

The Syntax of Ellipsis in Libyan Arabic:

*A generative analysis of sluicing, VP ellipsis,
stripping and negative contrast*

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Abstract

This dissertation explores the syntax of ellipsis in Libyan Arabic (LA henceforth) focusing on sluicing, verb phrase ellipsis, stripping and negative contrast. These elliptical structures have not been studied in the language before; therefore, this study provides the first description of these phenomena from a generative perspective.

Chapter three provides an overview of the status of ellipsis in syntactic theory and shows that there is compelling evidence that several ellipsis sites contain syntactic structure, which consequently can be treated as PF deletion phenomena. Chapter four investigates sluicing and attempts to determine whether what appears as sluicing is sluicing or pseudosluicing. It is revealed that some apparent cases of sluicing are instances of pseudosluicing despite their superficial appearance as sluicing. This follows from the fact that in this null subject language with covert copulas and non-case-marked *wh*-expressions, sluicing and pseudosluicing can be indistinguishable in some contexts.

Chapter five discusses the interaction between preposition stranding (*p*-stranding) and sluicing. It concludes that the apparent cases of *p*-stranded sluices are instances of pseudosluicing. Therefore, two sources of IP ellipsis are proposed: sluicing and pseudosluicing. The former derives from regular *wh*-questions and conforms to the *p*-stranding generalisation; while the latter results from the deletion of a clefted clause whose pivot is an extracted *wh*-phrase. The fact that the preposition in cleft *wh*-questions resides in the relative clause, which is eventually deleted in pseudosluicing, yields the illusion that such constructions involve *p*-stranding. Finally, the proposed analysis provides novel evidence for Shlonsky's (2002) analysis of Arabic Class II *wh*-questions as copular clauses.

Chapter six discusses two cases of verb phrase related ellipsis, referred to as modal ellipsis and verb-stranding VP ellipsis. In the former, the complement of the modal verb is deleted, while in the latter, where the lexical verb is assumed to have raised to T, the complement of the main verb plus all *v*P-related material are elided. Given that modal ellipsis exhibits missing antecedents and binding effects and allows for extraction in some contexts, it is proposed that such an ellipsis is a gap with internal syntactic structure, which thus can be analysed as VP deletion at PF. As for the putative verb-stranding VP ellipsis, I will propose that this should not be analysed as VP ellipsis as in Farsi, Hebrew and Finnish. Rather, it should be reducible to null objects and/or individual constituent drop. This claim rests on two arguments. First, unlike VP ellipsis, the putative verb-stranding VP ellipsis is subject to definiteness restrictions; second, it differs from VP ellipsis with respect to the deletion of *v*P-related material.

Finally, chapter seven is concerned with stripping and negative contrast. It is proposed that both constructions involve TP ellipsis. The remnant in such constructions undergoes movement to the left periphery followed by TP deletion. However, stripping and negative contrast are distinct in terms of their interaction with information structure, that is, while the remnant in stripping is perceived as new information focus, in negative contrast it is interpreted contrastively.

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Declaration

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Abbreviations

1	First Person
2	Second Person
3	Third Person
*	Ungrammatical
√	Grammatical
ACC	Accusative
AGR	Agreement
Asp	Aspect
CP	Complementiser Phrase
COMP	Complementiser
DAT	Dative
EPP	Extended Projection Principle
F	Feminine
FP	Focus Phrase
FUT	Future
GEN	Genitive
LF	Logical Form
M	Masculine
N	Noun
NP	Noun Phrase
NEG	Negation
NegP	Negation Phrase
NOM	Nominative
Op	Operator
PF	Phonological Form
P	Plural
Prog	Progressive
PRON	Pronominal copula
PST	Past
RM	Relative marker
S	Singular
Spec	Specifier
SUBJ	Subjunctive
t	Trace
T	Tense
TP	Tense Phrase
V	Verb
VP	Verb Phrase

Transcription

Consonants

Arabic Letter	Symbol	Phonological Transcription
ء	ʔ	glottal stop
ب	b	voiced bilabial stop
ت	t	voiceless alveolar stop
ث	θ	voiceless dental fricative
ج	ʒ	voiced palatal affricate
ح	ħ	voiceless pharyngeal fricative
خ	x	voiceless uvular fricative
د	d	voiced alveolar stop
ذ	ð	voiced dental fricative
ر	r	voiced alveolar flap
ز	z	voiced alveolar fricative
س	s	voiceless alveolar fricative
ش	ʃ	voiceless palato-alveolar fricative
ص	ʂ	emphatic s
ض	ɖ	voiced velarized alveolar stop
ط	ʈ	emphatic t
ظ	ɗ	voiced velarized dental fricative
ع	ʕ	voiced pharyngeal fricative
غ	ɡ	voiced uvular fricative
ف	f	voiceless labiodental fricative
ق	q	velar glottalized plosive
ك	k	voiceless velar stop
ل	l	voiced alveolar lateral
م	m	voiced bilabial nasal
ن	n	voiced alveolar nasal
ه	h	voiceless glottal fricative
و	w	voiced bilabial semi vowel
ي	y	voiced palatal semi vowel

Vowels

Central Open
 Front Closed
 Back Closed Rounded

Short

a
 i
 u

Long

ā
 ī
 ū

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Chapter 1

Introduction

1. General background

Ellipsis refers to the omission of elements that can be recoverable from the context. Following Smith (2001: 176), the phenomenon of ellipsis cannot be easily classified as it involves ‘phonology (due to its similarity to deaccenting), syntax (by virtue of its distribution), semantics (evidenced by its apparent licensing conditions), and pragmatics (because of the cognitive load it imposes)’. The central question with respect to ellipsis is its linguistic representation, which has always been a source of debate.

There are, in fact, two lines of thought with respect to the linguistic representation of ellipsis: deletion and non-deletion theories. The deletion account argues that ellipsis is syntactically represented but deleted at the PF interface, that is, it has syntax but not a phonological representation (Sag 1976; Chomsky & Lasnik 1993; Merchant 2001; Aelbrecht 2010; van Craenenbroeck 2010a). On the other hand, the non-deletion approach considers ellipsis as a null category (devoid of syntactic structure) that can be interpreted either as a regular pronoun (Hardt 1993; Lobeck 1995) or by copying the semantic component of the antecedent into the ellipsis site (Chung et al. 1995; Fortin 2007).

This dissertation explores the syntax of ellipsis in Libyan Arabic (LA henceforth). Specifically, it is concerned with sluicing, verb phrase ellipsis, stripping and negative contrast. Despite being extensively studied in languages such as English, Greek and Spanish, these types of ellipsis, to the best of my knowledge, have not been discussed in Libyan Arabic. Therefore, the present study provides the first description of these ellipsis phenomena from a generative perspective.

1.2 The data

The data used in the study represent different varieties of western Libyan Arabic spoken in the region of Tripolitania. The data were collected from and judged by native speakers of Libyan Arabic. Informants were asked to read different elliptical constructions and provide their judgements of grammaticality. Below is a brief description of the ellipsis data discussed in this study.

1.2.1 Sluicing

Sluicing is an elliptical structure involving the ellipsis of the sentential portion of a constituent wh-question, leaving only a wh-phrase remnant behind, as shown in (1) and (2).

- (1) Ali grē riwaya, lakən ma-nəddəkər-š bətəḥdīd
Ali read.3MS novel but NEG-remember.1S-NEG precisely
ʔayya riwaya.
which novel
'Ali read a novel, but I don't remember exactly which novel.'

- (2) Ali zār waḥəd, lakən miš ʕarəf man.
Ali visited.3MS someone but NEG know.1MS who.
'Ali visited someone, but I don't know who.'

1.2.2 VP ellipsis

Verb phrase ellipsis involves the deletion of an entire verb phrase. Two cases of verb phrase related ellipsis are discussed in this dissertation; one is licensed by the modal verb *yəgder* 'can' and the other is licensed by main verbs, as illustrated in (3) and (4) respectively.

(3) Omar yəgder yisafər bukra, lakən anē ma-nəgder-š.
 Omar can.3MS travel.3MS tomorrow but I NEG-can.1S-NEG
 ‘Omar can travel tomorrow, but I can’t.’

(4) Ali šrē siyyara, w hətta anē šrēt.
 Ali bought.3MS car and too I bought.1S
 ‘Ali bought a car, and I did too/bought (a car) too.’

1.2.3 Stripping and negative contrast

Stripping and negative contrast involve sentential ellipsis eliding the whole clause except for a remnant which is normally accompanied by a focusing adverb in the former and a negative particle in the latter. These two forms of clausal ellipsis, i.e. stripping and negative contrast, are discussed in the study. They are exemplified in (5) and (6) respectively.

(5) anē b-nsafər l-iṭalya, w iḥtimal hətta Omar.
 I FUT-travel.1S to-Italy and probably too Omar
 ‘I will travel to Italy, and probably Omar too’

(6) Omar mšē l-s-sinəma, miš l-ž-žamʕə.
 Omar went.3MS to-the-cinema, not to-the-university
 ‘Omar went to the cinema, not to the university’.

1.3 Issues of the study

The present study, apart from describing the ellipsis phenomena stated above, attempts to discuss and account for the following issues.

1.3.1 Sluicing

Sluicing and pseudosluicing are indistinguishable in some contexts in Libyan Arabic, as illustrated in (7). Pseudosluicing is defined as ‘an elliptical construction that resembles a sluice in having only a wh-XP as remnant, but has the structure of a cleft, not of a regular embedded question’ (Merchant 1998: 91).

- (7) Ali zār waḥəd, lakən miš ʕarəf man.
 Ali visited.3MS someone but NEG know.1MS who
 ‘Ali visited someone, but I don’t know who.’

Sluicing

- a. man_i pro — zār — t_i.
 who pro visited.3MS

Pseudosluicing

- b. man_i t_i — (hu) — illi — Ali — zār ah.
 who (PRON) that Ali visited.3MS-him

This can be attributed to several factors. Firstly, this language is a null subject language which has no equivalent to the expletive ‘it’. Secondly, it has no present-tense copula forms in cleft structures. Thirdly, case is not marked morphologically in the language and thus there is no indication of whether or not the case of the sluiced wh-phrase is identical to that of its correlate. Therefore, one of the contributions of the study is to investigate the sluicing phenomenon and determine whether what appear as sluicing in the language are instances of sluicing or pseudosluicing.

Another significant aspect of sluicing is the observation that it allows preposition stranding (p-stranding). This constitutes a challenge to the p-stranding generalisation, which is viewed as an argument for deriving sluicing by wh-movement and PF-deletion (Merchant 2001). P-stranding under sluicing has been identified in other languages such as Spanish (Rodrigues et al. 2009), Brazilian Portuguese (Almeida & Yoshida 2007) and Polish (Szczegelniak 2006). Taking into account the previous

studies on p-stranding under sluicing, the study investigates and accounts for the p-stranding effects under sluicing in Libyan Arabic in order to determine whether sluicing in the language challenges the p-stranding generalisation. This has implications not only for the syntax of sluicing and pseudosluicing, but also for that of wh-movement in Arabic.

1.3.2 Verb phrase ellipsis

Two types of verb phrase ellipsis will be discussed in this thesis: modal ellipsis and verb-stranding VP ellipsis. The former involves deletion of the complement of a modal verb, while the latter deletes the internal arguments of the lexical verb, which is raised to T and survives deletion. The phenomenon of modal ellipsis has been found in languages such as French, Spanish, Italian and Dutch. Modal ellipsis can be analyzed as VP deletion (see Busquets & Denis 2001 for French and Johnson 2001 for English), an ellipsis site containing a ‘null proform’ with no internal syntax (Lobeck 1995; Depiante 2001), or a type of modal ellipsis that elides a TP constituent, as in Dutch (Aelbrecht 2008) and in French, Italian and Spanish (Dagnac 2010). In this study, I intend to discuss the syntax of modal ellipsis in Libyan Arabic and aim to determine whether it involves VP or TP ellipsis and whether it can be analysed as a PF deletion process or merely as a null proform.

For some languages, verb-stranding VP ellipsis has been analysed as VP ellipsis, despite the fact that it is indistinguishable from null objects/arguments in some contexts. In discussing this ellipsis phenomenon, this study aims to determine whether the putative cases of verb-stranding VP ellipsis under discussion involve VP ellipsis, as in Farsi (Toosarvandani 2009), Hebrew (Doron 1999; Goldberg 2005) and Finnish (Holmberg 2001), or just result from an argument/constituent drop strategy.

1.3.3 Stripping and negative contrast

This study also discusses the syntax of stripping and negative contrast and their interaction with information structure. Both have been analysed as a process of

deletion of a sentential portion preceded by remnant movement to the left periphery (e.g. Merchant 2004; Kolokonte 2008). The study discusses these two types of ellipsis and attempts to determine whether or not they can be derived by movement and deletion and how each interacts with information structure.

1.4 Objectives and significance of the study

To the best of my knowledge, this dissertation represents the first comprehensive description of sluicing, VP ellipsis, stripping and negative contrast in Libyan Arabic, which in itself can be considered a contribution to the understanding of the syntax of the language. Specifically, the study introduces and examines these types of ellipsis and shows how each is manifested in the language. Overall, the study aims to:

- (a) provide a description of sluicing and determine whether what appear as sluicing in the language are instances of sluicing (elliptical wh-questions) or pseudosluicing (elliptical wh-clefts).
- (b) provide an account of the apparent violation of the p-stranding generalisation and its implications for the theory of Arabic sluicing and wh-movement.
- (c) provide a description and analysis of modal ellipsis and verb-stranding VP ellipsis.
- (d) provide a description and analysis of stripping and negative contrast and their interaction with information structure.

1.5 Organization of the study

The dissertation consists of seven chapters followed by a conclusion. The present chapter introduces the issues, objectives and structure of the study. Chapter Two provides a description of some syntactic aspects of Libyan Arabic which are relevant to the issues under discussion. These include clause structure and typology, verbal morphology, negation and wh-question formation.

Chapter Three introduces ellipsis and discusses its status in syntactic theory. It reviews the structural approaches to ellipsis, such as the proform, LF copy and PF deletion theories, in addition to non-structural approaches and the problems they face. Despite the on-going debate with respect to whether or not ellipsis sites have internal syntactic structure, the chapter presents several arguments in favour of the assumption of syntactic structure in ellipsis.

Chapter Four deals with sluicing constructions and attempts to determine whether forms which appear as sluicing are instances of sluicing or pseudosluicing. Sluicing-defining diagnostics will be applied to Libyan Arabic data to determine the contexts in which sluicing and pseudosluicing appear. Chapter Five discusses the apparent violation of the ‘preposition stranding generalisation’, which is viewed as support for the claim that sluicing derives from regular wh-questions. The chapter attempts to provide an explanation of p-stranding effects under sluicing. This has implications for not only the syntax of sluicing, but also the syntax of wh-movement in Arabic.

Chapter Six discusses two types of ellipsis that can be categorised as verb phrase ellipsis, which are referred to as modal ellipsis and verb-stranding VP ellipsis. The chapter aims to determine what category is targeted by deletion in modal ellipsis and whether such ellipsis can be analysed as a proform or PF deletion of a fully represented syntactic structure. It also discusses verb-stranding VP ellipsis and attempts to find out whether it can be analysed as VP ellipsis. Chapter Seven is devoted to stripping and negative contrast. It aims to describe these two ellipsis phenomena and to provide an account capturing their syntactic distribution and interaction with information structure. The last chapter summarises the study and presents its conclusions.

Chapter 2

Some Syntactic Aspects of Libyan Arabic

2.0 Introduction

This chapter provides a brief description of some syntactic aspects of Libyan Arabic. It seeks to identify and present the general properties of the language by giving a descriptive overview of the language and some of its syntactic aspects, such as clause typology and structure, word order, verbal morphology, negation, and wh-questions.

2.1 The Arabic language and Libyan Arabic

The Arabic language can be considered a collection of local spoken varieties and a standard written language referred to as Modern Standard Arabic (MSA). Both, from a sociolinguistic perspective, exist in a diglossic situation. MSA is the standard variety of Arabic used in all Arabic-speaking countries in written communication in books, journals, newspapers, official documents and so on, and in formal oral communication such as in radio and television broadcasts, conferences and lectures.

The regional varieties are typically spoken and are acquired by Arabs as their first language. However, in recent years these local varieties have received more attention and recognition. Plenty of literary material, for example, poetry, stories, and plays, are written in local varieties; furthermore, with the emergence of the generative tradition, more local varieties of Arabic have been studied and documented.

It is worth noting that the local dialects differ from each other phonologically, morphologically and syntactically. They also vary according to the geographical area and the sociolinguistic context (i.e. urban, rural, Bedouin). As pointed out by Aoun et al. (2010: 2), 'the main geographical linguistic groupings are the Maghreb (mainly North Africa), Egypt, the Levant, and the Gulf'.

Libyan Arabic is a variety of Maghrebi Arabic spoken in North Africa. It includes three main dialects spoken in three dialectal areas: (a) the western area (Tripolitania and Fezzan), (b) the eastern area (Cyrenaica) and finally (c) the transitional zone extending from the western city of Misurata in the Tripolitania region and the city of Sebha in the south to Cyrenaica (see Owens 1984; Pereira 2008). The eastern dialects differ, in some features, from the western ones; whereas the transitional zone dialects exhibit features of both eastern and western dialects as well as having their own features (Pereira 2008: 53). The variety of Libyan Arabic considered in this study is Western Libyan Arabic, referred to henceforth as LA.

Libyan Arabic is argued to belong to the Bedouin type since it exhibits lexical, phonetic and syntactic features similar to those exhibited by Bedouin dialects spoken in the region (see Pereira 2008). For instance, it includes lexical items of Bedouin origin such as *dar* ‘he did’, *xəšš* ‘he entered’, and *tləf* ‘he went out’¹; furthermore, from a phonetic viewpoint, diphthong reduction, as in /ay/ and /aw/ to /ē/ and /ō/ respectively, is a feature found in the Bedouin dialects spoken in North Africa (see Pereira 2008: 54-55).

2.2 Clause typology and structure

There are two clause types in Libyan Arabic: verbless clauses and verbal clauses.

2.2.1 Verbless clauses

Verbless clauses lack a verbal predicate. They consist of a subject and a non-verbal predicate; in such clauses, the subject can be followed by a noun phrase, adjectival phrase, prepositional phrase or adverb phrase as the predicate. This is illustrated by the data in (8), (9) and (10).

¹ There is a considerable number of loanwords of Italian origin in the language which have become part of its lexis, though some have been adapted to accommodate the phonology and morphology of the language; lexical items of Turkish and English origins also exist.

(8) Zayd mudərəs.
Zayd teacher.3MS
'Zayd is a teacher.'

(9) Zayd karīm / hənə.
Zayd generous.3MS / here
'Zayd is generous/here.'

(10) Hind fi-l mādərša.
Hind in-the school
'Hind is in the school.'

The fact that these clauses are interpreted as present tense constructions despite lacking a verbal head has been an issue of debate. The central issue is whether such structures are full clauses with a functional projection, that is TPs, or are just small clauses without a functional projection.

The fact that verbless clauses can contain temporal adverbs, thus indicating that they can have their own tense interpretation when occurring as embedded clauses, is an indication that they are full clauses and not small clauses. In example (11), the presence of the temporal adverb 'now' is argued to be anchored by tense (see Eisele 1988). Likewise, the clause *Ali f-l-hoš* 'Ali is at home' in (12) has its own tense interpretation, which is different from the matrix clause tense, indicating that it is a full tensed clause and thus cannot be just a small clause since the latter is typically interpreted with reference to the tense of the matrix clause (see Benmamoun 2000).

(11) Omar f-l-hoš təwwa.
Omar in-the-house now
'Omar is at home now.'

- (12) Omar gal inna Ali f-l-hoš.
 Omar said.3MS that Ali in-the-house
 ‘Omar said that Ali is at home.’

The null copula analysis proposed for verbless clauses is also problematic. The main argument against it is the case marking of the predicate, which is accusative when the copula is overt and nominative when it is null, as in (13) and (14) respectively from Standard Arabic².

Standard Arabic

- (13) kaana 1-waladu mariid-an.
 was.3MS the-boy sick-ACC
 ‘The boy was sick.’

- (14) 1-waladu mariid-un.
 the-boy sick-NOM
 ‘The boy is sick.’

(Benmamoun 2000: 43)

If there is a null copula, it is unclear why the predicate in (13) bears the accusative case, but the one in (14) the nominative (see Benmamoun 2000). I nevertheless take the above facts as evidence that verbless clauses in Libyan Arabic are full clauses, and thus TPs, with a functional projection specified for present tense (see Jelinek 1981; Benmamoun 2000).

Another property of verbless clauses is that they co-occur with ‘pronominal copulas’³ as illustrated in (15). Pronominal copulas are used to perform a copula function, that

² It is worth noting that case is not marked morphologically in Libyan Arabic.

³ These pronouns are normally referred to in the literature as pronominal copulas (PRON) since they can realise the copula function in present tense copular structures. Despite the fact that they take the form of third person subject pronouns, they do not function as subject pronouns in constructions such as (15).

is, to establish a predicational relationship. They agree with the subject NP in person, number and gender.

- (15) Zayd huwwa l-mudārəs.
 Zayd PRON.he the-teacher
 ‘Zayd is the teacher.’

Pronominal copulas are also used as an anti-ambiguity device, as noted by Eid (1983; 1991)⁴. In contexts in which the subject and the predicate are definite, the pronominal copula is used to prevent ambiguity between phrasal and sentential reading, as illustrated in (16); the presence of the pronominal copula enforces a sentential reading while its absence gives rise to a phrasal interpretation. Finally, pronominal copulas are also used in cleft constructions as shown in (17) (see Ouhalla 1999).

- (16) a. ṭ-ṭaləb huwwa l-wəsīm.
 the-student PRON. he the-handsome
 ‘The student is the handsome one/person.’

