations which do not affect the LF form of the derivation. In particular, *P-movement* (Zubizarreta 1998: 138-151), a non-feature checking operation that applies at the PF-interface, left-adjoins the prepositional phrase to VP, or whatever is the most local maximal projection containing its base position<sup>2</sup>. P-movement is a last-resort operation which is driven by well-formedness conditions on the PF-representation, which require that the constituent bearing nuclear stress in the clause, and therefore marked for tonic focus, must be in the most deeply embedded position in the clause (Zubizarreta 1998: 138-9)<sup>3</sup>.

<sup>&</sup>lt;sup>2</sup>The main difference between Zubizarreta's and Neeleman and Reinhart's proposals is that Zubizarreta derives the word order differences by a movement operation, while Neeleman and Reinhart derive it from different positions of base generation. Neeleman and Reinhart argue that unsatisfied features of a lexical head percolate with other features of the head, and thus can be satisfied at any level of the syntactic structure in which the verbs features still project. Therefore, given that an adverb adjoined to a projection behaves as a syntactic (and semantic) functor, returning the same projection as it adjoined to, it should be immaterial whether an argument of a verb is merged adjacent to the verb or to the right of an adjunct; it will be able to saturate a thematic role in either position.

<sup>&</sup>lt;sup>3</sup>This simplifies Zubizarreta's analysis substantially. In particular, she claims that the NSR has two clauses or "modules": according to the first, tonic focus is placed on the lowest in a hierarchy of arguments in the clause, while according to the second, tonic stress is placed on the mostly deeply embedded constituent in the clause. Zunizarreta argues that *both* clauses of the NSR are active in German and English, while only the second clause is active in Romance.

For example, a prepositional phrase base-generated as the complement of a noun head will be P-adjoined to the NP projected by that head:

(6-1) Illustration of P-movement



To illustrate this with example (2c) above, the string *min-hin habbe* "a piece of them" has a base order of *habbe min-hin*:



*P-movement* applies, adjoining the PP to NP.

Word order inversion (in particular PP-scrambling<sup>4</sup>) is driven by the need to arrange well-formed prosodic structures at the PF-interface; PP-scrambling isolates the NP in the clauses' nuclear stress "well," which is associated with presentational focus. This means that pronouns embedded within the scrambled constituent are intepreted as part of the discourse background, while the post-verbal NP is interpreted as discourse-new, such that coreference between the two is not possible. This is due to pragmatic restrictions on coreference rather than syntactic binding. According to these restrictions, the pronoun is associated with discourse-old information, while the noun phrase marked She also argues that English, German and French have a rule of *destressing*, which can render a constituent "invisible" to the calculation of stress placement. Destressing serves as an alternative to P-movement in languages that have it. However, Spanish, Italian, and according to the present analysis, Arabic, do not have destressing and therefore rely on P-movement to resolve conflits between the Focus Prominence Rule and the Nuclear Stress Rule.

<sup>4</sup>The term is taken from Belletti and Shlonsky (1994).

with nuclear stress is associated with discourse-new information, so that coreference between the two is ruled out pragmatically, but is (trivially) allowed by the syntax.

The heart of the analysis is the connection between sentence stress and presentational focus. Using the *Nuclear Stress Rule* as formulated by Zubirarreta (1998: 40) and Neeleman and Reinhart (1998: 341), tonic stress is placed on the most deeply embedded constituent in the clause. Tonic stress is associated with presentational (non-contrastive) focus, which can project from the stressed element up to the largest subset of the *focus set* (Neeleman and Reinhart 1998: 333), a set of constituents that includes the focused constituent itself, as well as the set of maximal projections dominating it up to the clausal node.

Let us briefly review the structure I have assumed for the VP in a presentational construction, including the matrix PrP, VP, the embedded PrP and PP:



Zubizarreta argues that the stress rule is calculated only with regard to constituents that are metrically "visible," those being syntactic objects that are pronounced: (3) *Nuclear Stress Rule* (Zubizarreta 1998: 40)

Given two nodes  $C_1$  and  $C_2$  that are metrical sisters, the one lower in the syntactic asymmetric c-command ordering is more prominent.

This is equivalent to Neeleman and Reinhart's Nuclear Stress Rule (Neeleman

and Reinhart 1998; Cinque 1993):

(4) *Nuclear Stress Rule* (Neeleman and Reinhart 1998: 341)

Main stress falls on the most deeply embedded constituent.

I will use the latter in what follows<sup>5</sup>.

Zubizarreta defines "metrical sisterhood" as follows:

metrical sisterhood is a less restricted version of syntactic sisterhood, in the sense that it may ignore intervening syntactic consituents that are not metrically branching, that is, that immediately dominate metrically invisible material...typically, consituents that are phonologically silent, such as traces, are

<sup>5</sup>Wayne Harbert (p.c.) has suggested the possibility that tonic focus might be assigned to the rightmost constituent in the PF-string. That this might be a preferred approach may be suggested by the following facts from Scots Gaelic (cf. Adger 1997), in which the most deeply embedded constituent in the clause (*ann an Lunnain* "in London") is not the one assigned focus by Neeleman and Reinhart's NSR:

- (i) Chunnaic Mòrag **do màithair** ann an Lunnain an dè saw Morag your mother in the London yesterday "Morag saw your mother in London yesterday."
- (ii) Chunnaic Mòrag ann an Lunnain an dè i saw Morag in the London yesterday her "Morag saw her in London yesterday."
- (iii) Bhasaich Mòrag ann an Lunnain an dè died Morag in the London yesterday "Morag died in London yesterday."

Instead, Adger suggests that stress is assigned with reference to the right edge of the clause, and that the weak clitic *i* "her" is merged with whatever constituent is assinged tonic focus. However, if we were to accept a rule placing focus on the rightmost constituent in the string, we would still need to account for conflicts arising between this rule and another assigning stress to a more-leftwards constituent.