- b. ṭ-ṭaləb l-wəsīm.
 the-student the-handsome
 ‘The handsome student.’

- (17) Zayed huwwa illi mat.
 Zayed PRON. he that died.3MS
 ‘It is Zayed who died.’

In the case of past and future tenses, the copula obligatorily surfaces, as in (18) and (19). Furthermore, clauses with a habitual present interpretation may have an overt present tense copular verb, as in (20), where a specified reference time is required

⁴ It is worth noting that such pronouns are identified by Arab grammarians as ‘separation pronouns’ since they function to separate the subject and the predicate while relating them at the same time.

(Eid 1991: 35). Without such a specified reference time, the structure will be ungrammatical, as in (21).

(18) l-wəld kan fi l-mədər̄sa.
the-boy was.3MS in the-school
‘The boy was in the school.’

(19) l-bənt ḥā-ṭkun fi l-mədər̄sa.
the-girl FUT-be.3FS in the-school
‘The girl will be in the school.’

(20) Yasin dima ykun f-məktb-ah youm s-səbt.
Yasin always is.3MS in-office-his day the-Saturday
‘Yasin is always in his office on Saturday.’

(21) *Ali ykun f-məktb-əh.
Ali is.3MS in-office-his
‘Ali is in his office.’ (Intended reading)

2.2.2 Verbal clauses

Verbal clauses consist of a subject and verb followed by a complement, exhibiting SVO word order as in (22). It is worth noting that, as a pro-drop language with rich agreement, pronominal subjects are normally dropped, as in (23). In other words, as generally assumed, the null subject in such a case is a null pronoun (pro), which can be licensed and identified by rich agreement.

(22) Taha srē siyyara.
Taha bought.3MS car
‘Taha bought a car’.

- (23) (pro) nəbbi r-razəl yaxəd l-ktab həda.
 (pro) want.1MS the-man take.3MS the-book this
 ‘I want the man to take this book.’

With respect to word order, the language displays variation between SVO and VSO; however, the former is the predominant and unmarked order (see Owens 1984: 96). This can be seen in embedded contexts where SVO is the natural and preferred order, as illustrated in (24) and (25) respectively. Furthermore, other word order sequences including VOS and OVS are also used in the language, as shown in (26) and (27) respectively.⁵

- (24) gal inna Ali xdē l-ktab həda.
 said.3MS that Ali took.3MS the-book this
 ‘He said that Ali took this book.’

- (25) *gal inna xdē Ali l-ktab həda.
 said.3MS that took.3MS Ali the-book this
 ‘He said that Ali took this book.’ (Intended reading)

- (26) šrē siyyara Ali.
 bought.3MS car Ali
 ‘Ali bought a car.’

- (27) siyyara šrē Ali.
 car bought.3MS Ali.
 ‘A car Ali bought.’

SVO is argued to be the basic word order from which other word order sequences can be derived; this applies to both MSA and the local varieties (see Fassi Ferhri 1993 for MSA; Shlonsky 1997 for Palestinian Arabic (PA); Mahfoudhi 2002 for Tunisian Arabic (TA), and Lassadi 2005 for Egyptian Arabic (EA)). Assuming, in

⁵ Such word order sequences are used mainly in focus and topicalisation structures which typically involve fronting constituents to some higher projection.

the spirit of Koopman and Sportiche (1991), that the subject is base-generated in spec vP, SVO is derived via movement of the subject to spec TP plus verb movement to T; the VSO order is obtained via movement of the verb to T while the subject stays in situ.

With regards to Libyan Arabic, there is empirical evidence for adopting the analysis in which the subject is base-generated in spec vP. This comes from the classical diagnostic of floating quantifiers. It is argued that floating quantifiers such as ‘all’ in English and French can move along with the DP they modify to a higher position or remain in situ while the DP moves alone. This is taken as an argument that the subject is base-generated in spec vP. Consider the examples in (28) and (29).

(28) All the children_i have t_i gone to the school.

(29) The children_i have all t_i gone to the school.

These effects are also attested in Libyan Arabic. The floating quantifier *kul* ‘all’ modifies the subject *l-wlad* ‘boys’ in (30) and (31) despite the fact that the quantifier is not adjacent to the DP it modifies in (31). It is obvious that the relationship between the quantifier and the DP involves movement, but which of these elements is affected by such movement? Following Koopman and Sportiche (1991), I assume that the quantifier and the DP form a quantifier phrase (QP) and that this QP is base-generated in spec vP. The SVO order is derived by movement of the entire QP to spec TP, as in (30), or by movement of the DP *l-wllad* only, as in (31). The VSO order is derived via verb movement to T while the subject, the QP, remains in situ, as in (32)

(30) kul l-wlād kanu yəlʕbu fil ḥadīqa.
 all the-boys were.3MP play.3MP in-the garden
 ‘All the boys were playing in the garden.’

(31) l-wlād kanu yəlʕbu kul-hum fil ḥadīqa.
 the-boys were.3MP play.3MP all-them in-the garden
 ‘The boys were all playing in the garden.’

- (32) kanu yəlʕbu l-wlād kul-*hum* fil ḥadīqa⁶.
 were.3MP play.3MP the-boys all-them in-the garden
 ‘The boys were all playing in the garden.’

2.3 Tense and verbal morphology

2.3.1 Imperfective vs. perfective

Verbs occur in two major paradigms: perfective (past) and imperfective (non-past). The two forms differ with respect to how agreement features are realized on the verb. Agreement features in perfective forms are realized as a suffix, whereas in imperfective forms they are realized by a prefix and a suffix (see Benmamoun 2000; Pereira 2008; Aoun et al. 2010). Tense is not encoded morphologically, whether in the perfective or imperfective forms; instead it is argued to be an abstract morpheme in Arabic (see Fassi Fehri 1993; Benmamoun 2000).

2.3.1.1 The imperfective form

The imperfective form is used to express non-past events. It occurs in different temporal and aspectual contexts. Firstly, it occurs in clauses with present tense interpretation, whether progressive or habitual, as in (33). There are no markers or proclitics that can express or distinguish between the habitual or progressive aspect⁷;

⁶ In line with Shlonsky (1991), I assume that the appearance of the quantifier *kul* to the right of the NP is a result of movement of the latter to spec QP.

⁷ However, in other varieties of Arabic such as Moroccan (MA), Lebanese (Leb.A) and Egyptian Arabic (EA), aspect is realised by aspectual morphemes such as *ta-* and *ka-* in MA, *ʕam* in Lebanese and *bi-* in EA. This is illustrated in (i), (ii) & (iii) respectively. See Ouali & Fortin (2007) for a different view arguing that the markers *ta-* and *ka-* in MA are tense morphemes.

- (i) ta-y-qra
 Prog-3-study
 ‘He is studying’ (MA, Aoun et al. 2010: 26)
- (ii) ʕam yiʔra.
 Prog 3-read
 ‘He is reading’. (Leb.A, Aoun et al. 2010: 26)
- (iii) bi-yi-dris hina dilwaʔt.
 asp-3m-study here now
 ‘He is studying now.’ (EA, Benmamoun 2000: 32)

the imperfective form is used in those contexts and the intended interpretation is normally obtained from the context and/or the presence of temporal adverbs.

- (33) Yasin yəlʕəb.
Yasin play.3MS
‘Yasin plays/is playing.’

Secondly, it is used in clauses with future tense interpretation, where a future marker is prefixed to the imperfective form, as illustrated in (34); and thirdly, it is used in non-finite clauses, as in (35). Finally, it is used in the context of auxiliaries such as modals and/or the past tense auxiliary *kān* ‘be’, as in (36) and (37) respectively; the past tense in the latter can have both progressive and habitual interpretations.

- (34) Yasin b-yəktəb r-rissala.
Yasin FUT-write.3MS the-letter
‘Yasin will write the letter.’

- (35) ɣawəl yəhrəb
tried.3MS escape.3MS
‘He tried to escape.’

- (36) yəgdər yəktəb rissala.
can.3MS write.3MS letter
‘He can write a letter.’

- (37) Ali kān ydəxən.
Ali was.3MS smoke.3MS
‘Ali used to smoke/was smoking.’

Table (1): Imperfective verbal morphology in Libyan Arabic

<i>person</i>	<i>Number</i> (S/P)	<i>Gender</i> (F/M)	<i>Affix</i>	<i>Verb+affix</i>
FIRST	S	F/M	n-	nəktəb
	P	M/F	n--u	nəktbu
SECOND	S	M	t-	təktəbt
	S	F	t-i	təktəbi
	P	M	t-u	təktbu
	P	F	t-u/ t-n	təktbu/ təktbən
THIRD	S	M	y-	yəktəb
	S	F	t-	təkətb
	P	M	y-u	yəktbu
	P	F	y-u/ y-ən	yəktbu/ yəktbən

2.3.1.2 The perfective form

The perfective form is used to express past tense, as in (38). Despite expressing past tense, there is disagreement with respect to whether or not the agreement features on the perfective form encode tense in addition to agreement. There are two hypotheses: a) the suffix on the verb expresses both tense and agreement; b) the suffix is agreement marking.

- (38) Ali w Omar ləʃbu kura mʃə l-wlād.
 Ali and Omar played.3MP football with the-boys
 ‘Ali and Omar played football with the boys.’

According to (b), the past tense is an abstract morpheme; the suffix marking on the perfective forms expresses agreement only (see Fassi Fehri 1993; Benmamoun 2000). Benmamoun (2000) observes that in Standard Arabic the agreement suffix on

the perfective forms can occur on negative and aspectual particles in clauses with present tense interpretation, indicating that such a suffix does not encode past tense. This is also the case in Libyan Arabic. The aspectual particle *mazal* ‘still’ exhibits all the suffixes of the perfective form, as shown in (39) and (40). This indicates that the suffix marking does not encode tense; it expresses agreement only.

(39) *mazalu* f-l-hoš.
 still.3MP in-the-house
 ‘They’re still at home.’

(40) *mazalna* f-l-hoš.
 still.1M/FP in-the-house
 ‘We’re still at home.’

Table 2: Perfective verbal morphology in Libyan Arabic

<i>Person</i>	<i>Number (S/P)</i>	<i>Gender (F/M)</i>	<i>Affix</i>	<i>Verb+affix</i>
FIRST	S	F/M	-t	ktəbt
	P	M/F	-na	ktəbna
SECOND	S	M	-t	ktəbt
	S	F	-ti	ktəbti
	P	F	-tu/	ktəbtu
			-ən	ktəbtən
P	M	-tu	ktəbtu	
THIRD	S	M	-	ktəb
	S	F	-t	kəbt
	P	M	-u	ktəbu
	P	F	-u/-ən	kətbu/ kətbən

2.3.2 Futurity

The future tense is expressed by the use of the preverbal future markers *b-* and *hā*. The former is used to ‘express the future of intention’, whereas the latter is used to express ‘a close/coming future’ (Pereira 2008: 55), as illustrated in (41) and (42) respectively. Futurity can also be expressed by the use of the motion participial predicate *raḥ* ‘going’, as in (43).

- (41) *bənšūfək* *ġudwa*.
FUT-see.1MS-*you* tomorrow
‘I will see you tomorrow.’

(Pereira 2008: 55)

- (42) *hā-nastāḥəš* *lībya*.
FUT-miss.1MS Libya
‘I am going to miss Libya.’

(Pereira 2008: 55)

- (43) *raḥ* *nsāfer*.
going travel.1MS
‘I’m going to travel.’

2.4 Case marking

Case is not marked morphologically in Libyan Arabic; therefore, nouns have the same form irrespective of their grammatical function in the clause. Nominative and accusative case marking can only be seen on pronouns when used in subject or object positions. Subject pronouns are independent forms that appear only in subject positions, as evidenced in (44) & (45); object pronouns are clitics attached to verbs and prepositions, as in (46).

- (44) *huwwa* *šrē* *siyyara*.
he bought.3MS car
‘He bought a car.’

(45) *anē šuft huwwa.
 I saw.1MS he
 ‘I saw him.’ (Intended reading)

(46) anē šuft-ah.
 I saw.1MS-*him*
 ‘I saw him.’

2.5 Auxiliaries

Libyan Arabic has a limited set of auxiliaries. The auxiliary ‘be’ is used to express the habitual past and to mark the past progressive, as in (47) and (48) respectively. The imperfective form of ‘be’ is covert in clauses with present tense interpretation (see 2.2.1); it is overt when preceded by a modal particle, as shown in (49).

(47) Omar kān ydaxən. (habitual past)
 Omar was.3MS smoke.3MS
 ‘Omar used to smoke.’

(48) Ali kān yəlfəb f-š-šarəf. (past progressive)
 Ali was.3MS play.3MS in-the-street
 ‘Ali was playing on the street.’

(49) Ali yəmken ykun f-l-məktəb.
 Ali maybe be.3MS in-the -office.
 ‘Ali may be in the office.’

It is worth noting that Libyan Arabic has no equivalents to the English dummy ‘do’ or the perfective ‘have’. Furthermore, the use of modal verbs is restricted since modality is realised mainly through modal particles and adverbs, as in (50). The modal *yəgder* ‘can’ is widely used, however, as exemplified in (51).

(50) *daruri* *Ali* *yiži.*
 necessary *Ali* come.3MS
 ‘It is necessary that Ali comes.’

(51) *Samir* *yəgder* *yətkəlləm* *iṭali.*
Samir can.3MS speak.3MS Italian
 ‘Samir can speak Italian.’

2.6 Negation

This section describes negation associated with copular clauses and verbal clauses with past, present and future tense interpretation.

2.6.1 Negation of copular clauses

Copular clauses are negated by the negation particle *miš* being placed between the subject and the predicate in regular copular clauses, as shown in (52). In cleft constructions, the negation particle appears clause-initially, that is, preceding the clefted constituent, as exemplified in (53).

(52) *Omar* *miš* *həna.*
Omar NEG here
 ‘Omar is not here.’

(53) *miš* *Ali* *illi* *žē.*
 Neg *Ali* that came.3MS
 ‘It is not Ali who came.’

In contexts in which pronominal copulas are used, the negation morphemes *ma-* and *-š* are attached to the pronoun as proclitic and enclitic respectively, as in (54).

- (54) Nadia ma-hi-š həna.
 Nadia NEG-PRON.she-NEG here
 ‘Nadia is not here.’

2.6.2 Negation of verbal clauses

Whether in the past or present tense, the negation of verbal clauses is expressed by the negative markers *ma-* and *-š* being attached to the verb: the former as a proclitic and the latter as an enclitic⁸ as exemplified in (55) and (56)⁹. The negation of a clause with future tense interpretation is expressed by the negative morpheme *miš* appearing before the main verb to which the future marker *ħa-* is prefixed, as in (57).

- (55) Ali ma-ktəb-š r-rissala.
 Ali NEG-wrote.3MS.-NEG the-letter
 ‘Ali did not write the letter.’

- (56) ma-ktəb-š Ali r-rissala?
 NEG.wrote.3MS-NEG Ali the-letter
 ‘Didn’t Ali write the letter?’

- (57) Ali miš ħa-yisafər bukra.
 Ali NEG FUT-travel.3MS tomorrow
 ‘Ali will not travel tomorrow.’

Previous studies on sentential negation in modern Arabic dialects have focused on the distribution of the two negation markers and the position of negation in the

⁸ Other modern Arabic dialects such as Moroccan and Egyptian Arabic (Benmamoun 2000) express sentential negation in the same way.

⁹ In eastern Libyan Arabic, the negative marker *-š* can be dropped (see Owens 1984), as in (i):

- (i) Ali ma-ktəb-(š) r-rissala.
 Ali NEG-wrote.3MS the-letter
 ‘Ali did not write the letter.’

clause, that is, higher or lower than T. For instance, for Palestinian Arabic, which also realises negation by *ma-* and *-š*, Mohamed and Ouhalla (1995) assume that the negation marker *ma* is the head of NegP, while *-š* occupies the specifier position¹⁰. They argue that the verb moves to T past the head Neg. As for the particle *-š*, this cliticises onto the verbal complex, resulting in *ma-verb-š* (see also Ouhalla 2002 for a similar analysis for Moroccan Arabic). In conclusion, the negation of verbal clauses is realised by both preverbal and post-verbal negative markers: the former involves *ma-* occurring as a pro-clitic and the latter *-š* as an enclitic on the verb. This is referred to as discontinuous negation.

2.7 Interrogative clauses

2.7.1 Yes/no questions

Yes/no questions are marked by intonation which distinguishes between declarative and interrogative clauses (see Owens 1984). Subject-verb inversion is attested in yes/no questions, though it is not necessarily required, as in (58) and (59). An SVO order is also commonly used in yes/no interrogative clauses.

(58) *mšē* Samir l-s-sinima?
 went.3MS Samir to-the-cinema
 ‘Did Samir go to the cinema?’

(59) Yasin *mšē* l-s-sinima?
 Yasin went.3MS to-the-cinema
 ‘Did Yasin go to the cinema?’

¹⁰ Another analysis, proposed by Benmamoun (2000), argues that the negation morphemes *ma-* and *-š* in MA and EA constitute a (dis)continuous complex occupying the head of NegP located between TP and VP. Thus, the verb *ktāb* in (55) moves from the VP to NegP, where it merges with *ma* and *š*, and then this lexical complex moves to T and is spelt out as *ma-ktāb-š*. By contrast, when T expresses the present tense, such as in copular clauses or imperfective forms, no movement takes place and Neg will surface as the independent form *miš* (for further discussion on this analysis, see Benmamoun 2000 and Aoun et. al 2010).

2.7.2 Wh-questions

There are three strategies for wh-question formation in Libyan Arabic: the gap, resumptive and in-situ strategies. The first two are used more frequently; the in-situ strategy is used only in specific contexts. This section provides a brief overview of these wh-question formation strategies.

2.7.2.1 Wh-questions: the gap strategy

The wh-phrase in regular wh-questions appears clause-initially in both matrix and embedded clauses, and is associated with an empty category marking the position of the variable bound by the wh-phrase. Regular wh-questions are compatible with all wh-phrases and they occur in matrix and embedded contexts, as in (60) and (61) respectively:

- (60) šen_i klē Ali t_i?
 what ate.3MS Ali
 ‘What did Ali eat?’

- (61) ma-yəʃrəf-š man_i t_i mat aməs.
 NEG-know.3MS-NEG who died.3MS yesterday
 ‘He does not know who died yesterday.’

Regular wh-questions are sensitive to island constraints and they manifest unbounded dependency, indicating that such wh-questions undergo successive-cyclic movement. Extraction out of a wh-clause, for instance, is not permissible because the wh-phrase then has to cross two IPs in order to reach spec CP, thus violating subjacency, as in (62).

- (62) *l-man_i yəstəgrəb šen Faisal ʃtē t_i ?
 to-whom wonder.3MS what Faisal gave.3MS
 ‘*To whom_i does he wonder what Faisal gave t_i?’

Unbounded dependency is also found as shown in (63), where a fronted wh-phrase binds a variable located several clauses down. This indicates that wh-phrases in such wh-constructions undergo successive-cyclic wh-movement to a clause-initial position.

- (63) l-man_i galət -_i inna Ali ʔʕtəqəd -_i inna Faisal ʕtē s-siyyara t_i ?
 to-whom said.3FS that Ali thought.3MS that Faisal gave.3MS the-car
 ‘To whom_i did she say that Ali thought that Faisal gave the car t_i?’

2.7.2.2 Wh-questions: the in-situ strategy

The in-situ strategy involves wh-phrases appearing in their base-generated position. The in-situ strategy is used in limited contexts in Libyan Arabic; as in other varieties of Arabic, an in-situ wh-question is interpreted as an echo question¹¹.

- (64) Nadia šafet man?
 Nadia saw.3FS who
 ‘Nadia saw who?’

2.7.2.3 Wh-questions: the resumptive strategy

The resumptive strategy involves a resumptive pronoun apparently filling the gap left by the displaced wh-phrase. Resumptive wh-questions¹² are characterized by certain salient features that distinguish them from regular wh-questions: i) the presence of the complementiser *illi*, ii) a resumptive pronoun filling the gap left by the wh-phrase, and iii) an optional pronominal copula appearing between the wh-phrase and the complementiser *illi*, as illustrated in (65)¹³.

¹¹ However, the in-situ strategy is the default strategy for Egyptian Arabic (see Aoun et al. 2010; Wahba 1984; Lassadi 2005 for discussion).

¹² I will refer to wh-questions that involve resumptive pronouns as resumptive wh-questions.

¹³ Resumptive wh-questions have the same structure in other Arabic local varieties such as Egyptian (Wahba 1984; Cheng 1997; Lassadi 2005; Soltan 2011b), Lebanese (Aoun et al. 2010), and Palestinian Arabic (Shlonsky 2002).

- (65) man-_i (hiyya) illi Ali šaff-*ha*-_i?
 who PRON.she illi Ali saw.3MS-*her*
 ‘Who did Ali see?’

Resumptive wh-questions are restricted to nominal wh-expressions; phrases of adverbial function are not permissible, as in (66). This has also been noted for Egyptian (Wahba 1984; Cheng 1997; Lassadi 2005; Soltan 2011b) and Palestinian Arabic (Shlonsky 2002). In addition, these questions are island insensitive, as shown in (67), indicating that they do not undergo wh-movement. Finally, like regular wh-questions, resumptive wh-questions display unbounded dependency.

- (66) wēn_i /əmta_i (*illi) Asma matət t-_i?
 where/when (illi) Asma died.3FS
 ‘Where/when did Asma die?’

- (67) man illi Ali hə-ykun saḥīd kan Omar yəʕzm-*ah* ?
 who illi Ali fut.be.3MS happy.3MS if Omar invite.3MS-*him*
 ‘Who is it that Ali will be happy if Omar invites him?’ (Intended reading)

In an account of island sensitivity and resumption exhibited by these wh-questions, Cheng (1997) argues that resumptive wh-questions in Egyptian Arabic are cleft constructions; more precisely, they are reduced clefts, that is, clefts lacking an expletive subject and a copular element. Shlonsky (2002) argues for a bi-clausal analysis for Palestinian Arabic (PA) wh-questions. The claim is that such wh-questions are copular clauses consisting of a subject DP and a predicate, a free relative clause functioning as a nominal predicate. The wh-phrase is base-generated in the subject position of the copular clause and it undergoes movement to spec CP, as shown in (68). In this dissertation, I adopt Shlonsky’s analysis, and in Chapter 5 I provide further evidence from sluicing in support of this analysis.

- (68) [_{CP} man_i[_{TP} t_i illi Ali šaff-*ah*?]]
 who that Ali saw.3MS-*him*
 ‘Who did Ali see?’

It is worth noting that resumptive and regular *wh*-questions differ not only in syntactic structure but also in terms of interpretation. The former imply presupposition, while the latter need not induce any presupposition. The resumptive *wh*-question in (69) presupposes that ‘someone did come’. On the other hand, a regular *wh*-question such as (70) does not imply such presuppositional effects. Evidence for a difference in presupposition is the fact that verbs in resumptive *wh*-questions display full agreement with the subject as in (69), whereas verbs in regular *wh*-questions are always in the default agreement, third person singular masculine (see Shlonsky 2002).

(69) man illi žət əms?
 what that came.3FS yesterday
 ‘Who came yesterday?’

(70) man žē əms ?
 who came.3MS yesterday
 ‘Who came yesterday?’

2.7.2.4 D-(iscourse)-linked *wh*-questions

It is a crosslinguistic fact that the *wh*-movement of *d*-linked *wh*-phrases displays syntactic properties distinct from those of non-*d*-linked *wh*-questions. *D*-linked *wh*-questions are normally associated with resumptive pronouns (see Doron 1982 for Hebrew; Kallulli 2008 for Albanian; Aoun et al. 2010 for Arabic). As opposed to non-*d*-linked *wh*-phrases, they display specific properties such as lack of superiority and island effects (see Boeckx & Grohmann 2004). Equally important, *d*-linked *wh*-questions are discourse-conditioned; while non-*d*-linked *wh*-questions are not (Pesetsky 1987; Boeckx & Grohmann 2004). The fact that such *d*-linked *wh*-questions are discourse-based is supported by the fact such questions, unlike non-*d*-linked questions, cannot be used in out-of-the-blue contexts, as in (71).

- (71) A: John bought something expensive yesterday.
 B: what did he buy?
 B: # which car did he buy?

(Boeckx & Grohmann 2004: 243)

D-linked wh-questions in Libyan Arabic are compatible with the gap, resumptive and in-situ strategies, as in (72), (73) and (74) respectively. The question is whether, in (72), the wh-phrase moves from within the TP or is just base-generated in the left periphery.

- (72) ʔayya ktab_i gru t-t-alaba t_i?
 which book read.3MP the-students
 ‘Which book did the students read?’

- (73) ʔayya ktab (illi) gro-**h** t-t-alaba?
 which book (that) read.3MP-*it* the-students
 ‘Which book did the students read?’

- (74) t-t-alaba gru ʔayya ktab ?
 the-students read.3MP which book
 ‘The students read which book?’

The structure in (72) is similar to that of regular wh-questions with respect to sensitivity to islands and unbounded dependencies, which, in principle, can be taken as an indication of successive-cyclic movement. The issue, however, is with d-linked wh-questions associated with resumption. These are not subject to island constraints; moreover, island insensitivity and the presence of resumptive pronouns indicate that wh-movement has not taken place.

For resumptive d-linked wh-questions, I assume Shlonsky’s (2002) analysis of resumptive wh-questions despite the fact that the two may superficially seem dissimilar. Thus, the structure in (75) is a copular clause consisting of a null/covert copula and a concealed relative.

- (75) ʔayya ktab (illi) gru-h t-ʔalaba?
 which book (that) read.3MP-it the-students
 ‘Which book did the students read?’

Such an analysis is supported by several observations. Firstly, it has been noted crosslinguistically that d-linked-wh-questions with resumption normally take the form of cleft-type structure (see for example McCloskey 1990 for Irish, and Kallulli 2008 for Albanian).

Secondly, the analysis is supported by morphological case facts from Standard Arabic. Despite the fact that d-linked wh-phrases in the language under discussion are not case-marked, their MSA counterparts are. A cross-linguistic fact about resumptive d-linked wh-questions is that they are island-insensitive. Demirdache (1991), in this respect, notes that island effects disappear in resumptive (d-linked) wh-questions if the wh-phrase bears nominative case, as in (76); if the former bears a different case such as the accusative, island effects persist, resulting in ungrammaticality, as in (77).

- (76) ʔayy-u rajulin raʔayta l-fataata llatii ʔarabat-hu?
 who-NOM man-GEN saw-you the-girl that hit-him-ACC
 ‘Who is it that you saw the girl that hit him?’

- (77) *ʔayy-a rajulin raʔayta l-fataata llatii ʔarabat-hu?
 who-ACC man-GEN saw-you the-girl that hit-him-ACC

(Boeckx 2003: 158)

The fact that island effects disappear in (76) is evidence that the wh-phrase does not move from inside the relative clause; if it does, then the wh-phrase is expected to display the accusative case, as illustrated by (77). The proposed analysis captures this phenomenon as follows: the wh-phrase is base-generated in spec TP of a copular clause and it moves upwards to spec CP, bearing nominative case in that position is

expected since wh-expressions in cleft wh-questions display pervasively the nominative case.

Thirdly, there is a case mismatch between the d-linked wh-phrase and the resumptive pronoun in d-linked wh-questions; the case displayed by the wh-phrase is nominative whereas that of the resumptive pronoun is accusative (see Demirdache 1991: 46). This supports the claim that such wh-questions contain a concealed relative, since the head of the relative clause appears normally in the nominative case. Thus, despite the absence of a relativiser in (78), such a relativiser is in fact present but null. In regular d-linked wh-questions, the wh-phrase, as in in (79) for example, bears accusative case which is expected given the fact that the wh-phrase functions as an object to the verb ‘saw’.

Standard Arabic

(78) *d-linked resumptive wh-question*

[ʔayy-u / *ʔayy-a rajulin] raʔayta-hu?
 which-NOM/which-ACC man-GEN saw-you-him-ACC
 ‘Which man did you see?’

(Boeckx 2003: 49)

(79) *d-linked regular wh-question*

[*ʔayy-u_i /ʔayy-a_i rajulin] raʔayta t_i?
 which-NOM /which-ACC man-GEN saw-you
 ‘Which man did you see?’

2.8 Conclusion

This chapter has provided an overview of some syntactic aspects of Libyan Arabic. It has discussed basic aspects of the language such as clause typology and structure, word order, verbal morphology, negation and wh-questions. Two types of clauses are found in the language, namely verbless and verbal clauses; the former lack a verbal predicate while the latter require one. The unmarked word order is SVO, other word order sequences such as VSO, OVS and VOS are also used, particularly in focus and

topicalisation constructions. Sentential negation is expressed discontinuously by prefixing and suffixing the negation morphemes *ma-* and *-š* respectively to the verb in present and past tense clauses. In copular clauses, and in verbal clauses with future tense interpretation, negation is realised by the negative morpheme *miš*. Finally, there are three strategies for wh-question formation: gap, resumptive and in-situ strategies. The gap strategy involves a gap marking the trace bound by the fronted wh-phrase; the in-situ, as usual, involves the wh-expression appearing in its base-generated position. Finally, resumptive wh-questions are characterised by a resumptive pronoun referring to the wh-expression appearing clause-initially, with an optional pronominal copula and the relative complementiser *illi*.

Chapter Three

Ellipsis in Syntactic Theory

3.0 Introduction

Ellipsis is one of the most debated topics in syntactic theory; therefore, the primary goal of this chapter is review the theories proposed to explain ellipsis phenomena. The chapter is organised as follows: section 1 introduces ellipsis and briefly discusses its different types; section 2 critically reviews different approaches to ellipsis, namely structural vs. non-structural approaches. Section 3 presents further evidence for the assumption that several ellipsis sites contain internal syntactic structure. Section 4 then presents the conclusions.

3.1 Defining ellipsis

Lobeck (1995: 20) defines ellipsis as the ‘omission of a syntactic constituent under identity with an antecedent in the preceding discourse’. Hankamer and Sag (1976) argue that ellipsis can involve deep or surface anaphora. Deep anaphora receive their interpretation from a pragmatic antecedent whereas surface anaphora require an overt linguistic antecedent. For instance, the pragmatic antecedent can license the anaphoric proform ‘do it’ in (80b), but not the bare ‘to’ ellipsis in (80a). The later can only be interpreted and licensed by an overt linguistic antecedent, as shown in (81). Surface anaphora, thus, impose some sort of identity in the sense that the ellipsis site is identified with reference to an antecedent.

(80) a. [Hankamer attempts to stuff a 9-inch ball through a 6-inch hoop]

Sag: # It's not clear that you'll be able to.

b. [Same context]

Sag: It's not clear that you'll be able to do it.

(Hankamer & Sag 1976: 392)

(81) Hankamer: I'm going to stuff this ball through this hoop.

Sag: It's not clear that you'll be able to.

(Hankamer & Sag 1976: 392)

Ellipsis can be sub-categorised into different types, depending on the category targeted by deletion. Below are illustrations of different ellipsis constructions.

Sluicing

(82) Jane met someone, but I can't remember who.

VP ellipsis

(83) Yasin bought a new house, and Ali did too.

Pseudogapping

(84) Robin will eat rutabagas, but she won't eat ice cream.

(Agbayani & Zoerner 2004: 186)

Gapping

(85) John read a novel and Mary a magazine.

Stripping

(86) Jane likes watching TV, and Mary too.

NP ellipsis

(87) The fact that [John's [e]] was poorly presented made the committee adopt

Mary's analysis instead. (Lobeck 1995: 42)

3.2 Ellipsis in syntactic theory

Ellipsis is an interdisciplinary topic that may involve the interfaces of syntax, phonology, semantics and/or pragmatics. The syntax of ellipsis has been explained using different non-structural and structural approaches. The non-structural approach claims that there is no syntactic structure in the ellipsis site (e.g. van Riemsdijk 1978; Culicover & Jackendoff 2005), while the structural approach argues for structure in

the elided material. However, within the latter, there is disagreement as to whether or not the unpronounced material involves lexically null elements (e.g. Chung et al. 1995; Lobeck 1995) or the deletion of already existing fully-fledged syntactic structure (Ross 1969; Sag 1976; Merchnat 2001; Lasnik 2006a, 2007; Aelbrecht 2010; van Craenenbroeck 2010a). Pursuing these lines of analysis, this section discusses and critically reviews the different approaches to ellipsis

3.2.1 Non-structural approach

The non-structural approach argues against positing a structure in ellipsis at any level of representation. In other words, there is no more structure than what is pronounced. There are several arguments in favour of this non-elliptical approach. For instance, the short answers in (88) are argued to involve no ellipsis.

- (88) Who ate the cake?
a. Me/him/them.
b. *I/he/they.

The pronouns in (88a) surface in the accusative case although they correspond to subject pronouns. The absence of structural nominative case, which is assigned in T, is taken by Provagoc (2006) as an indication that such a fragment answer is not a TP. Therefore, the short answer in (88a) is analysed as a phrasal projection smaller than a TP.

The fact that the NPs ‘me/him/them’ surface in the (default) accusative case is ascribed to the lack of a tense projection in the structure. The argument is that these pronouns are selected with the default case feature; therefore, they are legitimate objects and they do not contain any uninterpretable feature. The ungrammaticality of (88b) is because the pronouns ‘I/he/they’ contain unchecked nominative case features. In contrast, the fact that a subject pronoun in an answer such as ‘I did’ surfaces in the nominative case is expected given that nominative case assignment

requires a tensed element (see Progovac 2006 and Caselles 2006 for further discussion).

In addition, Progovac (2006) considers verbal utterances such as the short answer in (89) as base-generated phrases. The verb in the answer is in the bare infinitive form, which is not expected if the short answer is an elliptical structure derived from a non-elliptical sentential source, as in shown (90).

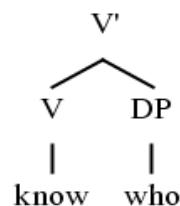
- (89) A: What did John do?
B: Play basketball.

- (90) *John play basketball.

The structure in (89B) is not a full TP as it lacks a tense node. The absence of tense and verbal agreement suggests that such utterances do not derive from full sentences by ellipsis; therefore, the answer in (89B) is analysed as a base-generated VP.

Proponents of this non-structural approach also argue that the sluiced wh-phrase in (91) is a bare 'wh-fragment', generated as an XP (DP, PP, AP) functioning as a complement to the main verb (Culicover & Jackendoff 2005).

- (91) Someone called you, but I don't know who.



However, recent studies have proposed that the ellipsis in sluicing contains syntactic structure (Lasnik 2001, 2007; Merchant 2001; Albrecht 2010; van Craenenbroeck 2010a), arguing that the wh-phrase in (91) is not a mere DP but part of a clausal

- (95) Dhe ksero {* i apantisi / tin apantisi}.
 not know.Isg the answer.NOM the answer-ACC
 ‘I don’t know the answer’.

(Merchant 2001: 43)

3.2.1.3 Distributional properties

The positional distribution of the sluiced wh-phrase indicates that the sluiced wh-phrase is a CP and not a DP (see Ross 1969; Merchant 2001). The positions available for sluiced wh-remnants are the same as those for full interrogative clauses but not for a DP. Irish, for instance, displays a difference with respect to the positions occupied by CP and DP complements. In Irish, a DP object in a non-finite clause obligatorily precedes the verb, as in (96); however, CP complements must follow the verb and thus appear clause-finally, as shown in (97).

- (96) Rinne sé socrú le duine den dís,
 made he arrangement with person of.the two
- a. ... ach níl sé sásta [rud ar bith] a inseacht dūinn.
 but not.is he willing anything tell_[-FIN] to.us
- b. ... *ach níl sé sásta a inseacht dūinn [rud ar bith].
 ‘He made an arrangement with one of the two people, but he won’t tell us anything.’
- (97) a. ... *ach níl sé sásta [caidé a tá ar bun] a inseacht dūinn.
 but not.is he willing what C is going-on tell_[FIN] to.us
- b. ... ach níl sé sásta a inseacht dūinn [caidé a tá ar bun].
 ‘... but he won’t tell us what’s going on.’

(Merchant 2001: 49-50)

Crucially, a sluiced wh-phrase behaves identically to a CP complement in terms of positional distribution, as it appears clause-finally and not clause-internally where DP arguments appear; this is illustrated by example (98).

- (98) a. ... *ach níl sé sásta [céacu ceann] a inseacht dūinn.
 but not.is he willing which of.them tell_[FIN] to.us
 b. ... ach níl sé sásta a inseacht dūinn [céacu ceann].
 ‘... but he won’t tell us which of them.’ (Merchant 2001: 50)

3.2.1.4 Selectional properties

It has been observed that predicates that select CP complements, including sluiced complements, do not generally take DP complements. This represents further evidence that the sluiced wh-phrase is a clausal complement (see Ross 1969; Merchant 2001; Lasnik 2007).

- (99) a. It’s obvious that Jack likes someone, but it’s not clear who.
 b. *It’s obvious that Jack likes someone, but it’s not clear the person.
- (100) a. He said that he had eaten, but he didn’t say what.
 b. *He said that he had eaten, but he didn’t say the kind of food.
- (101) a. He was reading a newspaper. I wonder which one.
 b. *He was reading a newspaper. I wonder the newspaper/the one.

To sum up, this section introduced the non-structural approach and showed that some structures, e.g. short answers, do not involve ellipsis. Therefore, they can be analysed as base-generated phrases. However, there is evidence that sluicing is an elliptical structure that contains unpronounced syntactic structure. The sluiced wh-phrase has a CP structure whose IP complement is missing at some level.

3.2.2 Structural approaches

In principle, structural approaches assume a structure in the site of ellipsis. However, they differ with respect to the syntactic representation assigned to ellipsis. Some accounts assume that the ellipsis site contains null elements; others argue for a fully-

fledged syntactic structure in ellipsis. This section reviews three proposed explanations of the ellipsis phenomenon, namely the proform, LF copy and PF deletion theories.

3.2.2.1 The null proform theory

This theory assumes that ellipsis contains a null category, the null proform, drawn from the lexicon. This pro-form is interpreted by semantic means in a manner similar to that of overt pronouns since ellipsis exhibits similarities with pronouns in terms of distribution and interpretation (see Wasow 1972; Hardt 1993; Lobeck 1995).

The typical argument for the pro-theory is the observation that ellipsis sites, just like pronouns, allow for split antecedents in which the ellipsis is interpreted as having more than just one antecedent (cf. Hardt 1993). This is illustrated by the examples (102) and (103).

(102) John_i told Bill_j that they_{i+j} should leave together.

(Baltin & van Craenenbroeck 2008: 1)

(103) Wendy is eager to sail around the world and Bruce is eager to climb
Kilimanjaro, but neither of them can Δ because money is too tight.

(Johnson 2001: 473)

In (103), the ellipsis is understood as having multiple antecedents, just like regular pronouns which are devoid of structure and identified with an antecedent, as in (102). The elliptical VP in (103) does not have the meaning of any of the antecedent VPs; instead, it is interpreted with reference to the two VPs as ‘to sail around the world or climb Kilimanjaro’ (see Johnson 2001: 473). I will discuss this approach further in section 3.3.3.

3.2.2.2 The LF copy theory

The LF copy theory views ellipsis as a null proform into which the antecedent is copied at LF in order to ensure that the null category is provided with the correct interpretation (see Fiengo & May 1994; Chung et al. 1995; Fortin 2007). Consequently, the ellipsis site in the sluicing case in (104) contains a null TP spelled out as a null category. For full interpretation to proceed, the antecedent is copied into the null category at LF, providing the correct interpretation (see Chung et al. 1995 for discussion).

(104) John met someone, but I don't know [_{CP} who [_{IP} e]].

The fact that sluicing is insensitive to islands is seen as an argument in favour of the LF copy. Since the wh-phrase is base-generated in spec CP, it thus undergoes no wh-movement, and sluicing violates no islands. However, a most serious weakness of the LF copy theory is its inability to deal with form-identity effects such as case-matching (Merchant 2001: 151-52). Consider the Greek example in (94), repeated in (105).

(105) Kapjos irthe, alla dhe ksero {pjos / *pjon}
 someone came, but not know.Isg who.NOM/who.ACC
 'Some came, but I don't know who'. (Merchant 2001: 43)

This case-matching effect does not receive a clear explanation under the LF copy theory. The fact that the wh-phrase is base-generated in spec CP means that it is not involved in the regular clause-internal case-assignment mechanism, and thus it remains mysterious how the case features of the wh-phrase are checked under this theory (see Merchant 2001; Aelbrecht 2010)¹⁴. This indicates that the ellipsis contains more structure than just a proform.

¹⁴ Chung et al. (1995: 283) argue that the LFs they assume are syntactically particular in the sense that they contain lexical items 'carrying with them specific syntactic licensing conditions. Hence, it is not surprising that sluicing is sensitive to case government and other idiosyncrasies of lexical structure'.

3.2.2.3 The PF deletion approach

The PF deletion approach argues that ellipsis has a fully-fledged syntactic structure which gets deleted in the course of derivation. Thus, elliptical structures and their non-elliptical counterparts are identical except at the PF interface, that is, the phonological content of the former does not undergo PF Spell Out (see Ross 1969; Hankamer & Sag 1976; Chomsky & Lasnik 1993; Lasnik 2001, 2006a, 2007; Merchant 2001, 2008a; Aelbrecht 2010; van Craenenbroeck 2010a).

The primary support for the PF deletion account comes from connectivity effects such as morphological case-matching and preposition-stranding (p-stranding) observed in several ellipsis phenomena including sluicing, stripping and fragment/short answers (see Merchant 2001, 2004). It has been observed crosslinguistically, for instance, that in overt case-marking languages the sluiced wh-phrase has to bear the case of its correlate, as can be seen in the German data in (106) and (107).

(106) Er will jemandem schmeicheln, aber sie wissen nicht, { *wer / *wen / wem }.
he wants someone.DAT flatter but the know not who.NOM/who.ACC/who.DAT
'He wants to flatter someone, but they don't know who.'

(107) Er will jemanden loben, aber sie wissen nicht, { *wer / wen / *wem }.
he wants someone.ACC praise but they know not who.NOM/who.ACC/who.DAT
'He wants to flatter someone, but they don't know who.'

Compare these to their non-elided counterparts:

(108) Sie wissen nicht, { *wer / *wen / wem } er schmeicheln will.
they know not who.NOM/ who.ACC/ who.DAT he flatter wants
'They don't know who he wants to flatter.'

- (109) Sie wissen nicht, { *wer / wen / *wem } er loben will.
 they know not who.NOM/ who.ACC/ who.DAT he praise wants
 ‘They don’t know who he wants to praise.’

(Merchant 2004: 665)

In German the verb *schmeicheln* ‘flatter’ assigns the dative case to its object, whereas the verb *loben* ‘praise’ assigns the accusative case. These effects are mirrored in sluicing, as can be seen in (106) and (107), where the sluiced wh-remnants bear the case of their correlates. Advocates of the PF deletion analysis view this as evidence for the claim that sluicing has a syntactic structure identical to that of non-elliptical wh-questions. Thus, the sluicing cases in (106) and (107) are assumed to be derived from their non-elliptical counterparts in (108) and (109).

Furthermore, p-stranding effects in ellipsis have also been used as an argument for PF deletion (see Merchant 2001). So, for instance, p-stranding in sluicing is only allowed if it is allowed under regular wh-movement in the language, as can be seen in English and Greek in (110) and (111) respectively.