Another possibility might be to formulate an analysis of the Scots Gaelic data above in terms of Zubizarreta's (1998) theory, which is more developed than Neeleman and Reinharts, and which provides both more mechanisms for assigning focus, as well as more means for resolving conflicts between these mechanisms.

metrically invisible for the purpose of applying the [Nuclear Stress Rule]. (p.41)

This excludes traces, PRO's, and other phonetically null elements. Therefore, in (6-4) below, NP<sub>1</sub> and PrP<sub>2</sub> (and indeed Pr') count as "metrical sisters."



The metrically "visible" elements of a clause form what Neeleman and Reinhart call a Focus Set, defined as follows:

(5) *Focus Set:* The Focus Set of IP contains the constituents containing main stress in IP.

According to (5), the Focus Set of (6-4) is  $\{PrP_{\nu}, VP, PrP_{\nu}, PP, NP_{2}\}$ . If focus is associated with VP, then both NP<sub>1</sub> and PrP<sub>2</sub> will be within the Focus Set. However, if the focus is placed on NP<sub> $\nu$ </sub> the focus set will be  $\{NP_{1}, VP, PrP_{1}\}$ . PrP<sub>2</sub> is not a member of this set, so it is destressed, and the Nuclear Scope Rule, which requires that the most deeply embedded constituent be the most prominent, will conflict with Zubizarreta's *Focus Prominence Rule*, a PF wellformedness condition, which requires that the constituent marked for focus is the most prominent. The Nuclear Stress Rule requires that NP<sub>2</sub> be the most prominent, as it is the most deeply embedded. The Focus Prominence Rule requires that NP<sub>1</sub> be prominent, because it has been assigned stress. The conflict between these two rules is resolved by P-movement of  $PrP_2$  to a position left-adjoined to VP, the most local maximal projection dominating the base position of  $PrP_2$ :



As a result of this operation,  $NP_1$  is now the most deeply embedded metrically visible constituent in the clause, taking focal stress (the traces of V and  $PrP_2$  are of course, more deeply embedded than  $NP_1$ , but don't count toward calculating stress placement). As P-movement is associated purely with the PF-interface, it has no effect on LF representations, but only on the linear order of the pronounced string, which is why binding is not affected, but possible coreference is.

# 6.3.1 *Applying the Analysis*

(6-5)

The proposal sketched above accounts for most of the problematic cases described at the beginning of the chapter:

- (170) a. ğâr-ak il-muslim abû-h il-e neighbor-cı3MS the-muslim father-cı3MS to-cı3MS
  <sup>c</sup>ala abû-k <sup>c</sup>išrîn alf against father-cL2MS twenty thousand "Your neighbor the Muslim, his father, your father owes him 20,000." (100.5)
  - mayyal fi-hal-hôš fîh hanâk yaxôr la-'afandi *turned3MS in-this-yard THERE there stall to-Efendi*"He turned into this yard; there was a stall there belonging to some Efendi." (118.4)



Next, we assume that the locative expression *hanâk* "there" is destressed, either by being assigned a particular feature (as per Zubizarreta 1998), or as part of a cycle of PF rules (as per Neeleman and Reinhart 1998). According to Zubizarreta's definition of metrical sisterhood, the NP *yaxôr la-<sup>3</sup>afandi* "a stall belonging to some Efendi" and the locative small clause headed by *hanâk* "there" are metrical sisters. *Hanâk* is more deeply embedded than the NP, so the Nuclear Stress Rule will require that it be the most prominent constituent in the clause. However, since it has been destressed, the NP *yaxôr la-<sup>3</sup>afandi* "a stall belonging to some Efendi" is assigned focal prominence, which again gives rise to a conflict between the Nuclear Stress Rule and Zubizarreta's Focus Prominence Rule. Therefore, at the PF interface, the locative expression undergoes Pmovement and adjoins to VP, its most local dominating maximal projection:



This makes the NP *yaxôr la-<sup>2</sup>afandi* "a stall belonging to some Efendi" the most deeply embedded metrically visible constituent, and allows *hanâk* "there" to be felicitously destressed. This derives the correct word order.

In the case of (1a) above, a similar process is at work. The difference is that the constituent that undergoes P-movement, the PP <sup>*c*</sup>*ala abû-k* "against your father", is a sub-constituent of the NP. Therefore, P-movement will left-adjoin it to NP, the most local dominating maximal projection. As before, we begin with the syntactic configuration at PF:



Again, the most deeply embedded metrical sisters in (6-8) are the NP <sup>*c*</sup>*išrîn alf* "twenty thousand" and the PP <sup>*c*</sup>*ala abû-k* "against your father". Assuming that <sup>*c*</sup>*ala abû-k* has been destressed, we again have a conflict between the Nuclear Stress Rule and the Focus Prominence Rule, the former requiring <sup>*c*</sup>*ala abû-k* "against your father" to have focal prominence, while the latter requires <sup>*c*</sup>*išrîn alf* "twenty thousand [lera]" to be. As before, this conflict is resolved through P-movement of the PP:



As before, P-movement derives the correct word order for the example in question.

## 6.4 **Other Analyses**

In this section I examine alternative explanations for the word order inversion under discussion. The first, based on Belletti and Shlonsky (1995), posits that scrambling of the PP is a form of A-movement. The second explanation says that the post-posed element undergoes right-ward movement. I argue that both possibilities are incorrect: the first is unformulable in the Minimalist Program, and the second requires extensive stipulation.

6.4.1 Belletti and Shlonksy (1994): PP-Scrambling as A-movement

Belletti and Shlonsky (1994: 490-491) discuss examples from Hebrew like the following, in which the locative prepositional phrase <sup>*al*</sup> *ha-šulxan* "on the table" can either follow (6a) or precede (6b) the direct object noun phrase <sup>*al*</sup> *ha-safer hahu* "that book":

(6)	a.	henaxti <sup>°</sup> et ha-sefer hahu <b>°al ha-šulxan</b> <i>put1S</i> Acc the-book that on the-table "I put that book on the table."
	b.	henaxti <b>`al ha-šulxan</b> `et ha-sefer hahu <i>put1S on the-table Acc the-book that</i> "I put on the table that book."
(7)	a.	lamadti harbe dvarim <b>me-ha ax šel-i</b> <i>learned1S many things from-the brother POSS-CL1S</i> "I learned many things from my brother."
	b.	lamadti <b>me-ha</b> <sup>3</sup> <b>ax šel-i</b> harbe dvarim <i>learned1S from-the brother</i> POSS-CL1S many things "I learned from my brother many things."
(8)	a.	xataxti prusat lexem <b>ba-sakin haze</b> <i>cut1S slice bread with-knife this</i> "I cut a slice of bread with this knife."
	b.	xataxti <b>ba-sakin haze</b> prusat lexem <i>cut1S with-knife this slice bread</i> "I cut a slice of bread with this knife."
(9)	a.	hem šalxu zer praxim <b>le-Gianni</b> <i>they sent<sup>3PL</sup> bouquet flowers to-Gianni</i> "They sent a bouquet of flowers to Gianni."
	b.	hem šalxu <b>le-Gianni</b> zer praxim they sent <sup>3PL</sup> to-Gianni bouquet flowers "They sent Gianni a bouquet of flowers."
(10)	a.	natanu pras <b>le-Dina</b> gave1P prize to-Dina "We gave a prize to Dina."
	b.	natanu <b>le-Dina</b> pras gave1P to-Dina prize "We gave Dina a prize."

Belletti and Shlonsky assume that the unmarked word order is that given in the (a) examples, *NP-PP*. They claim that Hebrew allows prepositional phrase

scrambling more freely than Italian does, and also allows heavy NP shift, such that the word order *PP-NP* can be derived by two different mechanisms; either by scrambling or by rightward extraposition of the (heavy) noun phrase<sup>6</sup>.

They also note that a post-verbal noun phrase is interpreted with contrastive focus, as is illustrated in the following short texts:

- (11) Q: mi <sup>°</sup>acar <sup>°</sup>et ha-roceax?
   who detained ACC the-murderer?
   "Who arrested the murderer?"
  - a. <sup>°</sup>et ha-roceax <sup>°</sup>acra ha-mištara *Acc the-murderer detained the-police*"It was the police who arrested the murderer."
  - b. # <sup>°</sup>et ha-roceax **ha-mištara** <sup>°</sup>acra Acc the-murderer the-police detained "Same"

Given the question mi 'acar 'et ha-roceax "who arrested the murderer?", the

appropriate response is (11a), which has the noun phrase *ha-mištara* "the police"

<sup>6</sup>In addition, they claim that Italian allows "light NP" post-posing in addition to PP-scrambling. They distinguish the two on the basis of the *ne*-cliticization test: post-posed subjects cannot license a *ne*-clitic on the verb:

- (i) ne ho dato tre a Gianni of-them have given three to Gianni "I have given three of them to Gianni."
- (ii) \*ne ho dato a Gianni tre of-them have given to Gianni three "Same."

However, rightextraposed NPs are acceptable when they are "heavy" (as in (iii)), or focalized (as in (iv)):

- (iii) ne ho dato a Gianni tre che mi avevano consigliato of-them have given to Gianni three which me have suggested la settimana scorsa the week last
   "I gave Gianni three which they suggested to me last week."
- (iv) ne ho dato a Gianni uno solo of-them have given to Gianni one only "I have given Gianni only one of them."

in the post-verbal "focus" position. In contrast, (11b), in which the noun phrase precedes the verb, is infelicitous as a response.

Similar correspondences between word order and interpretation can be seen regarding PP-scrambling: a preposed PP is interpreted as the focus of a response to a question:

(12)	Q:	<b>le-mi</b> carix le-haxzir <sup>°</sup> et ha-maftaxot? <i>to-whom must to-return</i> Acc <i>the-keys</i> ? "Who do we have to return the keys to?"
	a.	carix le-haxzir <b>le-Rina</b> <sup>°</sup> et ha-maftaxot <i>must to-return to-Rina Acc the-keys</i> "The keys must be given back to Rina."
	b.	# carix le-haxzir <sup>°</sup> et ha-maftaxot <b>le-Rina</b>

b. # carix le-haxzir 'et ha-mattaxot **le-Rina** must to-return Acc the-keys to-Rina "Same."

In (12), the appropriate response is (12a), in which the preposition phrase *le-Rina* "to Rina" is in a preposed position, suggesting that the prepositional phrase raises to the focus position.

In addition, PP-scrambing and VS word order are incompatible:

(13)	a.	<sup>°</sup> etmol natan <b>Dani</b> matana <b>le-Rina</b>		
		yesterday gave Dani present to-Rina		
		"Dani gave Rina a present yesterday."		

- b. ??<sup>°</sup>etmol natan **Dani le-Rina** matana yesterday gave Dani to-Rina present "Same."
- (14) a. <sup>°</sup>etmol heniax **Dani** <sup>°</sup>et ha-vaza <sup>°</sup>**al ha-šulxan** *yesterday placed Dani* Acc the-vase on the-table "Yesterday, Dani placed the vase on the table."
  - b. ??<sup>°</sup>etmol heniax **Dani** <sup>°</sup>**al ha-šulxan** <sup>°</sup>et ha-vaza yesterday placed Dani on the-table Acc the-vase "Same."

In (13b) and (14b), the subject noun phrase *Dani* and the prepositional phrases *le-Rina* "to Rina" and *a ha-šulxân* "on the table" cannot co-occur to the left of the object. Because of this, Belletti and Shlonksy argue that there is a Focus projection (FP) between VP and Agr<sup>o</sup>P (PrP in the terms assumed here)<sup>7</sup>, to which the focused constituent moves (whether this is the subject NP or the prepositional phrase):

(6-10) le-haxzir **le-Rina** <sup>°</sup>et ha-maftaxot to-return to-Rina Acc the-keys "to return the keys to Rina"



The word order restrictions seen in (13b) and (14b) are due to competition between the subject noun phrase and the locative PP for the specifier of this Focus projection.