(110) English

- a. Who was he talking to?
- b. He was talking with someone, but I don’t know (with) who.

(111) Greek

- a. *Pjon milise me?
 who she.spoke with
- b. I Anna milise me kapjon, alla dhe ksero *(me) pjon.
 the Anna spoke with someone but not I.know with who

(Merchant 2001: 94)

The fact that such effects are mirrored in sluicing is taken as evidence that ellipsis in sluicing contains a syntactic structure from which the sluiced wh-phrase has been extracted. Therefore, the ungrammaticality of the Greek example in (111b),

according to PF deletion, is due to the fact that the wh-phrase has been extracted from within a prepositional phrase, which is not permissible in the language, as shown in (111a). Since English allows both p-stranding and pied-piping, both options are permissible under ellipsis, as illustrated in (110).

There is further evidence that ellipsis does contain a syntactic structure. The next sub-section presents these other arguments in favour of the assumption of structure in ellipsis.

3.3 Arguments for internal structure in ellipsis

Recent research has shown that there indeed seems to be unpronounced internal structure in several types of ellipsis. This section presents several further arguments from different data in favour of assuming syntactic structure in ellipsis.

3.3.1 Extraction out of the ellipsis site

Extraction can be used as a diagnostic indication for deciding whether or not ellipsis contains a syntactic structure. Extraction of subject and/or object wh-phrases is possible in VP ellipsis, as shown in (112).

(112) I know which puppy YOU should take home, but I don't know which one SHE should [~~take home~~ *t* which puppy].

(Aelbrecht 2010: 9)

The data in (112) is an example of object wh-expression extraction from an ellipsis site which seems to behave just like a fully-fledged non-elliptical structure. The fact that the ellipsis site in (112) can host traces of movement is an indication that it has an internal syntactic structure. The grammaticality of the ellipsis in (112) indicates that there is internal structure containing the variable bound by the wh-phrase 'which one'.

Furthermore, this very same argument of extraction, when extended to the proform analysis, shows that the latter is incapable of accounting for the possibility of extraction. The example in (113), assuming that the ellipsis site contains a pronoun, is degraded. The ungrammaticality of (113) can be attributed to the fact that there is ‘a violation of the ban against vacuous quantification’ (see Johnson 2001: 456).¹⁵

(113) *I know which book José didn’t read for class, and which book Lulumae did it for him. (Johnson 2001: 456)

However, other types of ellipsis such as ‘null complement anaphora’ do not allow extraction. This is seen in (114), where extracting a wh-phrase is completely degraded, indicating that the ellipsis in (114) cannot be analysed as the PF deletion of a fully articulated syntactic structure.

(114) a. I asked Dany to make me a mojito, but he refused.
b. *I know Dany made a mojito, but I don’t remember which cocktail he refused [~~to make which cocktail~~].

(Aelbrecht 2010: 9)

3.3.2 Missing antecedents

Missing antecedents can also be a test for determining whether or not ellipsis has a syntactic structure. The argument is that if the ellipsis site in question allows missing antecedents, then this constitutes evidence for the existence of syntactic structure in the ellipsis. VP ellipsis displays the ‘missing antecedent’ phenomenon, as illustrated in (116), where the pronoun *it* appears to lack a proper antecedent. This can be explained by assuming that there is in fact an antecedent but that the VP containing it has been ellipited. Null complement anaphora, as in (117), on the contrary, cannot contain missing antecedents, which can be taken as an argument that such an ellipsis is devoid of any syntactic structure (see Hankamer & Sag 1976: 411-413).

¹⁵ Prohibition on Vacuous Quantification:
For every quantifier Q, there must be a variable x such that Q binds an occurrence of x in both its restrictive clause and its nuclear scope. (Kratzer 1995: 131)

(115) He said that one of us had to give up his seat, so Sue volunteered to give up her seat, because it was too narrow for her anyway.

(116) He said that one of us had to give up his seat, so Sue did, because it was too narrow for her anyway.

(117) *He said that one of us had to give up his seat, so Sue volunteered, because it was too narrow for her anyway.

(Hankamer & Sag 1976: 412)

Crucially, the missing antecedent phenomenon casts even further doubt on the proform analysis which assumes that the ellipsis site contains a proform. The contrast in (118) is straightforwardly accounted for if we assume that the ellipsis site has an internal syntactic structure and not just a proform.

(118) *My uncle didn't buy anything for Christmas, but my aunt did it for him, and *it* was bright red.

(*compare*: My uncle didn't buy anything for Christmas, but my aunt did, and it was bright red.) (Johnson 2001: 456)

3.3.3 Binding effects

Ellipsis displays binding effects which have been used to favour the syntactic analysis. The ellipsis in (119a) does not favour a strict reading in which the ellipsis site is interpreted as 'Sterling also blames Doug for the band's collapse'. For Kennedy (2003), this indicates that (119a) is derived from (119b), which has a fully-fledged syntactic structure. The fact that the strict interpretation is unavailable for (119a) is because the strict reading would violate Principle A of Binding Theory, which stipulates that an anaphor has to be bound in its governing category.

- (119) a. Doug blamed himself for the band's collapse, and Sterling did too.
 b. Doug blamed himself for the band's collapse, and Sterling did [_{VP} blame himself] too.

(Kennedy 2003: 31)

Similarly, the ungrammaticality of the ellipsis in (120a) can be attributed to violation of Principle B, which requires a pronoun to be free (that is, not bound) in its governing domain.

- (120) a. *Kim takes care of him_i because he_i won't.
 b. Kim takes care of him_i because he_i won't [_{VP} ~~take care of him_i~~]

(Kennedy 2003: 31)

Lasnik (2001, 2006a) presents the same argument for the existence of internal structure in sluicing, showing that the binding of elements in the remnant wh-phrase is possible and requires the underlying configuration of an embedded wh-question¹⁶ to license it; this is illustrated in (121) and (122).

- (121) They_i found some pictures of themselves_i, but I don't know exactly how many pictures of themselves_i [~~they found~~ _t]. (Lasnik 2006a: 3)

- (122) Every linguist₁ criticised some of his₁ work, but I'm not sure how much of his₁ work <every linguist₁ criticised -_t>. (Merchant 2006a: 276)

3.3.4 Locality effects

Islands are domains constraining movement which are referred to in the literature as locality effects. Ellipsis has been argued to be sensitive to island constraints

¹⁶ However, as noted by Lasnik (2006a), Culicover & Jackendoff (2005) argue that such binding effects can also be found in other constructions where there is no specific licensing underlying structure; a cleft structure provides the configuration required to license the reflexive, as in (i):

(i) It was pictures of themselves_i that they_i found. (Lasnik 2006a: 4).

(Kennedy & Merchant 2000; Kennedy 2003; Merchant 2004); and therefore, given that several ellipsis phenomena involve movement, one can argue that if the assumed movement is sensitive to islands, then that can be another indication that the ellipsis site contains a syntactic structure. This seems to be true in several ellipsis cases, as illustrated in the data below.

(123) *They want to hire someone who speaks a Balkan language, but I don't remember which they do. (Merchant 2008: 138)

(124) *They persuaded Kennedy and some other Senator to jointly sponsor the legislation, but I can't remember which one they did. (Merchant 2008: 139)

The VP ellipsis data in (123) and (124) involve wh-extraction from relative clause and coordinate structure islands respectively. The island effects that appear under ellipsis can receive a straightforward explanation if we assume that the ellipsis site contains an internal structure identical to that of the antecedent. In such a scenario, wh-movement will be illicit due to the fact that it has crossed island domains.

The very same outcome is attained when extending the above argument to other ellipsis phenomena such as fragment answers and pseudogapping. In fragment answers, the remnant is assumed to have undergone movement prior to deletion (Merchant 2004). Consequently, under such an analysis, the (b) fragments are derived from the representations in (125c) and (126c) which contain island domains out of which the remnant has moved. The fact that (125b) and (126b) are ill-formed is then borne out, and the ungrammaticality is simply attributed to an island violation.

- (125) a. Does Abby speak the same Balkan language that *Ben* speaks?
b. *No, *Charlie*.
c. No, she speaks the same Balkan language that *Charlie* speaks.

- (126) a. Did Ben leave the party because *Abby* wouldn't dance with him?
b. *No, *Beth*.
c. No, he left the party because *Beth* wouldn't dance with him.

(Merchant 2004: 688).

However, there are cases where extraction out of islands in ellipsis contexts is allowed. Sluicing is such a case (see Ross 1969; Merchant 2001, 2008a). The sluiced wh-phrase can have an overt correlate in the antecedent clause located within an island, which is not permissible in non-elliptical wh-questions due to island effects, as illustrated in (127a) and (127b) respectively.

- (127) a. Irv and someone were dancing together, but I don't know who.
b. *... but I don't know who_i Irv and t_i were dancing together.

(Chung et al. 1995: 273)

The data in (127) show that the syntactic behaviour and distribution of the wh-phrase in overt and elided clauses are not the same. If sluicing is derived by wh-movement and deletion, then such movement is expected to obey island constraints. The fact that it does not casts doubts on the claim that sluicing is derived via wh-movement and TP deletion. Instead, this has been taken as an argument in favour of approaches that do not assume structure or wh-movement in ellipsis such as LF copy theory.

Island violation in sluicing is so far unresolved in syntactic theory. However, a potential solution for the case in (127) is to assume that island effects under sluicing are PF phenomena (see Chomsky 1972; Lasnik 2001; Merchant 2001, 2008a)¹⁷. Therefore, if the part of the structure that contains the violation is deleted before the PF interface, deviance is eliminated (Lasnik 2007); the source of violation is the pronunciation of the island in question.

¹⁷ For Merchant (2001, 2008a), not all islands are PF phenomena. Islands are classified into three subtypes: selective islands, PF islands and LF islands. Each type involves a certain island-repair strategy under sluicing violations.

3.3.5 Superiority effects

Superiority effects in multiple wh-fronting languages provide further evidence for the analysis of ellipsis in sluicing as a PF deletion process. The argument is that, since sluicing involves wh-movement, then it is expected that sluicing would display superiority effects. Stjepanović (1999, 2003) observes that sluicing in Serbo-Croatian exhibits superiority effects, as illustrated in (128).

(128) a. Neko voli nekog.
somebody loves someone
'Somebody loves someone'

b. Ko koga?
who whom
'who (loves) whom'

c. *Koga ko?
whom who

(Stjepanović 2003: 256-257)

These contrasts, according to Stjepanović (1999, 2003), are due to a superiority violation. In (128b) the higher wh-phrase is assumed to have moved to the CP domain first, followed by the movement of the second (lower) wh-phrase. On the other hand, (128c), where the lower wh-phrase appears higher in the structure, is ungrammatical. This is attributed to a violation of the superiority condition, which requires C to attract the highest wh-expression first.

Furthermore, these effects seem to cast doubt on other accounts such as the LF copy approach, in which, as mentioned in section 3.2.2.2, the remnant wh-phrases are assumed to be base-generated in their surface position. Under such an assumption, superiority effects are not expected since any of the wh-phrases in the structure can

be base-generated first (see Park 2005: 378), which leads to the prediction that the structure in (128c) can be grammatical.

3.3.6 Identity under ellipsis

Ellipsis happens only if there is parallelism between the elided material and its antecedent; that is, the antecedent and the elliptical category have to be identical. However, the nature of the isomorphism is paramount in deciding whether pure syntactic or semantic isomorphism is sufficient to license ellipsis. This section discusses the sort of identity found in ellipsis.

3.3.6.1 Voice mismatch under ellipsis

Earlier syntactic accounts of ellipsis such as Sag's (1976) argue that ellipsis is licensed by syntactic identity between the antecedent and the ellipsis site. Thus, examples such as (129) and (130), where there is a syntactic difference between the antecedent and elided VP, are ungrammatical due to the fact that there is a voice mismatch between them¹⁸.

(129) *Paul denied the charge, but the charge wasn't by his friends.

(130) *John had observed many of the enemy's soldiers, but hadn't been seen by them.

(Merchant 2007: 4)

Recent studies, however, show that VP ellipsis tolerates voice mismatch between the antecedent and the elided category. Merchant (2007, 2008b) presents a detailed discussion showing this, as in (131) and (132).

(131) This problem was to have been looked into, but obviously nobody did *<look into this problem>*

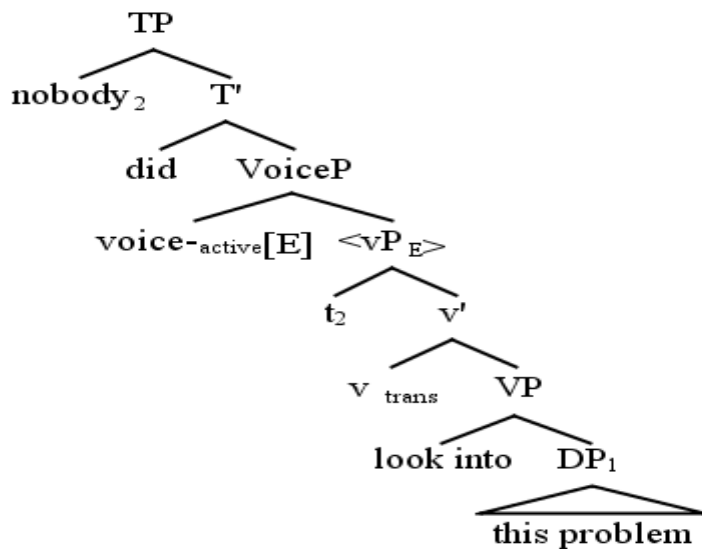
¹⁸ However, Sag (1976) cites some counterexamples where ellipsis is acceptable despite voice mismatch.

(132) The system can be used by anyone who wants to <use it>

(Merchant 2008b: 169)

Pursuing the deletion account, Merchant (2007, 2008b) points out that the fact that VP ellipsis permits voice alternation is ‘... because the head bearing the syntactic feature that determines the voice morphology on the verb is external to the verbal projection targeted by ellipsis’ (Merchant 2007: 2). In other words, there is a voice head above the *v*P which determines the voice of the verb; this head is endowed with the ellipsis feature [E] in elliptical VPs. The fact that voice mismatch in VP ellipsis is permitted is because the head that determines *voice* lies outside the ellipsis site. This is illustrated in the tree diagram in (133).

(133)



(Merchant 2007: 16)

Other types of ellipsis which target bigger portions such as sluicing, do not allow voice mismatch, as illustrated in (134) and (135). Merchant (2007) attributes the ungrammaticality of these examples to the fact that the node targeted by deletion (that is, TP) contains the voice head; therefore, the voice of the elided clause has to match the voice of the antecedent in order for the structure to be grammatical.

(134) *Joe was murdered (by someone), but we don't know who.

(135) *Someone murdered Joe, but we don't know by whom.

(Merchant 2007: 18-19)

3.3.6.2 P-stranding under sluicing revisited

Chung (2005) presents new evidence in favour of assuming internal structure in ellipsis based on a type of sluicing referred to as 'sprouting'. In such cases, the sluiced wh-phrase does not correspond to a correlate in the antecedent, while in regular sluicing the remnant wh-phrase has a correlate (Chung et al. 1995). Chung (2005) observes that when the antecedent contains an implicit prepositional phrase correlate, p-stranding is prohibited in sluicing; however, when the correlate is overt, p-stranding is optional. This is clarified in the data in (136).

(136) a. They're jealous, but it's unclear of who.

b. *They're jealous, but it's unclear who(m).

c. They're jealous of someone, but it's unclear of who/ who.

(Chung 2005: 79-80)

Chung (2005) examined other languages such as Norwegian and Danish, and concluded that they behave exactly like English with respect to p-stranding under sprouting sluicing. For instance, Norwegian allows p-stranding when the remnant wh-phrase has an overt correlate in the antecedent, but not otherwise. This is exemplified in (137) where the sluiced wh-phrase corresponds to an overt correlate, which in such a case allows the preposition to be pied-piped or stranded.

(137) a. Per har snakket med noen, men jeg vet ikke (med) hvem.

Per has spoken with someone, but I know not (with) who.

b. Per er sjalu på noen, men jeg vet ikke (på) hvem.

Per is jealous on someone, but I know not (on) who.

(Chung 2005: 81)

In the examples (138)-(139), there is no overt correlate corresponding to the remnant wh-phrase, and thus, as can be seen, only pied-piping is permissible.

(138) a. Per spilte en duett, men jeg vet ikke med hvem.
Per was playing a duet, but I know not with who.

b. Per er sjalu, men jeg vet ikke på hvem.
Per is jealous, but I know not on who.

(139) a. *Per spilte en duett, men jeg vet ikke hvem.
(Per was playing a duet, but I know not who.)

b. *Per er sjalu, men jeg vet ikke hvem.
(Per is jealous, but I know not who.)

(Chung 2005: 81)

Based on the above data, Chung (2005: 83) proposes that ‘we must look beyond semantics and pragmatics to account for the contrasts’. The obligatory presence of prepositions in sprouting sluicing seems to be formally motivated, that is, ‘there is a formal identity condition at work here’ (Lasnik 2006a: 7).

3.4 Conclusion

This chapter has provided an overview of the status of ellipsis in syntactic theory and the different theories proposed to explain the phenomenon. The question of whether or not ellipsis sites have internal structure has been controversial. In addition, there are several challenges for all the theories discussed in this chapter, which suggests that explaining ellipsis using just one theory is unrealistic. However, the chapter has provided compelling arguments showing that several ellipsis sites contain internal syntactic structure.

Ellipsis patterns with non-elliptical counterparts with respect to morpho-syntactic effects such as case-marking and other phenomena such as extraction, missing antecedents, locality effects and binding effects. This provides empirical evidence that ellipsis has a syntactic structure. Consequently, ellipsis should not be analysed as an empty category devoid of any syntactic structure, as in the pro-form theory in which ellipsis is interpreted either as regular pronouns (see Hardet 1993; Lobeck 1995) or by copying the LF representation of the antecedent into that null category (Chung et al. 1995). Instead, ellipsis is better treated as a PF deletion process; that is, the deletion of a fully articulated structure.

Chapter 4

Sluicing in Libyan Arabic

4.0 Introduction

This chapter introduces sluicing in Libyan Arabic and determines whether it is ‘true’ sluicing or pseudosluicing. It also discusses the crosslinguistic and language-specific properties that Libyan Arabic sluicing displays. The chapter is organised as follows: section 1 introduces sluicing and its status in syntactic theory. Section 2 deals with sluicing and its typology in Libyan Arabic and explains some of its crosslinguistic properties such as form-identity effects. Section 3 examines sluicing in the language in order to determine its underlying structure by applying sluicing-defining diagnostics to Libyan Arabic data. Section 4 proposes an analysis for Libyan Arabic sluicing and finally section 5 concludes the chapter.

4.1 Sluicing in syntactic theory

The term sluicing was originally coined by Ross (1969) to refer to a form of sentential ellipsis in which a remnant wh-phrase functions as a wh-question despite the fact that such a question is reduced phonologically to a mere wh-phrase, as in (140). Sluicing is a kind of surface anaphora since it requires an antecedent (Hankamer & Sag 1976); the content of the elided IP corresponds to the content of some sentence in the discourse. Sluicing constructions are similar to non-elliptical wh-questions in both distribution and interpretation. The sluiced wh-phrase is interpreted as a fully pronounced wh-question, since it conveys a full interrogative force, and is thus equivalent to full wh-questions, as in (141). The wh-phrase in (140) takes a scope over a missing clause, hence the name clausal/IP ellipsis.

(140) John bought something, but I don’t know what.

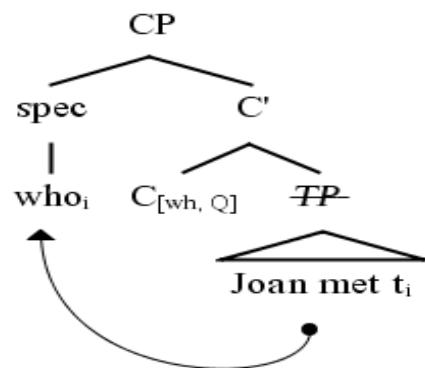
(141) John bought something, but I don’t know what John bought.

Generally, there are two main approaches with respect to the syntactic structure of sluicing: the non-structural and structural approach. The non-structural approach assumes that there is no syntactic structure in the ellipsis site and the sluiced wh-phrase is treated as a bare wh-fragment generated as an XP (DP, PP, AP) and functioning as a complement to the main verb (see section 3.2.1).

As discussed in the last chapter, the structural approach argues that there is a structure in the elided material. This is represented by most of the analyses. The two dominant structural approaches involve LF copying and PF deletion. The former assumes a null category filled by copying the semantic component of the antecedent clause at LF (Lobeck 1991, 1995; Chung et al. 1995; Fortin 2007), and the latter argues for a syntactic structure within the null TP which is deleted after a wh-movement operation has taken place (Ross 1969; Chomsky & Lasnik 1993; Merchant 2001; Aelbrecht 2010; van Craenenbroeck 2010a).

Following the deletion theory in positing a syntactic structure in the ellipsis site of sluicing, the question is how we can determine the nature of this invisible structure. According to the classical deletion analysis proposed by Ross (1969) and recently adopted by Merchant (2001, 2008a) and Craenenbroeck (2010a), among others, the sluiced clause has the syntactic structure of a wh-question and therefore sluicing is derived by wh-movement plus TP deletion, as shown in (142).

(142) Joan met someone, but I don't know who.



However, there is another plausible analysis advocated by Erteschik-Shir (1977), who argues that sluicing derives from an underlying copular clause, and consequently it can be analysed as an elliptical cleft, as illustrated in (143).

(143) John bought something, but I don't know what [it was].

These two lines of analysis sound plausible and they lead to the question of to what extent the invisible structure of the sluiced clause is isomorphic or identical to the structure of the antecedent clause. Building on this debate, this chapter seeks to determine the existence of sluicing in Libyan Arabic and whether it instantiates sluicing or pseudosluicing, i.e. elliptical clefts. It also aims to determine the crosslinguistic and language-specific properties of sluicing that LA sluicing exhibits.

4.2 Sluicing in Libyan Arabic

Sluicing occurs in Arabic both in Standard Arabic and in the local varieties of Arabic. Arabic sluicing resembles English sluicing in the sense that it leaves a wh-remnant behind. Furthermore, as in other languages, Arabic sluicing is only licensed by interrogative complementisers (Mughazy 2009: 19-20). The following are examples of sluicing from Standard Arabic.

(144) ṭalabat min-ni mūnā ʔan ʔarḥala lākin lā
 asked.3FS from-ni Mona that leave.1S but NEG
 ʔʕrif limādā.
 know.1S why
 ‘Mona asked me to leave, but I don't know why.’

(145) lā ʔa-taḍakkar matā bi-t-taḥdīd, lākin-nī ʔaʕṭtu-hu
 NEG 1S-remember when with-the-precision but-I gave.1S-him
 l-kitāb
 the-book
 ‘I don't know when exactly, but I gave him the book.’

(Mughazy 2009: 20)

Libyan Arabic also exhibits sluicing, as illustrated in (146). As in other languages, sluicing is licensed by interrogative wh-expressions only, and it is interpreted as a fully pronounced wh-question since the sluiced wh-phrase conveys the full interrogative force that stands for a complete wh-question. There are several wh-phrases in the language which are used to form wh-questions and sluicing. These include *man* ‘who/whom’, *šen*¹⁹ ‘what’, *ʔayya NP* ‘which NP’, *wēn* ‘where’, *əmta* ‘when’, *kēf* ‘how’, *kam* ‘how many’ and *lēš* ‘why’.

(146) *waḥəd zār Ali, lakən miš ʕarəf man.*
 someone visited.3MS Ali but NEG know.1MS who
 ‘Someone visited Ali, but I don’t know who.’

Sluicing occurs in both main and embedded contexts. Main-clause sluices occur as mere wh-phrases in contexts in which the antecedent is a main wh-question, as in (147); embedded-clause sluices occur normally in asyndetically conjoined constructions, as in (148). Moreover, embedded-clause sluices are introduced by verbs that select CP complements such as ‘know’, ‘guess’, ‘remember’, ‘say’, ‘forget’, etc.

(147) A: *Ali tṛəd waḥəd min ʔāləbt-əh lyoum.*
 Ali fired.3MS one of students-his today
 ‘Ali dismissed one of his students today’.

B: *man / ʔayya ʔāləb?*
 who which student
 ‘Who? / which student?’

¹⁹The wh-phrases *šen* ‘what’ and *man* ‘who’ have other gender-specified variants, namely *šen-u*, *šen-i*, *man-u* and *man-i*. The *-u* ending is used for singular masculine and the *-i* for singular feminine. Ouhalla (1996: 683) points out that the Iraqi Arabic wh-phrase *men-o* ‘who’ may have evolved from the combination *man huwwa* found in Classical Arabic reduced clefts, as in (i).

(i) *man huwwa* → *men-o*
 who he who he

- (148) Ali ṭrəd waḥəd min ṭāləbt-əh lyoum, lakən
 Ali fired.3MS one of students-his today but
 ma-gələ-š man.
 NEG-said.3MS-NEG who
 ‘Ali dismissed one of his students today, but he didn’t say who.’

4.2.1 Sluicing typology

Sluicing constructions can be divided into four subtypes: a) sluices with adjunct wh-phrases, b) sluices with overt correlates c) sluices with implicit arguments, and finally, (d) contrast sluices (see Chung et al. 1995 and Merchant 2001).

4.2.1.1 Sluicing with adjunct wh-phrases

In such sluices, the displaced wh-phrase is an adjunct that corresponds to nothing in the antecedent clause, as illustrated in (149).

- (149) Ali kan yəktəb , lakən miš ʕarəf-š wēn/ lēš.
 Ali was.3MS writing.3MS but NEG know.1MS where/why.
 ‘Ali was writing, but I don’t know where/why.’

4.2.1.2 Sluicing with overt correlates

The wh-phrase in this type of sluicing corresponds to an overt correlate in the antecedent IP, as in (150), where the correlate has to be either an indefinite NP or a weak DP. If the correlate is a strong DP, pronoun or quantifier, the sluice will be ungrammatical, as shown in (150). This is also the case for Libyan Arabic, where correlates corresponding to a sluiced wh-phrase are typically indefinite pronouns such as *waḥed* ‘someone’ or an indefinite DP such as *ražel* ‘a man’, as illustrated in (151); otherwise, an ill-formed sluice results, as in (152).

- (150) John ate dinner with (with) who. }
 $\sqrt{\text{someone}}$
 $\sqrt{\text{a woman from San Jose}}$
 *them
 *most first year students
 *John
 *nobody
 and we're wondering

(Chung et al. 1995: 254)

- (151) Ali zār waḥəd/ ražəl , lakən ma-gələš man.
 Ali visited.3MS someone/ man but NEG-said.3MS-NEG who
 ‘Ali visited someone, but he didn’t say who.’

- (152) *Ali zār r-ražəl həda, lakən ma-gələš man.
 Ali visitd.3MS the-man this but NEG-said.3MS-NEG who
 ‘*Ali visited this man, but he didn’t say who.’

4.2.1.3 Sluicing with implicit arguments

The wh-phrase in this type of sluicing corresponds to an implicit argument licensed by argument structure, as illustrated in (153). The sprouted constituent can also be a bare adjunct wh-expression such as *wēn* ‘where’, *əmta* ‘when’, *kēf* ‘how’, or a prepositional phrase containing a wh-phrase like *la wēn* ‘to where’, *ša lēš* ‘for what’, *min ʔayya NP* ‘from which NP’, as in (154).

- (153) Ali kan yəggra, lakən miš ʕarəf šenu/i.
 Ali was.3MS reading.3MS but NEG know.1MS what
 ‘Ali was reading, but I don’t know what.’

- (154) Ali bisafər, lakən ma-gələš la wēn.
 Ali FUT-travel.3MS but NEG-said.3MS to where
 ‘Ali will travel, but he didn’t say to where.’

Sprouted constituents can be non-direct object arguments, as in (155); likewise, sprouted arguments interpreted as an agent of a passive verb are acceptable provided that there is no voice alternation between the antecedent and sluiced clause, as in (156)-(157) respectively (see 3.3.6.1). Despite the fact that implicit argument sprouting in sluicing is only acceptable in cases where there is no voice alternation, as in (156), non-elliptical wh-questions allow voice alternation between the two coordinate clauses, as in (158).

(155) n-bāf l-ḥoš, lakən miš məʕrūf l-man.
 PASS-sold.3MS the-house but NEG known to whom
 ‘The house was sold, but it is not known to whom.’

(156) nbāf l-ḥoš, lakən miš ʕarəf ʕən ʕariq man.
 PASS-sold.3MS the-house but NEG know.1MS by means whom
 ‘The house was sold, but I don’t know by whom.’

(157) *nbaaf l-ḥoš, lakən miš ʕarəf man.
 PASS-sold.3MS the-house but NEG know.1MS who
 ‘*The house was sold, but I don’t know who.’

(158) nbāf l-ḥoš, lakən miš ʕarəf man (illi) bāf-əh.
 PASS-sold.3MS the-house but NEG know.1MS who that sold.3MS-it
 ‘The house was sold, but I don’t know who sold it.’

4.2.1.4 Contrast sluices

Contrast sluices are those structures in which ‘the descriptive content in the sluiced wh-phrase clashes with that of its correlate’, as in (159) (Merchant 2001: 150). Contrast sluices in Arabic are acceptable, as demonstrated by the example (160).

(159) There are nine women in the play, but I don’t know how many men.

(Merchant 2001: 150)

- (160) ʕandha tləta wlād, lakən miš ʕarəf kam bənt.
 has.3FS three sons but NEG know.1MS how many daughter
 ‘She has three sons, but I don’t know how many daughters.’

In brief, this section has introduced and described the sluicing phenomenon in Libyan Arabic. It has been shown that sluicing occurs in the language and that it resembles sluicing in other languages such as English in terms of structure and typology. The next section seeks to find out whether or not Libyan Arabic sluicing exhibits the crosslinguistic properties of sluicing according to which it is analysed as a form of elliptical wh-question.

4.2.2 Form identity effects in Libyan Arabic sluicing

From a crosslinguistic perspective, sluicing constructions display certain morpho-syntactic behaviours referred to as form identity effects; these include morphological case matching, p-stranding and binding effects. Form-identity effects such as morphological case-matching and preposition-stranding provide evidence for the claim that sluicing is an elliptical wh-question, since the sluiced wh-phrase behaves identically to a wh-phrase in a non-elliptical wh-question. From this kind of morpho-syntactic similarity, the case-matching and preposition-stranding phenomena are straightforwardly accounted for.

4.2.2.1 Form-identity generalisation I: case-matching

The sluiced wh-phrase must bear the case that its correlate bears.

(Merchant 2001: 91)

In case-marking languages, the sluiced wh-phrase displays only the case of its correlate in the antecedent clause, as in the Standard Arabic example in (161). Modern Arabic dialects, including Libyan Arabic, are not case-marking languages; therefore, the case-marking effect cannot be taken as evidence that Libyan Arabic sluicing derives from regular wh-questions. The sluiced wh-phrase takes the same form regardless of the syntactic position it occupies in the clause, as shown in (162).

(161) qaraʔ-a Khalid-un riwayat-an, lakin lā ʔaḍakkar
 read.3MS Khalid.NOM novel.ACC but NEG remember.1S
 bi-t-taḥḍīd ʔayyat-a riwayat-in.
 with-the-precision which.ACC novel.GEN
 ‘Khalid read a novel, but I don’t remember exactly which novel.’

(162) Ali gal inn-əh grē riwaya, lakən
 Ali said.3MS that-he read.3MS novel but
 ma- gal-š ʔayya riwaya
 NEG- said.3MS-NEG which novel
 ‘Ali said that he read a novel, but he didn’t say which novel.’

4.2.2.2 Form-identity generalisation II: preposition-stranding

A language *L* will allow preposition stranding under sluicing iff *L* allows preposition stranding under regular wh-movement.

(Merchant 2001: 92)

Merchant (2001) extended this generalisation to sluicing and wh-questions in other languages and concluded that it determines whether a language permits or prohibits p-stranding in sluicing. English allows p-stranding under wh-movement; therefore, p-stranding in sluicing is permitted, as in (164). Libyan Arabic does not permit p-stranding in regular wh-movement, as shown in (165); therefore, the p-stranding generalisation predicts that p-stranding is not permitted in sluicing either. Unexpectedly, this prediction is not correct, as evidenced in (166).

- (163) a. Who did John talk to?
 b. To whom did John talk?

(164) John talked to someone, but I don’t know who.

(165) a. *man təkəllem Sami mʕa?
 who talked.3MS Sami with
 ‘Who did Sami talk with?’ (Intended reading)

- b. mʕə man təkəlləm Sami?
 with who talked.3MS Sami
 ‘With whom did Sami talk?’

- (166) Sami təkəlləm mʕə waḥəd, lakən miš ʕarəf (mʕə) man.
 Sami talked.3MS with someone but NEG know.1MS (with) who
 ‘Sami talked with someone, but I don’t know (with) who.’

The fact that LA sluicing seems to allow p-stranding as in (166) suggests that the language is a counterexample to the p-stranding generalisation; therefore, the latter cannot strictly be taken as evidence that sluicing derives from regular wh-questions by wh-movement plus PF deletion. This issue is discussed in detail in Chapter 5.

4.2.2.3 Sluicing-COMP generalisation

In sluicing, no non-operator material may appear in COMP.

(Merchant 2001: 62)

There is a cross-linguistic restriction on any phonologically realised material in the COMP domain in sluicing, as in (167). The COMP generalisation prohibits elements that are not related to the sluiced wh-phrase to appear in sluicing; such elements include clitics, auxiliaries, or complementisers that may appear in the COMP domain in non-elliptical wh-questions either via movement, as in T-to-C movement or via base-generation, as with complementisers. In LA sluicing, the COMP position has to be null, as in (168); no auxiliaries or complementisers can appear in the COMP domain.

- (167) A: Max has invited someone.
 B1: Who has Max invited?
 B2: Really? Who (*has)?

- (168) kan yəggra f-ktab, lakən miš ʕarəf ʔayya ktāb (*kan/*illi)
 was.3MS reading.3MS in-book but NEG know.1MS which book was/that
 ‘He was reading a book, but I don’t know which book (*was/*that).’

(167) show that main-clause sluicing differs from non-elliptical wh-questions in that it lacks subject-auxiliary inversion. Merchant (2006a) suggests two possible explanations for this. One is that IP ellipsis takes place before T-to-C movement and therefore deletion bleeds verb movement to C. The other possibility has to do with the strong feature triggering verb movement to C. For Merchant (2001) and Lasnik (2001), this feature resides in T. Given that this feature is in the ellipsis site, it need not move since it will not cause PF crash (see Merchant 2001 and 2006a for discussion).

4.2.2.4 Island constraints and sluicing

Assuming that sluicing stems from wh-questions and is derived by wh-movement, it is expected that sluicing would obey movement constraints. However, sluicing shows insensitivity to islands (see Ross 1969 and Merchant 2001, 2008a, among others). Consequently, what appears to be grammatical sluicing could be derived from island-violating constructions, as illustrated in (169) and (170).

(169) Relative clause island

- a. They want to hire someone who speaks a Balkan language, but I don't remember which.
- b. *I don't remember which (*Balkan language*) they want to hire someone [*who speaks*].

(Merchant 2008a:136)

(170) Complement to nouns

- a. The administration has issued a statement that it is willing to meet with one of the student groups, but I'm not sure which one.
- b. ?*The administration has issued a statement that it is willing to meet with one of the student groups, but I'm not sure which one [it has issued a statement that it is willing to meet with]. (Chung et al. 1995: 272-3)

Sluicing in Libyan Arabic is also insensitive to syntactic islands. The sluiced wh-phrase can have an overt correlate in the antecedent clause located within an island, as in (171a) and (172a); this is not permissible in non-elliptical wh-questions due to island effects, as shown in (171b) and (172b).

(171) Complement to nouns

- a. l-mudīr ?šdər qarar inn-əh hə-yutrəd
the-manager issued.3MS resolution that-he fut-fire.3MS
waḥəd min l-muwəḍifin, lakən miš ʕarəf ?ayya muwəḍəf.
one of the-employees but NEG know.1MS which employee
‘The manager issued a resolution that he will fire one of the employees, but it is not known which one.’

Compare

- b. *?ayya muwəḍəf-i l-mudīr ?šdər qarar inn-əh
which employee the-manager issued.3MS resolution that-he
hə-yutrəd -i?
FUT-fire.3MS

(172) COMP-trace effect

- a. l-mudīr ?əkkəd inna waḥəd hə-yəstəqīl,
the-manager confirmed.3MS that someone fut-resign.3MS
lakən ma-nəddəkər-š b-t-təḥdīd man.
but NEG-remember.1S-NEG exactly who.
‘The manager confirmed that someone will resign, but I can’t remember exactly who.’

Compare

- b. *man-i l-mudīr ?əkkəd inna t-i hə-yəstəqīl.
who the-manager confirmed.3MS that FUT-resign.3MS

To sum up, form-identity effects do not seem to provide clear evidence that sluicing in LA derives from regular wh-questions, since the behaviour and distribution of the

sluiced wh-phrase is not fully clear-cut when compared to regular non-elliptical wh-questions. Firstly, as a non-case marking language, the case-matching generalisation cannot be extended to Libyan Arabic; secondly, sluicing seems to falsify the p-stranding generalisation, which casts further doubt on its underlying source. Finally, island insensitivity indicates that sluicing could indeed have an alternative underlying source. Based on these initial findings, the next section examines the underlying source of sluicing by implementing some sluicing-defining diagnostics.

4.3 Libyan Arabic sluicing: sluicing or pseudosluicing?

Crosslinguistically, the analysis of sluicing in null subject languages with covert copulas has been controversial. Japanese sluicing, for instance, has been accounted for as sluicing (see Takahashi 1993, 1994) and pseudo-sluicing, i.e. an elliptical wh-cleft (see Shimoyama 1995; Kuwabara 1996). Merchant (1998) ascribes this confusion to two main facts about Japanese: a) it is a null subject language, and thus is null-expletive; b) it optionally permits copula omission in embedded clauses. In response to Takahashi's (1993, 1994) analysis of Japanese sluicing as 'true' sluicing, a number of researchers (e.g. Shimoyama 1995; Kuwabara 1996; Nishiyama et al. 1996) have proposed that Japanese sluicing is a type of reduced cleft²⁰, which is referred to by Merchant as pseudosluicing and defined as follows:

Pseudosluice =_{def} An elliptical construction that resembles a sluice in having only a wh-XP as remnant, but has the structure of a cleft, not of a regular embedded question.

(Merchant 1998: 91)

As a null subject language, Libyan Arabic also exhibit some features that make sluicing and pseudosluicing indistinguishable. Firstly, it is a null subject language and it has no equivalent to the expletive subject 'it'; secondly, it has no overt present-tense copula forms in cleft constructions. Thirdly, Libyan Arabic is not a morphologically case-marking language; therefore, there is no indication as to whether or not the case of the sluiced wh-phrase is identical to that of its correlate.

²⁰ Erteschik-Shir (1977) argued for a cleft analysis for English sluicing. Szczegelnik (2006) claims that Polish sluices with d-linked wh-phrases derive from a cleft source.

Merchant (2001), in this regard, remarks that ‘in those languages without overt morphological case, we may be dealing with a truncation of something like ‘...who it is’’.

Since pseudosluicing is a type of cleft structure, it is expected that it would display cleft properties. In order to substantiate the presence of sluicing and/or pseudosluicing in Libyan Arabic, a number of Merchant’s (2001) diagnostics are implemented to differentiate between the behaviour of the wh-phrase in sluicing and pseudosluicing/clefting. Prior to implementing these tests, it is worthwhile to explain cleft structure in Libyan Arabic.

4.3.1 Cleft structure in Arabic

The structure of clefts in Arabic in general and in Libyan Arabic in particular is not identical to regular cleft structures in languages such as English in that it lacks an expletive ‘it’ and an overt copula. Cleft structure consists of the focused constituent appearing clause-initially followed by a pronominal copula and a free relative clause (see Ouhalla 1999: 341). This is illustrated in (173), where the clefted (focused) element ‘Zaynab’ appears in clause initial position followed by a pronominal copula and a relative clause.

(173) *Standard Arabic*

ZAYNAB-u	hiyya	llatii	ʔallaf-at	l-riwaayt-a.
Zaynab-NOM	PRON.she	RM	wrote.3FS	the-novel-ACC

‘It was ZAYNAB who wrote the novel.’ (Ouhalla 1999: 341)

The structure of clefts in Libyan Arabic is similar to that in Standard Arabic, as illustrated in (174). However, it is worth noting that the pronominal copula is optional, indicating that it is not a cleft-defining property.

(174) Nadia	(hiyya)	illi	safrət.
Nadia	(PRON.she)	that	travelled.3FS

‘It is Nadia who travelled.’

(175) man (hiyya) illi safrət?
 who (PRON.she) that travelled.3FS
 ‘Who is it that travelled?’

It is worth noting that there is a restriction on the type of the grammatical category that can be clefted; only nominal constituents but not phrases of adverbial functions can be clefted (see Ouhalla 1999 for the same issue in Standard and Moroccan Arabic and Soltan 2011b for Egyptian Arabic)²¹. This is exemplified in (176), (177) and (178) from Libyan Arabic.

(176) Ali (huwwa) illi b-yəmši l-ṭrabləs.
 Ali PRON.he that FUT-go.3MS to-Tripoli
 ‘It is Ali that will go to Tripoli’.

(177) *l- ṭrabləs (hiyya) illi Ali b-yəmši
 to-Tripoli PRON.she that Ali FUT-go.3MS
 ‘It is to Tripoli that Ali will go.’ (Intended reading)

(178) *wēn (hiyya) illi Ali b-yəmši?
 where PRON.she that Ali FUT-go.3MS
 ‘Where is it that that Ali will go?’ (Intended reading)

For now, I will follow Shlonsky (2002) and assume that wh-questions that appear with pronominal copulas, e.g. (175) are cleft wh-questions and thus they are different from regular wh-questions. These are discussed in detail in Chapter 5.

4.3.2 Sluicing-defining diagnostics (Merchant 2001)

Merchant (2001) proposes a set of diagnostics to distinguish the behaviour of the wh-phrase in sluicing and pseudosluicing (cleft-questions with XP-pivots). His argument

²¹ As noted by Ouhalla (1999: 341) ‘Arabic clefts are restricted to definite argument phrases only. Indefinite noun phrases, prepositional phrases as well as categories of adverbial function, when focused can only make use of the in situ strategy ... and the preposing strategy in Standard Arabic’.

is that the structures of sluicing and pseudosluicing in English exhibit distinct syntactic behaviour with respect to adjuncts and implicit arguments, prosody, aggressively non-d-linked wh-phrases, mention-some modification, mention-all modification, else-modification, swiping (wh-preposition inversion), languages with limited or no cleft strategy and case matching.

However, as noted by Craenenbroeck (2010b), Merchant's arguments were concerned with whether or not sluicing can be analysed as an elliptical cleft; that is, they argue against a cleft analysis of English sluicing. This, however, does not exclude the possibility that sluicing can derive from a copular source, at least in some contexts (see also Martín González 2010). The next section applies the diagnostics proposed by Merchant (2001) to data from Libyan Arabic in three contexts; namely sluicing, full wh-questions and full cleft wh-questions. This will determine whether sluicing in Libyan Arabic derives from regular or cleft wh-questions.