Returning now to Rural Palestinian Arabic, Belletti and Shlonsky's proposal derives the desired word order in an example like (2a), repeated below:

<sup>&</sup>lt;sup>7</sup>Belletti and Shlonsky argue that in Hebrew, the specifier of FP projects to the left, whereas in Italian it projects to the right. Their proposal is formulated in a pre-minimalist Principles and Parameters framework which allows such stipulations on phrase-structure. It is not clear that such a stipulation would be formulable in the Minimalist Program.

 (2) a. mayyal fi-hal-hôš fîh hanâk yaxôr la-'afandi turned3MS in-this-yard THERE there stall to-Efendi "He turned into this yard; there was a stall there belonging to some Efendi." (118.4)

The locative adverb *hanâk* "there" could be analyzed as having risen into Focus Phrase:



However, in the remainder of the examples in (1) and (2) above, Belletti and Shlonsky's analysis encounters difficulty, in that it would require unusual extraction procedures. For example, in each example in (1) and (2) (repeated below), the second preposed locative is understood as being in a predicative relationship with the noun phrase, and its base position is analyzed as the complement of N.

 a. <sup>c</sup>išrîn alf <sup>c</sup>ala abû-k twenty thousand [lera] against father-cl2MS
 "20,000 [lera] against your father"

- b. arba<sup>c</sup>t alâf lêra <sup>c</sup>a-l-bank *four thousands lera on-the-bank* "4000 lera on the bank"
- (2) a. bâb la-l-fatwa <sup>c</sup>ind-i *door to-the-law at-cL1S*  "a door to the law at me"
  - b. habbe min-hin *piece from-cL3FP* "a piece of them"

In order to apply Belletti and Shlonksy's analysis to these examples, we would have to be able to extract the constituent in question out of the noun phrase first, as shown in (6-12):

(6-12) kuttēnāt-ak, inçān <sup>c</sup>înd-ak **min-hin** habbe *figs-cL2MS, if at-cL2MS from-cL3FP seed* "your figs, if you have *one* left...!"



In Minimalist terms, moving the NP-internal prepositional phrase to the Focus Phrase would involve two separate operations: moving the PP to an A'-position in NP, and then to adjoin to FocP. Each of these operations would require independent motivation in the form of a strong feature that would need to be checked. To motivate the first transformation of the PP, from the base position as the complement of N to the position adjoined to NP would therefore require that an A-chain be exhaustively included within a single maximal projection. This would in turn require a stipulation as to why this putatively strong feature could not be checked by the PP in its base position, as opposed to undergoing raising first.

Belletti and Shlonsky argue that PP scrambling is a result of leftward A-movement, rather than A'movement, justifying this claim with the observation that a clitic pronoun in the scrambled constituent cannot corefer with the embedded noun phrase, as coreference implies reconstruction, and A-movement in general is held to not allow reconstruction (this amounts to a claim that a disjoint reference can be used as a diagnostic for A-movement):

(15) a. baka fi-bêt-him ūlâd
was3MS in-house-cL3MP childrenMP
"\*in their, house were children,"
"in their, house were children,"

However, as we saw previously, a noun phrase at the right edge of the clause can control agreement marking on a preceding participle:

(16) a. baka fih kâ<sup>c</sup>dîn fi-bêt-him <sup>c</sup>asçar
 *was3MS THERE sitPARTMP in-house-cl3MP soldiersMP* "There were living, in their," house soldiers,"

Following the analysis in Chapter 2, the participle  $k\hat{a}^{c}d\hat{n}$  "living" heads a small clause that includes a PRO argument controlled by the noun phrase *casçar* "soldiers." This is illustrated in (6-13), which depicts the LF structure of example





In (6-13),  $PRO_1$  would precede the noun phrase in the surface string, but would be c-commanded by it at LF, where the binding relation between the two would be established. Therefore, the small clause PRO  $k\hat{a}^c d\hat{n} han\hat{a}k$  "PRO living there" must be reconstructed to a position within the c-command domain of the noun phrase, as shown in (6-13). Thus, there is an apparent paradox implied by (16): PP-scrambling in the the former seems to require an A-movement analysis that resists reconstruction, because there must be disjoint reference between the pronoun clitic in *bêt-him* "their house" and *casçar* "soldiers," while the agreement marking on the participle seems to require A'-movement which does allow reconstruction.

#### 6.4.2 *Inversions in Transitive Clauses*

Interestingly, similar word order inversions occur in the post-verbal field of clauses with transitive verbs, and seem to be motivated by factors

including noun phrase definiteness and prosodic weight, as is the case with post-verbal inversions in existential constructions. In both kinds of construction, both indefinite and definite object noun phrases tend to precede prepositional phrases with full NP arguments. If the prepositional phrase includes an inflected pronoun, an indefinite tends to follow it, while a definite precedes it. Heavy noun phrases frequently follow the prepositional phrase. However, none of these observations is absolute: indefinite noun phrases do precede inflected prepositions, heavy noun phrases can precede a prepositional phrase, and definite noun phrases can follow the preposition phrase.

These various possibilities are illustrated below. The examples in (17) illustrate inverted post-verbal word order, with the prepositional phrase complement preceding an indefinite object noun phrase:

(17)	a.	<sup>c</sup> aķķabat	min-ha	ķann	îne zġîre	
		held-back31	FP from-cL3F	P bottlei	FS smallFS	
		"She retain	ned of it a sr	nall bot	tle." (42.16)	
	b.	u-ḥuṭṭu	°alê-h	çêl	u-nușș	
		and-put3MS upon-cL3MS weight and-half				
		"and the	ey put on hi	m a wei	ght and a half.'	" (21.2)

The examples in (18) show definite noun phrases preceding the prepositional phrase complement. In the source text, both the object NP and the PP-complement have been previously mentioned in the discourse:

(18) a. kâl "la<sup>3</sup>a, bidd-na nidhaš tîz-ak fi-s-sirwâl, ya šêx" said3MS no, wish-cL1P stick1P rear-cL2MS in-the-uniform,oh Sheikh" "He said, 'no, we're going to stick your rear in uniform, Sheikh'." (15.2)

 b. xâfu l-ġazzâye w-harabu w-xallu krâṣ-him feared3MP the-bandits and-fled3MP and-left3MP ash-bread-cL3MP fi-n-nâr in-the-fire "The bandits panicked and fled and left their ash-bread in the fire." (38.2)

Those in (19) show heavy-NP shift:

- (19) a. hațțat **°a-ğurh-e min mîyyt il-hayâh** *put3FP on-wound-cL3MS from water the-life* "She put on his wound [some] of the water-of-life." (42.5)
  - kâmat sawwat la-bint-ha haz-zawwâde 'ala uşûl-ha rose3FP made3FP to-daughter-cL3FP these-provisions as requirements-cL3FP
     "Then she made for her daughter these provisions as was proper." (45.7)

Similar inversions occur following active participles of transitive verbs, showing that inversion occurs independently of whether the verb is a tensed form or not. This is illustrated in (20):

- (20) a. bakêt **hâțiț fi cibb-i açam min ṣarâra** *was1S putpartMS in pocket-cL1S some from stones* "I had put in my pocket several stones." (17.3)
  - b. w-il-masîḥ mâsiç f-êd-e luxra çtâb içbîr and-the-Messiah holdPARTMS in-hand-cL3MS another book big a<sup>c</sup>la min râs-e taller than head-cL3MS "...and the Messiah was holding in his hand another big book, taller than his head." (64.3)
  - c. iftaçrat inn-e **šâyif °alê-ha iši** *thought3FP that-cL3MS see*<sub>PART</sub>*MS upon-cL3FP something* "She thought that he had seen something against her." (60.3)

The word orders shown in (20) are marked. In the unmarked case, the object noun phrase precedes the prepositional phrase complement. This is shown below; the examples in (21) show participles hosting pronoun clitics, which (necessarily) precede the prepositional phrase, while those in (8) show a full NP preceding the PP:

(21) a. bâķi <sup>c</sup>ind-e b-îği <u>t</u>ala<u>t</u>în bêộe mmaððre, *bepartMS at-cL3MS INDIC-come3MS thirty eggFS rottenFS*, hâțiț-**hin** fi hal-<sup>c</sup>ilbe *putpartMS-cL3FP in-this-box* "He had some thirty rotten eggs; he had put them in this box." (23.1)

b. baka ma<sup>c</sup>-i talt awâk titin u-fārim-hin was3MS with-cL1S three ounces tobacco and-chopPARTMS-cL3FP
<sup>c</sup>ala raddit şurmâyt-i on sole sandal-cL1S
"I had with me three ounces of tobacco, and I had chopped them on the sole of my sandal." (16.4)

 (22) a. ta-yçûnu mêxôîn çill iḥkûk-him mn-d-dêr IN-ORDER-be3MP takepART<sup>MPL</sup> all rights-cL3MP from the-monestery w-imsâwyîn-him fi çill il-iḥkûk iç-çanâysîye and-be-equalpART<sup>MPL</sup>-cL3MP in all the-rights the-ecclesiastical "...in order to retain all their rights from the monastery, and to be their equals in all ecclesiastical rights." (56.1)

- b. u-hu hâmil hal-kirțalle malâne waraş çlâb <sup>c</sup>a-râs-e and-he carryPARTMS this-basketFS fullFS manure dogs on-head-cL3MS
  "...while he was carrying a basket full of dog manure on his head." (54.7)
- c. w-il-nûrîye ḥâmle l-kuţţên fi-ç-çîs <sup>c</sup>a-ðahir-ha and-the-gypsyFS carryPARTFS the-figs in-the-bag on-back-cL3FP "...while the gypsy was carrying the figs in the bag on her back." (20.6)

According to most analyses of Arabic clause structure, participles in do not raise out of the thematic domain of the clause<sup>8</sup> (c.f. Halila 1992; Eid 1993). In the present framework, this means that they do not raise past PrP into TP. This is seen in their inability to host the *ma…š* negation morpheme (c.f. Chapter 4). However, as can be seen in (21) above, they host object pronoun clitics,

assign accusative case, license telic aspectual readings, and agree with their external arguments, all of which indicate that they raise into PrP, adjoining to its head.

Therefore, we can deduce that participles can occur no higher and no lower than the head of PrP. It follows from this that post-verbal word order inversions have to take place within the VP. Given that prepositional phrase complements are generated as sisters to V<sup>0</sup>, a leftward A-movement analysis of inversion would require that an A-chain be contained exhaustively within one maximal projection. This might be technically feasible under the definition of checking domain given in Chomsky (1995: 178), according to which the complement position is excluded from the "checking domain." The PP would be generated as the complement of V, and would raise to the specifier of VP to check some as yet undetermined feature.

Alternately, should we wish to argue that these word orders are derived by rightward movement of the noun phrase, we will have to face examples

<sup>&</sup>lt;sup>8</sup>The main reason for arguing that Arabic participles do not raise is their position relative to negation and their tense interpretation. In most forms of Arabic, participles cannot host the *ma…š* negation morpheme, and are instead negated by *miš/maš/muš* or by one of the pronouns of negation (*ma-nî-š, ma-hû-š, ma-ntî-š, etc.*). This is also true of adjectival, nominal, and prepositional predicates (with the exception of inflected prepositions noted above: see Eid 1993).

Likewise, "bare" participles denote a punctual present tense, similar in some respects to the English present continuous and/or present perfect (depending on the *aktionsart* of the root verb from which the participle is derived). Tensed verbs in the imperfect are ambiguous between a punctual present tense, and a habitual/iterative interpretation. The imperfect can also be ambiguous with regards to its tense reference; it can refer to the past if it follows a past-tense marker such as a tensed auxiliary. Participles, on the other hand, have to occur in a syntagm with a past-tense auxiliary in order to refer to the past tense. Of course, it must be kept in mind that participles (particularly those of transitive verbs) have a perfective interpretation similar to the English present perfect, in which a completed action is evaluated in terms of the moment of utterance.