4.3.2.1 Adjuncts and implicit arguments

The distribution of adjuncts and implicit arguments can distinguish between sluicing and pseudosluicing (clefting). English sluicing is grammatical with adjuncts and implicit arguments, whereas pseudosluicing is not, as in (179)²². Similarly, the LA elliptical structure in (180) cannot be pseudosluicing since the adjunct wh-phrases are incompatible with cleft wh-questions, as shown in (181). This indicates that sluicing with adjunct wh-remnants is genuine sluicing and not pseudosluicing.

(179) a. He fixed the car, but I don't know how (*it was).

b. They served the guests, but I don't know what (*it was).

(Merchant 2001: 121)

²² However, van Craenenbroeck (2010b) points out in a footnote that a full cleft version of the examples in (179) is acceptable, as in (i) and (ii).

(i) He fixed the car, but I don't know how it was that he fixed the car.

(ii) They served the guests, but I don't know what it was that they served the guests.

(van Craenenbroeck 2010b: 1715)

(180) Ali şəlləh s-siyyara, lakən miş ƣarəf kēf /əmta.
 Ali fixed.3MS the-car but NEG know.1MS how/when
 ‘Ali fixed the car, but I don’t know how.’

(181) *əmta/kēf hiyya illi Ali şəlləh s-siyyara?
 when/how PRON.he that Ali fixed.3ms the-car
 ‘When/how was it that Ali fixed the car?’ (Intended reading)

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
adjuncts	√	√	*

Sluicing is grammatical with implicit arguments, as in (182), and so are cleft wh-questions, as in (183), indicating that sluicing with implicit arguments can derive from a regular or cleft wh-question.

(182) Ali kan yəggra, lakən miş ƣarəf šenu.
 Ali was.3MS reading.3MS but NEG know.1MS what
 ‘Ali was reading, but I don’t know what.’

(183) miş ƣarəf šenu (hu) illi Ali kan yəggra fi-h.
 NEG know.1MS what PRON.he that Ali was.3MS reading.3MS in-it
 ‘I don’t know what it is that Ali was reading.’

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
Implicit arguments	√	√	√

4.3.2.2 Aggressively non-D-linked wh-phrases

In English, aggressively non-D-linked wh-phrases, for example, ‘who the hell’ or ‘who the devil’ cannot occur in sluicing, but they are acceptable as pivots of clefts, as in (184).

- (184) Someone dented my car last night.
 a. I wish I knew who!
 b. I wish I knew who the hell it was!
 c. *I wish I knew who the hell.

(Merchant 2001: 122)

As for LA, aggressively non-D-linked wh-expressions are compatible with cleft wh-questions, as in (185)²³, but not with sluicing and regular wh-questions, as in (186) and (187) respectively. This diagnostic shows that sluicing and clefting should be considered two distinct structures.

- (185) man (hu) š-šīṭan illi xədē s-siyyara?
 who PRON.he the-devil that took.3MS the-car
 ‘Who the hell was it who took the car?’

- (186) *waḥəd xədē s-siyyara, lakən miš ʕarəf man š-šīṭan.
 someone took.3MS the-car but NEG know.1MS who the-devil
 ‘*Someone took the car, but I didn’t know who the hell.’

- (187) *man š-šīṭan xədē s-siyyara?
 who the-devil took.3MS the-car
 ‘Who the hell took the car?’ (Intended reading)

Diagnostic	Sluicing	Full wh-questions	Full cleft wh-questions
Aggressively non-d-linked wh-phrases	*	*	√

4.3.2.3 Mention-some modification

Mention-some modification is compatible with sluicing and wh-questions, but not with clefts since the wh-pivot of a cleft is only compatible with mention-all

²³ As can be seen from example (185), the wh-phrase and the aggressively non-D-linked wh-expression do not constitute one unit as the case in English due to the fact that cleft structure is different in the two languages, i.e. English and Arabic. However, this diagnostic can be used to distinguish regular from cleft wh-questions in Libyan Arabic.

interpretation. This means that a cleft wh-pivot is incompatible with modifiers such as ‘for example’ that enforce mention-some interpretation, as in (188).

(188) A: You should talk to somebody in the legal department for help with that.

B1: Could you tell me who (*it is), for example?

B2: Who (*is it), for example?

(Merchant 2001: 122)

As for LA, mention-some modification with *mətallən*, literal translation of ‘for example’, is acceptable in sluicing and regular wh-questions, as in (189) and (190) respectively. It is also compatible with cleft wh-questions, as in (191). This suggests that sluicing with mention-some modification can derive from regular or cleft wh-questions.

(189) A: enta tægder tækællem mŋə wahəd ʕən l-muškla hadi.

you can.3MS speak.2MS with someone about the-problem this

‘You can speak to someone about this problem.’

B: mŋa man, mətallən?

with who, for example

(190) mŋə man mətallən nægder tækællem ʕən l-muškla hadi?

with who for example can.1MS speak.1MS about the-problem this

(191) man (hu) mətallən illi nægder nækællem mŋ-əh?

who (PRON.he) for example that can.1MS talk.1MS with-him

‘Who is it, for example, that I can speak with?’

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
mention-some modification	√	√	√

4.3.2.4 Mention-all modification

Mention-all modification has the opposite distribution of ‘mention-some’ in English; it is compatible with clefts, but not with sluicing, as shown in (192). This fact is seen by Merchant (2001) as an indication that sluicing is not an elliptical cleft. The claim is that if the underlying structure of sluicing is a cleft, the former is then expected to display cleft properties with respect to the modifier ‘all’.

- (192) A bunch of students were protesting,
 a. sluicing: * and the FBI is trying to find out who all.
 b. cleft: and the FBI is trying to find out who all it was.

(Merchant 2001: 122)

In Libyan Arabic, the wh-modifier *kul* ‘all’ is degraded in both sluicing (193) and wh-questions (194). This degradation, however, does not affect cleft wh-questions, as in (195). Merchant (2001) considers these facts as supporting the argument that sluicing derives from wh-questions and not clefts; that is, if the underlying structure of sluicing is a cleft, then the former is expected to exhibit cleft properties.

- (193) məʒmuʕa min ʔ-ʔalaba kanu yəḍahru.
 a group of the-students were.3MP demonstrating.3MP
 ‘a group of students were demonstrating ...’

*w š-šurta təbbi təʕrəf man kul-hum
 and the-police want.3FS know.3FS who all-they
 ‘*and the police wants to know who all.’

- (194) *man kul-hum kanu yəḍahru?
 who all-they were.3MP demonstrating.3MP
 ‘Who all were demonstrating?’ (Intended reading)

(195) man (humma) kul-hum illi kanu yəḍahru?
 who PRON.they all-they that were.3MP demonstrating.3MP
 ‘Who is it all that was demonstrating?’

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
mention-all modification	*	*	√

4.3.2.5 Mention-else modification

The modifier ‘else’ in English can only modify wh-phrases occurring in wh-questions and sluicing, but not in clefts, as in (196). The distribution of ‘else-modification’ is not straightforward in Libyan Arabic. The word *tani*, literally ‘second’ but also having the interpretation ‘else’, is used in sluicing and wh-questions as in (197) and (198); however, it cannot modify wh-expressions in clefts, as in (199).

- (196) a. *Harry was there, but I don’t know who else it was.
 b. Harry was there, but I don’t know who else.

(Merchant 2001: 122)

(197) A: man ʕədda l-l-ḥəfla?
 who went.3MS to-the-party
 ‘Who went to the party?’

B: Ali ʕədda, lakən miš ʕarəf man tani.
 Ali went.3MS but NEG know.1MS who else
 ‘Ali went, but I don’t know who else.’

(198) man tani ʕədda l-l-ḥəfla?
 who else went.3MS to-the-party
 ‘Who else went to the party?’

- (199) *man tani (huwwa) illi ʕdda l-l-ħafla?
 who else (PRON.he) that went.3MS to-the-party
 ‘Who else is it who went to the party?’ (Intended reading)

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
mention-else modification	√	√	*

4.3.2.6 Case Marking

Case marking is used as a diagnostic for distinguishing sluicing from pseudosluicing. In sluicing, the case of the sluiced wh-phrase has to match the case of its correlate in the antecedent, whereas in clefting (pseudosluicing), the wh-expression displays only nominative case, as illustrated in the Greek examples in (200) and (201) respectively.

- (200) I astinomia anekrine enan apo tous Kiprious prota,
 the police interrogated one.ACC from the Cypriots first
 ala dhen ksero { * pjos / pjon } anekrine i astinomia.
 but not I.know who.NOM who.ACC interrogated the police
 ‘The police interrogated one of the Cypriots first, but I don’t know who.’

- (201) I astinomia anekrine enan apo tous Kiprious prota,
 the police interrogated one.ACC from the Cypriots first
 ala dhen ksero { pjos /*pjon } itan.
 but not I.know who.NOM who.ACC it.was
 ‘The police interrogated one of the Cypriots first, but I don’t know who (it was).’ (van Craenenbroeck 2010b: 1717)

Case is not realised morphologically in LA as mentioned above. Wh-expressions surface in the same form regardless of their position and grammatical function in the clause, as illustrated in (202). Therefore, case marking cannot be used as a test to distinguish sluicing and pseudosluicing.

(202) Ali ʔrəd ʔāləb lyoum, lakən ma-gələ-š
 Ali fired.3MS student today but NEG-said.3MS-NEG
 bi-t-taḥdīd ʔyya ʔāləb.
 exactly which student
 ‘Ali dismissed a student today, but he didn’t say exactly which student.’

Diagnostic	sluicing	Full regular wh-questions	Full cleft wh-questions
Case-matching	-	-	-

4.3.2.7 Languages with limited or no cleft strategy

If sluicing is derived from clefts, then it is expected that sluicing would be unavailable in languages that lack clefts or have a limited clefting strategy. LA has a limited clefting strategy; however, sluicing is used in the language. Cleft structure lacks an expletive ‘it’ and an overt copula, not to mention the restriction on the category that can be clefted (see 3 above). For instance, LA does not allow PP pivots of clefts (203b), though it allows PP wh-phrases as remnants of sluicing, as in (203a).

(203) a. Ali təkəllem mʕə raʒəl; gūl mʕə man.
 Ali talked.3MS with a man say with whom
 ‘Ali talked with a man; guess with whom.’

b. *mʕə man (hu) illi Ali təkəllem?
 with who PRON.he that Ali talked-he
 ‘With whom was it that Ali spoke?’ (Intended reading)

Diagnostic	Sluicing	Full regular wh-questions	Full cleft wh-questions
PP remnants with clefts	√	√	*

In summary, the implementation of Merchant’s sluicing-defining diagnostics reveals that sluicing exists in Libyan Arabic and patterns with regular wh-questions. The table below shows the results of the sluicing-defining diagnostics.

Table 3: Results of sluicing vs. pseudosluicing diagnostics:

	DIAGNOSTIC	Sluicing	Full regular wh-questions	Full cleft wh-questions
1.	adjuncts	√	√	*
2.	implicit arguments	√	√	√
3.	aggressively non-d-linked wh-phrase	*	*	√
4.	mention-some modification	√	√	√
5.	mention-else modification	√	√	*
6.	mention-all modification	*	*	√
7.	case marking	-	-	-
8.	PP remnant in clefts	√	√	*

4.4 Analysis of sluicing in Libyan Arabic

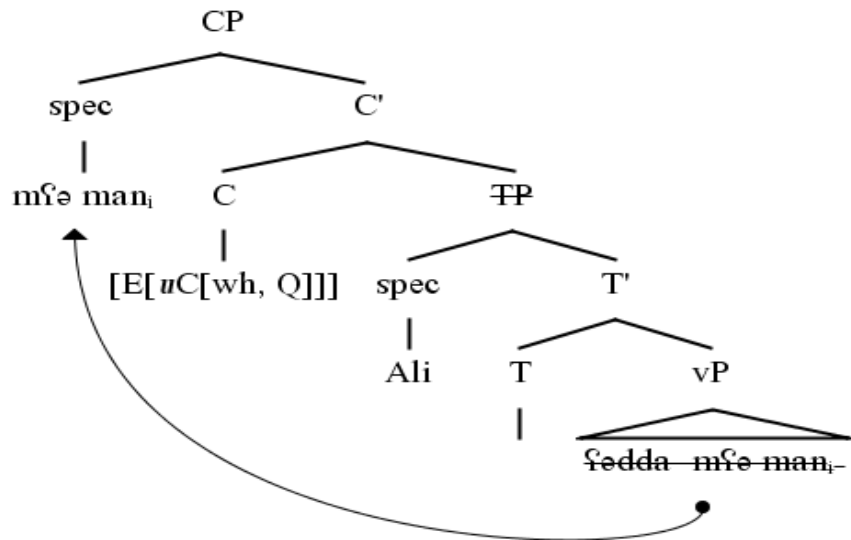
Having provided evidence that sluicing exists in Libyan Arabic and that it patterns with regular wh-questions, I argue that sluicing can be derived by wh-movement plus TP deletion at PF (see Ross 1969; Merchant 2001, 2004; Aelbrecht 2010). Furthermore, I propose that sluicing in Libyan Arabic is licensed by an interrogative C and that ellipsis is triggered by an [E]llipsis feature.²⁴

²⁴ Merchant (2001, 2004) proposes that ellipsis is licensed by an [E]llipsis feature. This feature is the locus of the properties distinguishing elliptical from non-elliptical constructions. The E feature has specific syntactic, phonological and semantic requirements that vary according to the elliptical category and need to be satisfied in order for ellipsis to take place. In sluicing, the syntax of [E]_S stipulates that E occurs only on an interrogative C with [wh, Q], whereas its phonology “... issues instruction to the PF system to skip its complement for purposes of parsing and production” (Merchant 2001: 60). Finally, for recoverability, the semantics of E ensures mutual semantic entailment between the antecedent clause (IP_A) and the elided clause. For discussion on the nature of the E feature, see Merchant (2001, 2004), Gengel (2007) and Aelbrecht (2010).

- (204) Hind galət inna Ali ʕədda mʕə waḥəd, lakən
 Hind said.3FS that Ali went.3MS with someone but
 ma-galət-š mʕə man.
 NEG-said.3FS-NEG with who.
 ‘Hind said that Ali went with someone, but she didn’t say with whom.’

The derivation of (204) proceeds as follows. The sluice in (204) is licensed by the interrogative C and is triggered by an E-feature endowed with uninterpretable $[uwh, Q]$ features that need to be checked for ellipsis to take place. The E-feature residing in C gets its values checked as soon as the wh-phrase moves to spec CP. Once E is fully checked, it triggers the deletion of its complement, which is the TP. Eventually, what remains is a sluiced wh-phrase in the left periphery, as represented in the tree diagram in (205).

- (205)



4.5 Conclusion

The chapter concludes that sluicing exists in Libyan Arabic and that it patterns with regular wh-questions. Therefore, it can be analysed as an elliptical wh-question derived by wh-movement followed by TP deletion at PF. Furthermore, sluicing exhibits a language-specific property in challenging the preposition stranding generalisation. Such an effect argues against analysing sluicing as an elliptical wh-question derived by wh-movement and TP deletion. The next chapter discusses the issue of p-stranding in sluicing and provides an account of the phenomenon.

Chapter Five

Preposition Stranding in Libyan Arabic Sluicing

5.0 Introduction

Chapter 4 has provided evidence that sluicing exists in Libyan Arabic and that it can be derived by *wh*-movement and TP deletion. This chapter discusses a language-specific property of Libyan Arabic sluicing, namely *p*-stranding. To the best of my knowledge, *p*-stranding has not been studied in the context of Arabic sluicing. Accordingly, the present chapter attempts to account for the apparent violation of the *p*-stranding generalisation. Merchant (2001) proposes that *p*-stranding under sluicing is permitted only in those languages that allow *p*-stranding under regular *wh*-movement. Despite Merchant's (2001) extensive documentation of data in support of this generalisation, recent research has uncovered cases of non-*p*-stranding languages that allow *p*-stranding under sluicing. Libyan Arabic is apparently such a language. *P*-stranding is prohibited under regular *wh*-movement; however, it is permitted in sluicing, as illustrated by (206).

- (206) hiyya galət inn-ha təkəllmet mʕə waḥəd,
she said.3FS that-she talked.3FS with someone
lakən ma-galət-š (mʕə) man.
but NEG-said.3FS-NEG (with) who
'She said that she talked with someone, but she didn't say (with) who.'

P-stranding under sluicing in non-*p*-stranding languages has been studied in languages such as Polish (Szczegelnik 2006), Brazilian Portuguese (Almeida & Yoshida 2007), and Spanish (Rodrigues et al. 2009). In such languages, *p*-stranding effects under sluicing are assumed to derive from a copular source. In this chapter, I contribute to this debate by proposing that sluicing under *p*-stranding in Libyan Arabic, despite its appearance as true sluicing, also stems from a copular source. The

claim put forward is that p-stranded sluices are copular clauses and that the elided portion is a clefted TP.

The chapter is organised as follows: Section 1 introduces the p-stranding generalisation and the interaction between p-stranding and sluicing from a cross-linguistic perspective. Section 2 reviews previous accounts of p-stranding effects in some non-p-stranding languages. Section 3 discusses p-stranding in Libyan Arabic sluicing and provides evidence that sluicing under p-stranding derives from a copular source. Section 4 proposes an analysis for p-stranded sluices, which contributes to knowledge of the syntax of wh-movement in Arabic by providing new evidence from sluicing for the claim that resumptive wh-questions are copular clauses involving wh-movement (Shlonsky 2002). Finally, section 5 presents the conclusions.

5.1 Crosslinguistic typology of p-stranding under sluicing

P-stranding under regular overt wh-movement is allowed in some languages, but not in others. Languages differ with respect to whether or not they allow for a wh-DP to be displaced from an associated adposition. Merchant (2001) notices the correlation between p-stranding and wh-movement in full and elliptical wh-questions and claims that such effects are mirrored in sluicing. Based on this correlation, Merchant (2001) posits this generalisation:

A language *L* will allow preposition stranding under sluicing iff *L* allows preposition stranding under regular wh-movement.

(Merchant 2001: 92)

Merchant (2001) presents extensive documentation from several languages in support of the p-stranding generalisation. Among the p-stranding languages cited by Merchant (2001) are English, Frisian, Swedish, Norwegian, Danish and Icelandic. For instance, English and Swedish allow p-stranding under regular wh-movement; therefore, p-stranding in sluicing is permissible, as in (207) & (208) respectively.

(207) English

- a. Peter was talking with someone, but I don't know (with) who.
b. Who was he talking with?

(208) Swedish

- a. Peter har talat med någon; jag vet inte (med) vem.
Peter has talked with someone I know not with who
b. Vem har Peter talat med?
who has Peter talked with

(Merchant 2001: 92-93)

Non-p-stranding languages include Greek, German, Dutch, Yiddish, Russian, Polish, Czech, Bulgarian, French, Italian²⁵, Hebrew and Moroccan Arabic. These disallow p-stranding under regular wh-movement; therefore, it is predicted that they prohibit it under sluicing. This prediction is borne out, as illustrated in (209) and (210) in German and Moroccan Arabic respectively.

(209) German

- a. Anna hat mit jemandem gesprochen, aber ich weiß nicht, *(mit) wem.
Anna has with someone spoken but I know not with who
b. *Wem hat sie mit gesprochen?
who has she with spoken?

(Merchant 2001: 94)

(210) Moroccan Arabic

- a. Driss tkəlm m^a ši wahəd, walakin ma ʕraft š *(m^ə) mən.
Driss talked with someone but not know neg with who

²⁵ However, Merchant (2001) notes that some speakers of Italian found p-stranding sluices almost acceptable, as illustrated in (i).

- (i) a. Pietro ha parlato con qualcuno, ma non so ?(con) chi.
Pietro has spoken with someone but not I-know with who
b. *Chi ha parlato Pietro con?
who has spoken Pietro con

(Merchant 2001: 99)

b. * mən tkællem Driss m̄a?
who talked Driss with

(Merchant 2001: 99)

The p-stranding effects under sluicing can be straightforwardly accounted for by the deletion approach assuming wh-movement and deletion. However, upon closer scrutiny, data from some non-p-stranding languages seem to falsify the p-stranding generalisation. Recent research has uncovered cases of non-p-stranding languages that allow p-stranding under sluicing, such as Brazilian Portuguese (Almeida & Yoshida 2007), Polish (Szczegielniak 2006), Indonesian (Fortin 2007) and Spanish (Rodrigues et al. 2009). Given this observation, this section discusses p-stranding in such languages to find out the underlying source of sluicing under p-stranding.

5.2 P-stranding under sluicing: a crosslinguistic perspective

Languages display p-stranding effects under sluicing differently; while in some languages it is only permitted with d-linked wh-phrases such as Polish (Szczegielniak 2006) and Spanish (Rodrigues et al. 2009), others display p-stranding effects in both bare and d-linked wh-phrases, such as Indonesian (Fortin 2007) and Brazilian Portuguese (BP) (Almeida & Yoshida 2007). Before discussing p-stranding in Libyan Arabic sluicing, previous studies on this issue in other languages, including BP, Spanish and English are reviewed.

5.2.1 P-stranding under sluicing in BP

BP is argued to be a counterexample to the p-stranding generalisation. Despite the fact that BP is a non-p-stranding language, p-stranding in sluicing is permissible and considered acceptable by native speakers of the language (Almeida & Yoshida 2007: 351). In regular wh-questions, pied-piping the preposition is obligatory, as shown in (211). However, it is optional in sluicing, as illustrated by the contrasts in (212).

no P-stranding in regular wh-questions in BP

- (211) *Quem_i que a Maria dançou com t_i?
who that the Maria danced with
'Who did Maria dance with?'

(Almeida & Yoshida 2007: 350)

P-stranding under sluicing in BP

- (212) A Maria dançou com alguém, mas . . .
the Maria danced with someone but
'Maria danced with someone, but . . .'

a. eu não sei com quem.
I not know with who
'I don't know with who.'

b. eu não sei com quem foi.
I not know with who was
'I don't know with who (it) was.'

c. eu não sei quem.
I not know who
'I don't know who.'

d. ??eu não sei quem foi.
I not know who was
'I don't know who (it) was.'

(Almeida & Yoshida 2007: 352)

Observing, among other things, that the only well-formed cleft source requires the pied-piping of the preposition and that the cleft source under p-stranding is unavailable, as shown in (212b) and (212d) respectively, Almeida and Yoshida

(2007) take this as an indication that BP sluicing should be analysed as sluicing and not as pseudosluicing.

It is worth noting that Rodrigues et al. (2009) argue that sluicing under p-stranding in BP derives from a copular source, and not from regular wh-questions. Therefore, it is not a direct challenge to the p-stranding generalisation although it may superficially appear to be. The fact that the preposition is absent can be attributed to the fact that relative clauses in BP allow preposition drop independently, as in (213)²⁶.

(213) O João dançou com alguém ...
 the João danced with someone

a. mas eu não sei quem é que o João dançou
 but I not know who is that the João danced

b. mas eu não sei [CP quem [IP é [RC ~~que o João dançou~~]]]
 but I not know who is that the João danced

(Rodrigues et al. 2009: 192)

5.2.2 P-stranding under sluicing in Spanish

Sluicing in Spanish also exhibits p-stranding effects, as shown in (215). Rodrigues et al. (2009) argue that such p-stranding effects are merely superficial, since p-stranding violation in sluicing does not derive from regular wh-questions but rather from an underlying copular source.

no P-stranding in regular wh-questions in Spanish

(214) *¿Qué chica ha hablado Juan con?
 what girl has talked Juan with

(Rodrigues et al. 2009: 176)

²⁶ See Almeida & Yoshida (2007) and Rodrigues et al. (2009) for further discussion.

P-stranding under sluicing in Spanish

- (215) Juan ha hablado con una chica, pero no sé cuál.
Juan has talked with a girl but not know which
(Rodrigues et al. 2009: 176)

Investigating p-stranding in Spanish and BP, and re-examining Almeida & Yoshida's (2007) findings, Rodrigues et al. (2009) argue that neither BP nor Spanish constitute counterexamples to the p-stranding generalisation. They instead propose that both languages have two sources of IP ellipsis, namely sluicing and pseudosluicing, and that only pseudosluicing constructions present p-stranding effects. The main argument that Rodrigues et al. (2009) put forward for their claim that p-stranding effects in Spanish and BP derive from a copular source comes from the behaviour of multiple sluicing with respect to p-stranding. In English multiple sluicing, p-stranding is only permitted in the first wh-phrase; the preposition of the second wh-remnant cannot be dropped, as illustrated in (216).

- (216) Peter talked about something to somebody but I can't remember (about) what
*(to) whom.
(Martín González 2010: 32)

However, in Spanish and BP multiple sluicing prepositions are obligatory; preposition drop is not permissible whether in the first or second remnant, as can be seen in (217) and (218). This, as noted by Rodrigues et al. (2009), 'is clearly unexpected if the ban on P-stranding is a PF constraint that is avoided only under sluicing by eliding the locus of the violation (as proposed by Almeida & Yoshida 2007)'.

Multiple sluicing in Spanish:

- (217) Ella habló con alguien sobre algo, pero no sé
she talked with someone about something but not know-I
*(con) quién *(sobre) qué.
with who about what

Multiple sluicing in BP:

(218) Ela falou sobre alguma coisa para alguém, mas
she talked about some thing to someone but
eu não sei *(sobre) o que *(para) quem
I not know about the what to who

(Rodrigues et al..2009: 179)

Following Lasnik (2006b), Rodrigues et al. (2009) propose that multiple sluicing, as in (217) & (218), can be derived by regular wh-movement of the first wh-expression plus rightward extraposition of the second wh-phrase followed by TP deletion at PF. The ungrammaticality of p-stranding in (217) and (218) can be explained as follows. Given that p-stranding under sluicing derives from a cleft, that is, a copular bi-clausal structure, the first wh-remnant does not involve p-stranding; as for the second, this can only escape deletion if it moves out of the embedded relative clause which would constitute a violation of the Right Roof Constraint²⁷ (see Ross 1967). Consequently, the ungrammaticality should not actually be attributed to p-stranding but to the illicit movement of the second wh-remnant (see Rodrigues et al. 2009).

Furthermore, Rodrigues et al. (2009) argue that, if the copular clause is the underlying source of the sluice in (215), then blocking this source should result in ungrammaticality. This prediction is borne out when using the ‘else modification’ test in clefts and in p-stranded sluices. Sluicing with ‘else-modification’ is not permissible in p-stranding contexts, and a cleft with ‘else-modification’ is not grammatical either, as in (219a) and (219b) respectively²⁸. ‘Else-modification’ is

²⁷ Right Roof Constraint : ‘An element cannot move rightward out of the clause in which it originates.’ (Citko 2011: 70)

²⁸ However, Martín González (2010) points out that the observation made by Rodrigues et al. (2009) cannot be strictly correct since ‘else modification’ is acceptable in sluicing under p-stranding ‘as long as the context makes it clear that the referent questioned by the wh-remnant is part of an already introduced larger set.’ (Martín Gonzalez 2010: 32-33).

(i) Juan fue visto con varias de sus estudiantes. Seguro que fue visto con Paula y
Juan was seen with several of his students surely that was-he seen with Paula and
con María pero no recuerdo **quién(es)** /cuál más.
with María but not remember-I who.sg/pl /which else

permissible in regular wh-questions (220); therefore, non-p-stranding sluices are grammatical. Accordingly, since p-stranding sluices are not allowed with ‘else-modification’, then it holds that ‘else-modification’ cannot be used in clefts either, and this prediction is correct.

(219) a. Juan ha hablado con una chica rubia, pero no sé *(con) qué chica más.

Juan has talked with a girl blonde but not know with what girl else

b. *No sé qué chica más es la chica con la que ha hablado Juan.

not know what girl else is the girl with the that has talked Juan

(220) ¿Con que` chica más ha hablado Juan?

with what girl else has talked Juan

(Rodrigues et al. 2009: 184)

5.2.3 P-stranding under sluicing in English

It is worth noting that despite the fact that English is a p-stranding language, there are contexts where p-stranding is prohibited under regular wh-movement but permissible under sluicing, as illustrated by the examples in (221), (222) and (223) (see van Craenenbroek 2007b; Martín González 2010).

(221) a. Against whose wishes did he get married?

b. *Whose wishes did he get married against?

(222) Terry got married against someone’s wishes, but I don’t know whose.

a. Terry got married against someone’s wishes, but I don’t know whose ~~it~~ was.

b. ?*Terry got married against someone’s wishes, but I don’t know against whose wishes.

c. ?*Terry got married against someone’s wishes, but I don’t know against whose wishes it was.

(Craenenbroeck 2007b: 8)

- (223) a. *What circumstances will we use force under?
 b. We are willing to use force under certain circumstances, but we will not say in advance which ones.
 c. ... which ones [~~the circumstances are~~ <which ones>].
- (Martín González 2010: 41).

English sluicing under p-stranding derives from a copular source and not from regular wh-questions, as the contrasts above show. For Martín González (2010), these effects indicate that sluicing in English can have a copular or non-copular source as an underlying structure (see also Craenenbroeck 2010b for the same conclusion). Consequently, under the assumption that ellipsis in (221)-(223) derives from a copular source, it follows that there are no p-stranding effects. This indicates that when a corresponding wh-question is not available, sluicing derives from a copular source.

5.3 P-stranding effects in Libyan Arabic sluicing

As noted above, Libyan Arabic seems to be a counterexample to the preposition stranding generalisation. P-stranding is prohibited under regular wh-movement, yet it is allowed under sluicing with both bare and d-linked wh-phrases, as illustrated in (224) and (225). Native speakers of LA find the prepositionless and pied-piping variants acceptable and interchangeable.

- (224) Yasin ʕadda mʕə waḥəd, lakən miš ʕarəf (mʕə) man.
 Yasin went.3MS with someone but NEG know.1MS with who
 ‘Yasin went with someone, but I don’t know (with) who(m).’

- (225) l-stād tkəllem mʕə waḥəd min ʔ-ʔalabt-ah, lakən
 the-teacher talked.3MS with one of students-his but
 ma-nəḍəkər-š b-taḥdī d (mʕə) ʔayya ʔaləb.
 NEG-remember.1S-NEG exactly with which student

‘The teacher talked with one of his students, but I don’t remember exactly (with) which student.’

It is worth noting that p-stranding is only permitted in those contexts in which the wh-remnant has a corresponding correlate in the antecedent clause. As noted by Chung (2005), in p-stranding languages when the antecedent contains an implicit prepositional phrase correlate, p-stranding is prohibited in sluicing; however, when the correlate is overt, p-stranding is optional. This is exemplified in (226).

(226) a. They’re jealous, but it’s unclear of who

b.*They’re jealous, but it’s unclear who(m).

c. They’re jealous of someone, but it’s unclear of who/ who.

(Chung 2005: 70-84)

Likewise, Libyan Arabic, despite being a non-p-stranding language, imposes constraints on p-stranding under sluicing. As the data in (227)-(229) show, p-stranding in sluicing is only permissible as far as the wh-remnant has an overt correlate in the antecedent; if the correlate is implicit, p-stranding is not acceptable.

(227) huwwa kan xayəf min waḥəd, lakən miš məʕrūf.
 he was.3MS scared from someone but NEG known
 (min) man.
 of who

‘He was scared of someone, but it’s not known (of) who(m).’

(228) huwwa kan xayəf, lakən miš məʕrūf min man.
 he was.3MS scared but NEG known of who

‘He was scared, but it’s not known of who(m).’

(229) *huwwa kan xayəf, lakən miš məʕrūf man.
 he was.3MS scared but NEG known who

‘*He was scared, but it’s not known who(m).’

5.3.1 P-stranding under sluicing and wh-movement in Libyan Arabic

Despite the fact that p-stranding is not allowed under overt wh-movement, as illustrated by the examples (230) and (231), a preposition seems to be stranded in a resumptive wh-question. This is a wh-question constructed with the complementiser ‘illi’ and contains a resumptive pronoun attached to the preposition and referring back to the wh-phrase, as in (232).

No p-stranding in regular wh-questions with bare wh-phrases

(230) a. mʕə man_i ʕədda Yasin t_i?
with whom went.3MS Yasin
‘With whom did Yasin go?’

b. *man_i ʕədda Yasin mʕə t_i?
who went.3MS Yasin with
‘Who did Yasin go with?’ (Intended reading)

No p-stranding in regular wh-questions with d-linked wh-phrases

(231) a. mʕə ʔayya ʔaləb_i təkəlleṃ l-stād t_i?
with which student talked.3MS the teacher
‘With which student did the teacher talk?’

b. *ʔayya ʔaləb_i təkəlleṃ l-stād mʕə t_i?
which student talked.3MS the teacher with
‘Which student did the teacher talk with?’ (Intended reading)

P-stranding in resumptive wh-questions

(232) a. man (hu) illi Yasin ʕədda mʕə-h?
who (PRON.he) that Yasin went.3MS with-him
‘Who did Yasin go with?’

b. ʔayya ʔaləb (illi) l-stād təkəlleṃ mʕə-h?
which student that the teacher talked.3MS with-him
‘Which student did the teacher talk with?’

The data in (230)-(232) indicate that the only possible underlying structure of sluicing under p-stranding is the resumptive wh-questions. This seems to be supported by the incompatibility of pied-piped wh-phrases with resumptive wh-questions, as illustrated in (233) and (234).

(233) *mʕa man (hu) illi Yasin təkəllem?
 with who (PRON.he) that Yasin talked.3MS

(234) man (hu) illi Yasin təkəllem mʕə-h?
 who (PRON.he) that Yasin talked.3MS with-him

5.3.2 The underlying source of p-stranded sluices

Pursuing the PF deletion approach to sluicing, there are two possible hypotheses to account for the p-stranding effects under sluicing. The first possibility is that resumptive wh-questions are not formed by wh-movement as proposed in Cheng's (1997) analysis of Egyptian Arabic wh-questions; instead, they are cleft structures in which the wh-phrase is base-generated in some TP external position. The wh-phrase is base-generated in its surface position, that is, spec CP; while in that position, the wh-phrase is co-indexed with a null (relative) operator that moves to spec CP (spec *illi*) to form an operator-variable structure, as illustrated in (235).

(235) EA
 [CP[DP miini] [CP OP_i illi [IP Mona shaafit-uh_i]]]
 [CP[DP who_i] [CP OP_i that [IP Mona saw-him_i]]]
 ‘Who did Mona see?’ (Cheng 1997: 53)

This analysis predicts that there is no p-stranding in resumptive wh-questions, since the wh-phrase is base-generated in spec CP. It also patterns with the crosslinguistic evidence that p-stranding effects in non-p-stranding languages derive from a copular source. However, it is not evident how sluicing is licensed and derived under the deletion analysis, which assumes movement of the sluiced wh-phrase to spec CP,

given the fact that LA is a wh-movement language, that is, the wh-phrase is argued to undergo movement from Spec TP to Spec CP.

The second possibility, which I adopt in this thesis, is to argue that p-stranded sluices derive from copular clauses by wh-movement plus TP deletion. This is predicted under Shlonsky's (2002) analysis of Class II (resumptive) wh-questions in Palestinian Arabic (PA). Shlonsky (2002) proposes that such wh-questions are copular clauses consisting of a subject DP and a free relative clause functioning as a nominal predicate. The wh-phrase is base-generated in spec TP, and it undergoes movement to spec CP, as shown in (236).

- (236) [CP man_i [TP t_i (hu) illi Ali šāff-ah]]?
 [CP who [TP (PRON.he) that Ali saw.3MS-him]]
 ‘Who is it that Ali saw?’

Shlonsky's (2002) analysis is similar to Cheng's (1997) in some respects. In principle, both analyses consider resumptive wh-questions copular clauses, and both assume no movement from a clause-internal position. However, while Cheng (1997) argues that the wh-phrase is base-generated in its surface position, Shlonsky (2002) proposes that it moves to the CP domain.

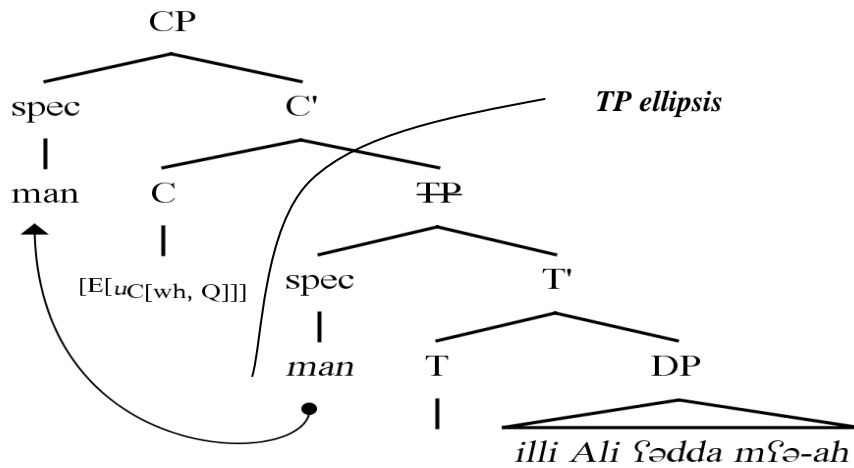
5.4 Analysis of sluicing under p-stranding in Libyan Arabic

Building on Shlonsky's (2002) analysis of resumptive wh-questions as copular clauses, I propose that sluicing under p-stranding in Libyan Arabic derives from a copular source, thus exhibiting a similar pattern to those in other non-p-stranding languages such as BP, Spanish and Polish. This shows that sluicing can have a copular and non-copular source as an underlying structure (see Craenenbroeck 2010b; Martín González 2010), which indicates that there are two sources of TP ellipsis in the language: sluicing and pseudosluicing. Despite the fact that sluicing and pseudosluicing can be derived by wh-movement and TP deletion, only pseudosluicing displays apparent p-stranding effects.

The fact that cleft wh-questions, as opposed to regular wh-questions, cannot be headed by a preposition indicates that the former allows neither pied-piping nor stranding a preposition. Therefore, it is argued that the structure in (237), despite its superficial appearance as sluicing, is derived from a cleft source, and thus is an instance of pseudosluicing. Like sluicing, pseudosluicing is derived by wh-movement plus TP deletion. Thus, following the PF deletion, it is proposed that sluicing under p-stranding is licensed by an interrogative C and that ellipsis is triggered by an E-feature endowed with uninterpretable [*uwh, Q*] features that need to be checked. Once the wh-phrase has moved to spec CP, the [*uE*] feature gets checked; and, as a result, its complement, the TP, is sent for non-pronunciation at PF.

- (237) Ali ʕəddə mʕə wəḥəd, lakən miš ʕarəf man.
 Ali went.3MS with someone but NEG know.1MS who.
 ‘Ali went with someone, but I don’t know who.’

(238)



5.4.1 P-stranding and resumption in wh-questions and relative clauses

Sufficient evidence has been presented for the claim that resumptive wh-questions are copular clauses consisting of a subject NP, an optional PRON and a predicate free relative clause. It was also argued earlier that that p-stranded sluices stem from these copular wh-constructions. This section explains the status of the apparently stranded

prepositions and resumptive pronouns that appear in these constructions. It is worth noting that it is permissible to have pronominal copulas and the relativiser *illi* null in resumptive wh-questions with both bare and d-linked wh-phrases as in (239) and (240) respectively.

(239) ʔayya bənt (illi) təkəlləm mʕə-ha?
 which girl (illi) talked.3MS with-her
 ‘Which girl did he speak with?’

(240) man (hu) (illi) təkəlləm mʕə-ha?
 who (PRON.he) (that) talked.3MS with-her
 ‘Who is it who spoke with her?’

5.4.2 The relativiser *illi* in wh-questions and relative clauses

The structure of resumptive wh-questions and relative clauses is marked by the use of the particle *illi*. This particle functions as a relativiser in LA and other contemporary spoken dialects of Arabic such as Egyptian (Lassadi 2005), Palestinian (Shlonsky 2002) and Baghdadi Arabic (Wise 1975). However, the particle ‘illi’ is not a true relative pronoun in LA as it displays complementiser properties. ‘Illi’ cannot, for example, be used as a complement of a preposition in embedded clauses (see Mughazy 2009: 63-64). In this, *illi* resembles the relative complementiser ‘that’ in English. Thus, while a structure such as ‘the man to whom I wrote a letter’ is grammatical in English, ‘the man to that I wrote a letter’ is not. The same fact holds for LA, suggesting that *illi* is a relative complementiser.

It was argued in section 5.4 that resumptive wh-questions allow neither pied-piping nor the stranding of a preposition. This could be attributed to the properties of the relativiser *illi*, which is compatible with nominal constituents only, as illustrated in (241) and (242).

(241) *(r-raḏəl) mḡə illi Ali təkəlleḡ.
 the-man with whom Ali talked.3MS

(242) (r-raḏəl) illi Ali təkəlleḡ mḡə-ah.
 the-man that Ali talked.3MS with him
 ‘The man who Ali talked with.’

[*DP* (r-raḏəl) [*CP* *Op*_i *C* illi_[WH, EEP, N] [*TP* Ali təkəlleḡ mḡə \emptyset_{P_i}]]]
 the-man that Ali talked with

I propose that *illi* has uninterpretable [μ WH, μ N, EEP] features that need to be valued. The [μ N] feature is valued via agreement with a nominal goal bearing the same feature; the [μ WH, EEP] features attract a wh-operator to move to spec CP, as in (242)²⁹. Thus, as an active probe, C attracts only nominal constituents to move to specCP; hence, the incompatibility of non-nominal constituents with *illi* is accounted for (241). The nominal operator is bound by the head DP of the relative (see Shlonsky 2002). The pronominal clitic *-ah* ‘him’ in (242) is the spell-out of the trace (or copy) of the null wh-operator which is realised on the preposition as a pronominal clitic.

5.5 Conclusion

Libyan Arabic is a non-p-stranding language that seems to display p-stranding under sluicing despite the fact that it is prohibited under regular wh-movement. This instance can be taken as *prima facie* evidence against the p-stranding generalisation

²⁹ Unlike its LA counterpart, the relative complementiser *allaḏi* in MSA has uninterpretable ϕ -features, rather than an unspecified [μ N], in addition to [μ WH, EEP] features. Thus, in (i), as an active probe with unvalued $\mu\phi$ -features, C probes for a (nominal) goal for feature valuation. The [EEP, μ WH] are satisfied via movement of the null relative-operator to spec-CP, just as in LA. The difference is that the relative complementiser in MSA agrees overtly with the head of the relative (via Op). Since PPs and adverbs don’t bear ϕ -features, they are barred from spec-CP, and hence the presence of any non-nominal constituents in spec-CP results in ungrammaticality.

(i) l-kitab-u allḏdi ṡtarytu-hu
 the-book-NOM that.3MS bought.1S-it
 [*DP* (l-kitab-u) [*CP* *Op*_i *C* allḏdi_[WH, EEP, $\mu\phi$, N] [*TP* ṡtarytu \emptyset_{P_i}]]]

put forward by Merchant (2001). Taking into account the properties of clefts, resumptive wh-questions and the functions of pronominal copulas, it has been proposed that p-stranding sluicing derives from a cleft source, and thus is an instance of pseudosluicing despite its superficial appearance as sluicing.