This contrast between these kinds of predicates and tensed verbs (which are inflected for person) can be readily explained by claiming that participles, etc. do not raise out of the VP-complex into T in the syntax, while tensed forms (such as the perfect and imperfect stems) do. See Ouhalla (1990) for a discussion of negation and verb movement, Eid (1993) for a discussion of negation and non-verbal predicates, and Shlonsky (1997: 94-108 for discussion of Arabic; 25-42 for Hebrew) for a discussion of the syntax of participles.

like (2c) above, in which the right-dislocated constituent is the head of the NP:

- (23)a. kâl "kult-l-ak rûhin kuttēnât-ak w-inçân **<sup>c</sup>ind-ak** said3MS "said1S-to-cl2MS went3FP figs-cl2MS and-if at-cl2MS šârib šârib min-hin habbe, b-akDûş u-b-axalli from-cl3FP seedFS, INDIC-shave1S moustache and-leave1S moustache "He said, 'I told you your figs are gone, and if you have [even] a piece [left] of them, I'll shave half my moustache and leave half'." (20.7)
  - b. ðall **min il-arb<sup>c</sup>în wâḥad** *remained3MS from the-forty oneMS* "One of the forty remained." (42.4)
  - c. ya sîd-i rațîl-ak zġîr, bidd-i tsawwî-l-i oh lord-cL1S ratils-cL2MS small, wish-cL1S make2MS-to-cL1S min hal-ḥâǧar <sup>c</sup>iyārât from this stone weights "My Lord, your ratil is small; I want to make myself weights from this stone." (30.9)

The presentational clause in the example is *inçân <sup>c</sup>ind-ak min-hin ḥabbe* "if you have a piece of your figs [left]", in which the NP *ḥabbe* "seed, individual piece of fruit" is preceded by two prepositional phrases. *Ḥabbe* is understood to be in a (dislocated) partitive construction with *min-hin* "of them" (referring to the figs mentioned in the previous clause). Constructions of this sort are common in the data, and have an umarked word order of *NP min-NP*. This is illustrated below:

- (24) a. talat harâmîye wâhad min-him kêsi dâru min hân šâma three thieves one from-cL3MP qesi wandered3MP from here north mitl-ma tkûl <sup>c</sup>a-nâblis like-what say2MS to-Nablus "Three thieves, one of them was a Qesi, wandered from here north, like you might say to Nablus." (37.1)
  - b. yôm-ha ḥaçmat çiḥlit **wâḥade min ʿīnê-ha** *day-cL3FP happened3FP make-up3FP oneFS from eyes-cL3FS* "That day, it happened that she painted one of her eyes." (58.4)

- c. kâmat hâði hallat **maṣṣîṣa min ihbâl il-xême** *rose3FP this3FP untied3FP thread from ropes the-tent* "Then she untied a thread from the tent-ropes." (38.5)
- d. çill-ma kâl "hêðða" yuðrub bi-s-sêf every time said3MS 'like-this hit3MS with-the-sword habil min ihbâl il-xême rope from ropes the tent "Every time he said 'like so' he cut with the sword one of the tent ropes." (43.7)

The string *NP-min-NP* is a noun phrase constituent (which I will refer to as a partitive NP), presumably with a structure like the following, in which the prepositional phrase is a complement of the head noun *habbe* "piece, seed":



A partitive NP, including the nominal head and the PP complement, can also be moved. The following examples, a *NP-min-NP* constituent has been raised to the "subject" position of a clause:

- (25) a. aḥsan-**ma bint min banât-na** tit<sup>c</sup>allaḥ fî-h *better not daughter from daughters-*cL1P *hangs*3FP *in-*cL3MS "It's better that no daughter of ours falls for him." (43.5)
  - xaṭra ʿasçari min ʿasçar ibrahîm bâša ištara bôšit râyib once soldier from army Ibrahim Pahsa bought3MS pitcher yoghurt "Once, one of Ibrahim Pasha's soldiers bought a pitcher of yoghurt." (14.1)

 c. aşil-ha inn šêx min mašâyix <sup>c</sup>urbân il-balka origin-CL3FP that sheikh from sheikhs bedouin the-balka bâķi maţlûb la-l-<sup>c</sup>asçar bepartMS demandpasspartMS to-the-army "Its origin was that one of the sheikhs of the bedouin from al-Balqa had been called up for the army." (15.1)

 d. wâḥad min iộ-ộyûf kâm nuṣṣ il-lêl one from the-guests rose3MS middle the-night ta-yṭayyir maiy IN-ORDER let-fly3MS water "One of the guests got up in the middle of the night to make water." (24.6)

That the first noun in the string (such as *habbe* "piece" above) is the head of the NP can be seen in that it controls agreement with external predicates. In each of the following examples, the head of the partitive has feminine gender, and controls feminine agreement on the verb:

- (26) a. kâmat ğamâ<sup>c</sup>a min <sup>c</sup>urbân ġazze
   rose3FS groupFS from bedouin Gaza
   "A group of Bedouin from Gaza came." (62.1)
  - ka<sup>c</sup>dat <sup>c</sup>ind-ha wâḥade min niswân ixwit il-bint
    sat3FS at-cL3FP oneFS from women sisters the-girl
    "One of the women who were the girl's sisters sat by her." (37.5)

The head noun can also be modified by a quantificational determiner (27a-b) or the definite article (27c):

(27) a. ķâm hâộa mall la-çill wâḥad min ūlâdt-e xurğ mâl rose3MS thisMS filled3MS to-every one from children3MS jug money "Then he filled for every one of his children a jug of money."
 (51.2)

- b. hâða bakî-l-e talt banât, çill wâhde min-hin thisMS bepartMS-to-cL3MS three daughters, each oneFS from-cL3FP bi-tkûl la-l-kâmar "ġîb t-ak<sup>c</sup>ud mitrah-ak"
  INDIC-say3FP to-the-moon 'go IN-ORDER-sit1S place-cL2MS "He had three daughters; each of them would say to the moon, 'go so that I can take your place!'" (46.1)
- c. **il-wâḥad min-him** ma-b-iswa bazķa *the-one from-cL3MP not INDIC-be-worth3MS spit* "Not one of them is worth a spit." (56.2)

The prepositional sub-constituent of the partitive NP can be extraposed, as can be relative clauses and other noun phrase complements:

(28) a. kâl "'a-l-yôm law in hada mât min 'êlt-i said3MS 'at-the-day if that someone died3MS from family-cl1S wala şâr illi şâr than happened3MS REL happened3MS "He said, 'if only one of my family had died today, rather than had happened what happened'." (58.4)

Given the structure proposed for partitive NPs in (6-14), for *habbe* in (2c) to occur in its position at the right edge of the clause as a result of rightward extraposition would require that the head of a noun phrase can undergo extraposition, as illustrated in (6-15) below. The head of *habbe min kuttenât-ak* has been right-adjoined to VP (following widely held assumptions regarding the syntax of rightward extraposition<sup>9</sup>):

<sup>&</sup>lt;sup>9</sup>c.f. Büring and Hartmann (1995), Chung and McCloskey (1987), McCloskey (1997), Rochemont and Culicover (1990).



Allowing the head of a constituent to extrapose out of it is undesirable theoretically, as extraposition is a form of A'-movement, usually reserved for XP constituents (c.f. the Chain Uniformity Condition as discussed in Chomsky 1995: 91<sup>10</sup>; see also p. 318).

Another problem for a rightward dislocation analysis of the nominal head *habbe* in (2c) is what the motivation for it would be. In the Minimalist Program, all movement operations are driven by the need to check uninterpretable features, and overt movement is driven by the need to check strong features. Since rightward extraposition is overt movement, there should be a strong feature being checked as a result of the operation. However, this would require stipulation that the VP projection (and crucially not the head of VP) has a strong feature that can only be checked by rightward movement of a

<sup>&</sup>lt;sup>10</sup>However, it is not clear that the Chain Uniformity Condition is relevant to rightward extraposition. Chomsky defines the CUC as a well-formedness condition on LF-representations. Rightward extraposition, however, is regarded to be a PF-phenomenon that undergoes reconstruction at LF. Therefore, it is not clear that the CUC would apply to rightward extraposition at all.

nominal head inside it. Instead, PP-scrambling is derived more expediently by a P-movement analysis.

## 6.5 **Intonation and Stress in Rural Palestinian Arabic**

The analysis of P-movement presented so far makes certain predictions regarding to pronounciation of an Arabic clause. In particular, it predicts that the most deeply embedded constituent (as determined at PF) will be pronounced with some expression of tonic focus. In this section, I present evidence suggesting that this prediction is true. I show that in several recorded examples of existential constructions, the noun phrase or some sub-constituent of the noun phrase is pronounced with increased pitch, and that the constituent so pronounced contributes the distinctively new information presented in the clause. Distribution of prominence within the focused noun phrase is argued to be due to constituency constraints on the application of P-movement.

The examples in (29) below are from conversations concerning the topic of livestock, and *ġanam* "sheep" in particular. In Arabic, terms for describing animals are mass nouns (like English *cattle, sheep, livestock,* etc.), and are "individuated" through terms like *râs* "head" (just as *head* is used in English to describe quantities of cattle), or through the use of the "singulative" affix *-a(t)*: *ġaname* "a sheep", *cašara râs ġanam* "ten head of sheep". Both (29a) and (29b) have reduced partitives that omit the classifying noun *ġanam*, which has been established as the topic of the discourse at the point of utterance (stressed syllables in bold-face):

baka <u>Sand</u>-na **mîy**tên, ya ni, **mîy**tên arb **în** râs was3MS at-cl1P two-hundred, that-is, two-hundred twenty head (29)a. "We had 200...that is...240 head [of sheep]."
b. baka <sup>c</sup>and-na b-íği **mîy**tên... w-arb<sup>c</sup>în râs was3MS at-cL1P INDIC-come3MS two-hundred...and-twenty head "We had roughly two hundred...and twenty head."

In the examples in (29), the most prominent stress (in terms of raised pitch and prominence) falls on the numeral quantifiers, while the noun *râs* "head" has some of the most reduced stress in the clause. In each of these cases, the concept of *râs ġanam* "head of sheep" is very prominent in the discourse<sup>11</sup>, so the new information in the examples is the cardinality of the set of sheep possessed by the speaker. Therefore, the degree of stress placed on the quantifiers reflects their information status within the clause.

In (30), the topic is cattle, as can be seen by the "broad subject" *bakarât* "cows" in (30a):

a.	bakarât, <u>baka</u> c <u>and</u> -na b-îği c <b>a</b> šara, it <b>nâ</b> šir râs cows was3MS at-cL1P INDIC-come3MS ten, twelve head "Cows, we had roughly ten, twelve head."
b.	baka <sup>c</sup> and-na, wallah b-îği b-akûl-ak was3MS at-cl1 by-God INDIC-come3MS INDIC-say-to-cl2MS
	ya <b>tis<sup>c</sup>a</b> ya <b>tamanya</b> bakar
	either nine or eight cattle
	"We had roughlyI'd say either nine or eight cows."
C.	<b>baķa ʿand-</b> na baķar was3MS at-cL1P cattle "We had cattle."
	a. b. c.

In (30), the subject of *bakar* "cattle" or *bakarât* "cows" is introduced; in (30a), *bakarât* is a left-dislocated topic, which provides the discourse antecedent for the reduced partitive *cašara, itnašar râs* "ten, twelve head." In (30a-b), stress patterns similar to those in (30) are seen: prominence is on the quantifiers

<sup>&</sup>lt;sup>11</sup>However, *râs* [*bakar*] is not being used referentially, but is rather identifying the set of referents being quantified.

*cašara, itnašar* "ten, twelve…" and *ya tis ca ya tamanya* "either nine or eight", rather than on *râs* or *ðyâl* "tails." In (30c), there is no prominence at all in the noun phrase; this example was uttered towards the end of the topic, and seems to be a summary or conclusion to the discussion of cattle. Therefore, none of the information included in the sentence is discourse-new per se, but there are no referential arguments either. A previous assertion is simply being repeated, which may explain the lack of prominence on the noun phrase.

So far, we have looked at examples where the element of the clause pronounced with tonic stress is a numeral quantifier, which represents the new information in the clause, the noun modified by the quantifier having been previously established in the discourse, and not actually pronounced in most the examples. Next, in (31), at a point in the discourse at which the discussion has moved to history, the topic of livestock is reintroduced with the nouns *in<sup>c</sup>âğ* "ewes" and *ganam* "sheep, goats":

(31) <sup>c</sup>a-hôn ağu, tal<sup>c</sup>at, ağit nâs imšarraķ <sup>°</sup>amḥâlit, ya<sup>c</sup>ni, a. to-here came3MP, left3FP, came3FP people eastern place, that-is, iš-šarķîye ağat il...trâš-hum blâd illi ağat came3FP to...herds-cl3MP Rel came3FP country the-east ma<sup>c</sup>-hum **in<sup>c</sup>âğ**, ma<sup>c</sup>-hum **ġanam**, ma<sup>c</sup>-hum... *with-cl3MPewes, with-cl3MP rams,* with-cL3MP... "To here came, left, came people from the east, from a place, that is, the country to the east, their herds that they brought with them ewes, with them rams, with them..."

In (31), the topic of livestock is being reintroduced to the discourse at a stage later than the examples in (31) and (32), and in a different context. While the livestock possessions of the speaker were being discussed before, the new topic concerns historical events involving a migration of sheep-herders from land to the East (*il-iblâd iš-šarļâye* "the eastern lands"). The example details the livestock they brought with them. Therefore, these mentions of livestock terms

are discouse-new information, since they do not have referential denotations and they belong to a context which is new to the discourse. Correspondingly, we see that prominence is on the nouns  $in^c \hat{a} \check{g}$  "ewes" and  $\dot{g}anam$  "rams" themselves, rather than on a numeral quantifier, as we previously.

I assume a phrase structure like the following for the noun phrase:

(6-16) mîytên w-arb<sup>c</sup>în râs [ġanam]
*hundred<sup>DUAL</sup> and-forty head sheep* "two hundred and forty head of sheep"



Given this structure, Zubizarreta's and Neeleman and Reinhart's proposals might be expected to place tonic stress on *râs* "head," since it is the most deeply embedded of the pronounced constituents. We might predict that the noun phrases in examples (31) and (32a,b) should show scrambling, since the head noun *râs* [ġanam] is the most deeply embedded metrically visible (ġanam not being pronounced) constituent in the noun phrase, but it is not the most prominent. As we saw above, this is the condition that Zubizarreta predicts to give rise to scrambling, as it entails a conflict between the Nuclear Stress rule and Focus Prominence rule (repeated below):

## (32) Nuclear Stress Rule

Given two nodes  $C_1$  and  $C_2$  that are metrical sisters, the one lower in the syntactic asymmetric c-command ordering is more prominent.

Given two sister nodes  $C_i$  (marked [+Focus]) and  $C_j$  (marked [-Focus]),  $C_i$  is more prominent than  $C_j$ .

Viewed in terms of meterical constituency, *mîytên w*-*arb*<sup>*c*</sup>*în* "two hundred forty" and *râs* "head" are metrical sisters. If *mîytên w*-*arb*<sup>*c</sup></sup><i>în* is marked for focus, then the Focus Prominence Rule will be in conflict with the Nuclear Stress Rule, which will assign prominence to *râs*, which is lower in the asymmetric c-command order. Therefore, we would predict that P-movement would rearrange them to \**râs mîytên w*-*arb*<sup>*c</sup></sup><i>în*, which clearly does not happen.</sup></sup>

The reason such an ordering of consituent does not develop may be that while a PF operation is not subject to principles such as Attract and Greed, P-movement is still subject to restrictions on constituency. In particular, I assume that P-movement has to apply to XP-constituents (and that it is in effect a variety of A'-movement). Therefore, P-movement will not be possible in the phrase structure shown in (6-16), because  $r\hat{as}$  is not an XP-constituent. Rather, it is the head of the constituent containing the focused constituent  $m\hat{y}t\hat{e}n w-arb^c\hat{i}n$ . Since P-movement is not applicable, deaccenting applies as a last resort, as per Zubizarreta's analysis of English and German.

## 6.6 **Chapter Summary**

In this Chapter, I examined a set of data that present complications for the syntactic analysis developed in Chapters 2 and 3. These data involved apparent examples of "secondary" PP fronting in existential constructions (which I refer to as PP-scrambling), which would be difficult to motivate in the model of grammar I am assuming. Instead, I argued that these word order inversions are derived by a P-movement, a PF-operation that adjusts the linearization of the pronounced string without affecting its LF-representation. This analysis was supported by a comparison with PP-scrambling in the post-verbal field of transitive verbs. I compared this analysis with proposals made by Belletti and Shlonsky (1995), according to whom PP-scrambling is a form of A-movement. I argued that this analysis is unformulable in the Minimalist Program, and so an analysis based on P-movement is to be preferred.

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Abbreviations: L&P = Linguistics and Philosophy; LI = Linguistic Inquiry; LR = The Linguistic Review; NLLT = Natural Language and Linguistic Theory; NLS = Natural Language Semantics; NELS = North East Linguistic Society; PAL = Perspectives on Arabic Linguistics: Proceedings of the Annual Symposium on Arabic Linguistics; SALT = Conference on Semantics and Linguistic Theory; SLRA = Semitic Linguistics Research Archive (http://www.usc.edu/dept/LAS/linguistics/semitic/index.html); WCCFL = West Coast Conference on Formal Linguistics

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