This indicates that there are two sources of TP ellipsis: sluicing and pseudosluicing. Sluicing is an instance of an elliptical wh-question and it conforms to the p-stranding generalisation. Pseudosluicing, on the other hand, is an elliptical cleft resulting from the deletion of a clefted TP whose pivot is an extracted wh-phrase. The reason why pseudosluicing displays p-stranding effects can be attributed to the fact that the wh-pivots of clefts cannot be headed by a preposition. The deletion of the preposition alongside the relative clause leads to the illusion that sluicing exhibits p-stranding effects. This analysis, if on the right track, provides novel evidence based on sluicing facts for the claim that Arabic resumptive wh-questions are copular clauses derived by movement (Shlonsky 2002).

Chapter 6

VP Ellipsis in Libyan Arabic

6.0 Introduction

This chapter provides an overview of the syntax of verb phrase ellipsis in Libyan Arabic. It aims to specify the phenomenon and determine its properties and licensing conditions. The chapter is organized as follows. Section 1 introduces VP ellipsis from a crosslinguistic perspective and section 2 discusses instances of VP ellipsis in Libyan Arabic licensed by the modal verb *yagder* ‘can’, while section 3 investigates and diagnoses the internal syntax of modal ellipsis, focusing on missing antecedents, binding effects and extraction possibilities. Sections 4 and 5 then present cases of apparent verb-stranding VP ellipsis and provide an explanation for the phenomenon. Finally, section 6 presents the conclusions.

6.1 VP ellipsis: a crosslinguistic perspective

VP ellipsis is a process of deleting an entire verb phrase including the verb, object plus any adjuncts. VP ellipsis is typically licensed by an overt finite auxiliary preceding the elided material as in (243). In English, this is only grammatical when T is filled with lexical material such as the dummy auxiliary *do*, modals, the perfective *have*, progressive *be* or the infinitival marker *to* (Lobeck 1995; Johnson 2001; Agbayani & Zoerner 2004). As illustrated in (244)-(247), VP ellipsis is ungrammatical when T is empty or when the VP is the complement of a main verb as in (250).

(243) George likes to dance, but Jane doesn't [~~like to dance~~].

(244) Because she *(shouldn't) [*e*], Mary doesn't smoke.

(245) Dennis rarely plays the piano, but Susan often *(does) [*e*].

(245) Pete isn't signing the petition even though most of his friends *(are) [*e*].

(247) *Because Mary continued [*e*], John also started speaking French.

(Lobeck 1995: 47-48)

VP ellipsis is not as pervasive crosslinguistically as other elliptical phenomena such as sluicing, gapping and stripping. For instance, in languages such as Spanish (249), French (250) and Italian (251) VP ellipsis cannot be licensed by auxiliaries such as ‘be’ and ‘have’ as in English (248). Such languages are assumed to lack VP ellipsis equivalent to that in English (see Lobeck 1995; Busquets 2006; Dagnac 2010).

(248) Julio hasn’t finished his homework, but Juan has.

(249) *Susana había leído Guerra y Paz pero Maria no había [e].
 Susana has read War and Peace but Maria not has
 (López 1999: 265)

(250) *Claudine est une bonne étudiante, et Marie est [e] aussi.
 Claudine is a good student and Mary is [e] too
 (Lobeck 1995: 142)

(251) *Tom ha visto a Lee ma Maria non ha ____.
 Tom has seen (to) Lee but Mary NEG has
 (Dagnac 2010: 157)

However, just as in English, root modals in these languages allow their complement to surface as null, as in (252). Such constructions resemble VP ellipsis in English.

(252) a. Tom a pu voir Lee, mais Marie n’a pas pu ____. (French)
 b. Tom pudo ver a Lee, pero Maria no pudo _____. (Spanish)
 c. Tom ha potuto veder Lee, ma Maria non ha potuto ____. (Italian)
 Tom can.PST see (to) Lee but Mary NEG can.PST
 ‘Tom could see Lee but Mary couldn’t ____.’
 (Dagnac 2010: 158)

The ellipsis data in (252) have been analysed in different ways. To start with, Busquets and Denis (2001) consider the French example (252a) to be an instance of

modal ellipsis that involves VP ellipsis at PF. As for the Spanish and Italian cases, these have been analysed by Depiante (2001) as null pro-forms devoid of any internal syntactic structure. However, according to Dagnac (2010), the ellipsis cases in (252) are cases of modal ellipsis of a TP constituent. Dagnac (2010) argues that modal ellipsis contains syntactic structure as it allows for A'-movement; therefore, it is plausible to analyse the structure as the deletion of a fully articulated syntactic structure at PF.

6.2 VP ellipsis in Libyan Arabic

VP ellipsis also exists in Libyan Arabic but only in specific contexts. Unlike in other varieties of Arabic such as Moroccan Arabic, as in (253), the basic auxiliary 'be' forms cannot license VP ellipsis in Libyan Arabic, as in (254); moreover, the language does not have equivalents to the English pro-forms of *do* or the perfective auxiliary *have* that can license VP ellipsis in English. The typical cases of verb phrase ellipsis in LA are those licensed by the modal *yəgder* 'can' as in (255a), with the fuller version given in (255b).

(253) Yasin kan kayal^{əb} l-kura w Yousre kan __ hətta huwa.
 Yasin was playing football and Yousre was __ too
 (Kortobi 2002: 226)

(254) *Ali kan yəgra fi r-riwaya, lakən anē ma-kunt-š.
 Ali was.3MS read.3MS PRT the-novel but I NEG-was.1S-NEG
 'Ali was reading the novel, but I wasn't.' (intended reading)

(255) a. Ali yəgder yətkəllem iṭali, w hətta David yəgder.
 Ali can.3MS speak.3MS Italian and too David can.3MS
 'Ali can speak Italian, and David can too.'

b. Ali yəgder yətkəllem iṭali, w hətta David yəgder yətkəllem iṭali.
 Ali can.3MS speak.3MS Italian and too David can.3MS speak.3MS Italian
 'Ali can speak Italian, and David can speak Italian too.'

Example (255) involves ellipsis in the complement of the modal *yəgder* ‘can’. The structure can be analysed in different ways. It can be an instance of VP ellipsis as proposed for similar cases in English (see for example, Johnson 2001; Merchant 2008b), an ellipsis site containing a ‘null proform’, and thus no internal syntax (see Lobeck 1995; Depiante 2001), or a type of modal ellipsis that elides a TP constituent, as in Dutch (Aelbrecht 2008) and French, Italian and Spanish (Dagnac 2010). I propose here that the modal ellipsis in (255) is a gap with an inner syntactic structure that can be analysed as a VP deletion process at PF.

6.2.1 Modal ellipsis: VP or TP ellipsis

The use of modal verbs is restricted in Libyan Arabic due to the fact that modality is realised mainly by modal particles and adverbs.³⁰ However, the root modal *yəgder* ‘can/be able to’ does license ellipsis of its complement. This could be a case of VP ellipsis. However, modal ellipsis has been analysed as TP ellipsis in French, Spanish and Italian (Dagnac 2010) and Dutch, (Aelbrecht 2008, 2010), since root modals in such languages take TP complements. Therefore, in order to decide whether Libyan Arabic modal ellipsis involves VP or TP ellipsis, the status of the modal *yəgder* and its complement need to be determined.

Generally, modals can be auxiliaries, heads of a modal phrase or V-heads, that is, lexical verbs.³¹ The modal verb *yəgder* ‘can’ patterns more with lexical verbs. There are arguments in favour of this claim, which include inflection, stackability and argument structure. Firstly, the modal *yəgder* is inflected for tense and for ϕ -features, i.e. person, gender and number, as shown in (256)-(258); secondly, it can co-occur with an auxiliary, as in (257); and finally, it behaves like regular lexical verbs when it comes to argument structure and can take two arguments as in (258). This indicates that the modal *yəgder* can be used both as an auxiliary modal verb and as a transitive

³⁰ These include *yemkən* ‘maybe’, *lazəm* ‘be must’, *daruri* ‘be necessary’ and *momkən* ‘be possible/probable’.

³¹ Modal verbs have been analysed as raising verbs in languages such as Dutch and German. For further details and discussion, see Barbiers (1995), Wurmbrand (2003) and Aelbrecht (2010).

lexical verb. In the former use, it takes a *vP* complement, while in the latter it takes a *DP* complement.³²

(256) humma gədru yəššru šəga, w hətta hənē gderna.
 they.3MP could.3MP buy.3MP flat and too we could.1P
 ‘They could buy a flat, and we could too.’

(257) kanu yəgdru yəššru šəga, lakən hənē ma-kuna-š nəgdru.
 were.3MP can.3MP buy.3MP flat but we NEG-were.1P-NEG could.1P
 ‘They were able to buy a flat, but we were not able to.’

(258) Hisham yəgder il-kors.
 Hisham can.3MS the-course
 ‘Hisham can (do) the course.’

6.2.2 Modal ellipsis targets *VP*, *TP* or *CP*

The categorial status of the complement of the verb *yəgder* has to be determined in order to identify the category targeted by modal ellipsis. The complement of the modal *yəgder* can at least be a *VP* since it contains a verb and its internal arguments. It is worth noting that the complement of the modal *yəgder* is not an infinitival complement; the lexical verb in the modal complement is fully inflected for ϕ -features and has to be in the imperfective form, as in (259). The tense of the clause is carried by the modal verb, which is an indication that the complement of the modal *yəgder* is not a *TP* because it cannot have its own tense specification. Therefore, I argue that the complement of the modal *yəgder* is a *vP*. Furthermore, the fact that the complement of the verb *yəgder* in (260) cannot be introduced by an overt complementiser, as in Standard Arabic in (261), indicates that it is not a *CP*.

³²However, unlike other regular lexical verbs, the modal *yəgder* cannot be passivised, and neither can its complement. Furthermore, the contexts in which it can take *DP* complements are limited.

(259) yəgder / gder √yəšri / *srē səyara.
 can.3MS / could.3M buy.3MS bought.3MS car
 ‘He can/could buy a car.’

(260) yəgder (*inn-əh) yəšri šəga.
 can.3MS that-he buy.3MS flat
 ‘He can buy a flat.’

(261) *Standard Arabic*

yastaʔīfu Zaid-un *(ʔan) yaðhaba ɣadan.
 can.3MS Zaid-NOM COMP go.3MS.SUB tomorrow
 ‘Zaid can go tomorrow.’

6.2.3 Properties of modal ellipsis

Modal ellipsis displays several properties of VP ellipsis. First, modal ellipsis patterns with VP ellipsis in allowing a sloppy and strict identity reading, a property considered a diagnostic of VP ellipsis. The ellipsis in (262) can be interpreted with a sloppy and strict identity reading; thus, it can be interpreted as ‘Ali couldn’t call Omar’s brother’ or ‘Ali couldn’t call his brother’.

(262) Omar gder yəttšəl bi xu-h, lakən Ali ma-gdər-š.
 Omar could.3MS call.3MS with brother-his but Ali NEG-could.3MS-NEG
 ‘Omar could call his brother, but Ali couldn’t.’

A second trait of VP ellipsis is that it allows backward anaphora; this is also found in modal ellipsis in LA as can be seen in (263), where the ellipsis site precedes the antecedent clause. Furthermore, modal ellipsis can appear inside an island domain, thus patterning with VP ellipsis which is insensitive to locality effects (Sag 1976; Doron 1999, Merchant 2008a). As evidenced in (264), despite appearing within an island, modal ellipsis is grammatical.

(263) liʔəna ma-gdər-š, anē mšēt bədləh l-s-sug.
 because NEG-could.3MS-NEG I went.1S instead-him to-the-market
 ‘Because he couldn’t, I went to the market instead of him.’

(264) a. gder yəbʕət rissala l-Sara?
 could.3MS send.3MS letter to-Sara
 ‘Could he send a letter to Sara?’

b. ēh gder, lakən waḥəd nšər išāʕə inn-əh ma-gdər-š.
 yes could.3MS but someone spread.3MS rumor that-he NEG-could.3MS-NEG
 ‘Yes, he could, but someone circulated a rumor that he couldn’t.’

Finally, like VP ellipsis, modal ellipsis allows both the antecedent and/or the ellipsis site to be embedded. For instance, the antecedent clause in (265) appears in a matrix clause, whereas the ellipsis site is embedded within a subordinate clause; while in (266), both the antecedent and the ellipsis site are embedded in two distinct clauses.

(265) anē nəbbi nžži lakən nššek inn-i nəgder.
 I want.1S come.1S but suspect.1S that-I can.1S
 ‘I want to come but I doubt that I can.’

(266) gal inn-əh ma-yəgder-š yiži, lakən ʕaʔtaqəd inn-əh yəgder.
 said.3MS that-he NEG-can.3MS-NEG come.3MS but think.1S that-he can.3MS
 ‘He said that he can’t come, but I think that he can.’

To sum up, these facts indicate that modal ellipsis displays the traits of VP ellipsis, suggesting that it can be analysed as VP deletion, where VP deletion means that the missing VP-complement is fully represented in the syntax (hence at LF) but is not spelt out at PF and thus does not have a phonological representation.

6.3 Modal ellipsis: diagnosing ellipsis

Hankamer and Sag (1976) argue that ellipsis can be deep or surface anaphora. Deep anaphora has no structure and is interpreted with reference to the context, such as in a pragmatic antecedent. Surface anaphora, such as VP ellipsis, contains syntactic structure and is deleted under identity with a linguistic antecedent. Therefore, the modal ellipsis under discussion can be analysed as deletion of a fully-fledged syntactic structure or just as a null proform with no internal structure (see Hardt 1993; Lobeck 1995). In order to determine whether or not the ellipsis site in modal ellipsis has a syntactic structure, I will apply some diagnostics to modal ellipsis data, namely missing antecedents, binding effects and extraction.

6.3.1 Missing antecedents

Missing antecedents can distinguish between surface and deep anaphora (Hankamer & Sag 1976). Given that the relationship between a surface anaphora such as VP ellipsis, and its antecedent is syntactic, VP ellipsis can contain missing antecedents. The pronoun ‘it’ in (267b), for instance, must have a missing antecedent in the elided vP; the occurrence of ‘a camel’ cannot serve as an antecedent for ‘it’, as shown in (267c). This indicates that the ellipsis site in (267b) has a syntactic structure. Null complement anaphora, which is a type of deep anaphora, cannot contain missing antecedents since it is devoid of any syntactic structure that can host the antecedent, as in (268).

- (267) a. I’ve never ridden a camel, but Ivan’s ridden a camel_i, and he says it_i stank
horribly.
b. I’ve never ridden a camel, but Ivan has, and he says it_i stank horribly.
c. *I’ve never ridden a camel, and it stank horribly.

(Hankamer & Sag 1976: 403-404)

- (268) *I never managed to ride a camel, but Sue succeeded, and it was the two
humped variety. (Hankamer & Sag 1976: 412)

Modal ellipsis in LA can contain missing antecedents. The overt occurrence of *hədəf* ‘goal’ in the antecedent clause in (269) cannot serve as an antecedent to the pronoun *-ah* ‘it’ as it is under the scope of negation. This suggests that the pronoun *-ah* ‘it’ in (269) must find its antecedent from within the ellipsis site, which is only possible if we assume a syntactic structure in ellipsis. In such a case, the pronoun ‘it’ can have its reference from a null *vP*, as in (270).

(269) anē ma-gdert-š nsəžžəl hədəf, lakən Omar gder,
 I NEG-could.1S-NEG score.1S goal but Omar could.3MS
 w gal inn-ah kan min rigoli.
 and said.3MS that-it was.3MS from penalty
 ‘I couldn’t score a goal, but Omar could and he said that it was from a penalty.’

(270) anē ma-gdert-š nsəžəl hədəf lakən Omar gder,
 I NEG-could.1S-NEG score.1S goal but Omar could.3MS
 [yisəžžəl—hədəf-_i] w gal inn-ah-_i kan min rigoli.
 score.3MS goal and said.3MS that-it was.3MS from penalty
 ‘I couldn’t score a goal, but Omar could [score a goal] and he said that it was from a penalty.’

In addition, there is another argument in favour of the assumption of syntactic structure in the ellipsis site of modal ellipsis; this comes from the availability of strict and sloppy identity readings in modal ellipsis, as illustrated in (271).

(271) Ali ma-gdər-š yəttšəl b-umm-əh lakən
 Ali NEG-could.3MS-NEG call.3MS with-mother-his but
 Omar gder w gal inn-ha b-şəhḥa žeida.
 Omar could.3MS and said.3MS that-she with-health good
 ‘Ali couldn’t call his mother, but Omar could and he said that she is in a good condition.’

Strict reading: ‘... but Omar could call Ali’s mother.’

Sloppy reading: ‘... but Omar could call Omar’s mother.’

The fact that modal ellipsis can give rise to both sloppy and strict identity readings indicates that it has a syntactic structure containing a pronoun; thus, on the strict reading, such a pronoun has a referent identical to that of the pronoun in the antecedent clause, while on the sloppy reading, the pronoun behaves as a variable. Such an observation suggests that the ellipsis site in (271) has a syntactic structure. To recapitulate, the missing antecedent phenomenon and the availability of strict/sloppy readings support the claim that modal ellipsis contains an unpronounced syntactic structure.

6.3.2 Binding effects

VP ellipsis displays binding effects, which requires the syntactic analysis. For instance, the ellipsis in (272a) does not favour a strict reading under which the ellipsis site is interpreted as ‘Sterling also blames Doug for the band’s collapse’. Based on this observation, Kennedy (2003) argues that (272a) is derived from (272b). Thus, the fact that the strict reading is unavailable in (272a) is ascribed to Principle A of the Binding Theory, that is, the anaphor *himself* has to be bound in its governing domain.

- (272) a. Doug blamed himself for the band’s collapse, and Sterling did too.
b. Doug blamed himself for the band’s collapse, and Sterling did [_{VP} blame himself] too. (Kennedy 2003: 31)

The modal ellipsis cases under discussion also exhibit such binding effects. The natural interpretation of the ellipsis in (273) is ‘Omar can hand over himself to the police too’, as illustrated in (273b). Such an interpretation is arguably forced by Condition A of the binding theory in the sense that the reflexive *himself* in the assumed invisible structure in (273b) is bound locally by its antecedent, that is, *Omar*, which in such a case satisfies Condition A. The absence of the strict

movement is an indication that they have an internal syntactic structure containing the variable bound by the displaced *wh*-phrases.

6.3.3.1 Extraction in modal ellipsis

This section investigates extraction possibilities namely subject extraction and object extraction in the context of the modal ellipsis under discussion.

6.3.3.2 Subject extraction in modal ellipsis

Subject extraction in modal ellipsis is permissible. The cases in (276)-(278) involve the movement of the subject *wh*-phrase out of the ellipsis site in both embedded and matrix *wh*-questions. Therefore, based on these facts, it is argued that the ellipsis site in (276)-(278) contains a fully-fledged syntactic structure that hosts the traces of *wh*-movement prior to deletion.

(276) anē ʕarəf inna Ali ma-yagder-š yədfəʕ l-məbləg,
 I know.1MS that Ali NEG-can.3MS-NEG pay.3MS the-sum
 lakən miš ʕarəf man yəgder.
 but NEG know.1MS who can.3MS
 ‘I know that Ali cannot pay the sum, but I don’t know who can.’

(277) a. ʕatəqəd inna Ali ma-yəgder-š yiži l-lhəfla.
 think.1S that Ali NEG-can.3MS-NEG come.3MS to-the-party
 ‘I think that Ali can’t come to the party’.

b. bahi, man yəgder?
 so who can.3MS
 ‘So, who can?’

(278) man gder yəggra n-naš w man ma-gder-š?
 who could.3MS read.3MS the text and who NEG-could.3MS-NEG
 ‘Who could read the text and who couldn’t?’

Furthermore, the presence of the subject outside the ν P is an indication that the subject has actually moved out of the ellipsis site, as shown in (279).

- (279) Ali ma-yəgder- š yiži l-lħəfla, lakən Omar yəgder.
 Ali NEG-can.3MS-NEG come.3MS to-the-party but Omar can.3MS
 ‘Ali can’t come to the party, but Omar can.’

It is worth noting that the verb *yəgder* is a lexical verb and that it behaves like a raising verb. For example, it patterns with raising verbs with respect to allowing inanimate subjects, as shown in (280). Another property of raising verbs is that they can take expletives such as ‘it’ and ‘there’. Though there are no direct equivalents of the expletive ‘it’ in LA, the verb *yəgder* can take inanimate weather-related terms as subjects, as in (281); whereas a control verb such as *yihawəl* ‘try’ cannot.

- (280) s-siyyara √təgder /*tħawəl tərfaḥ tlata nfār.
 the-car can.3FS / tries.3FS accomodate.3FS three persons
 ‘The car can accommodate three people.’

- (281) ʕaʔtaqəd inna r-rīḥ/l-mṭar √təgder /*tħawəl
 think.1S that the-wind/the-rain can.3FS / tries.3FS
 tṭayəḥ il-ħoṣ hada.
 destroy.3FS the-house this
 ‘I think that the wind/the rain can destroy this house.’

The modal *yəgder* undergoes V-to-T movement just like other lexical verbs. This presupposes that the subject is base-generated in spec ν P and it moves to spec TP, while the modal verb which heads a VP, raises to T. Evidence for this claim is the crosslinguistic fact that floating quantifiers such as ‘all’ in English can move with their subject DP to a higher position or remain in spec ν P while the DP moves alone leaving the quantifier in-situ. I argue that this is so in Libyan Arabic too; thus, this accounts not only for the word order in (282), (283) and (284), but also for the fact

that the subject is base-generated in spec ν P and that the modal verb *yəgder* raises to T, that is, to a position higher than that of the floating quantifier.

(282) kul ʔ-ʔalaba yəgdru yidīru l-mtiḥan l-youm.
 all the-students.3MP can.3MP do.3MP the-exam the-day
 ‘All the students can do the exam today.’

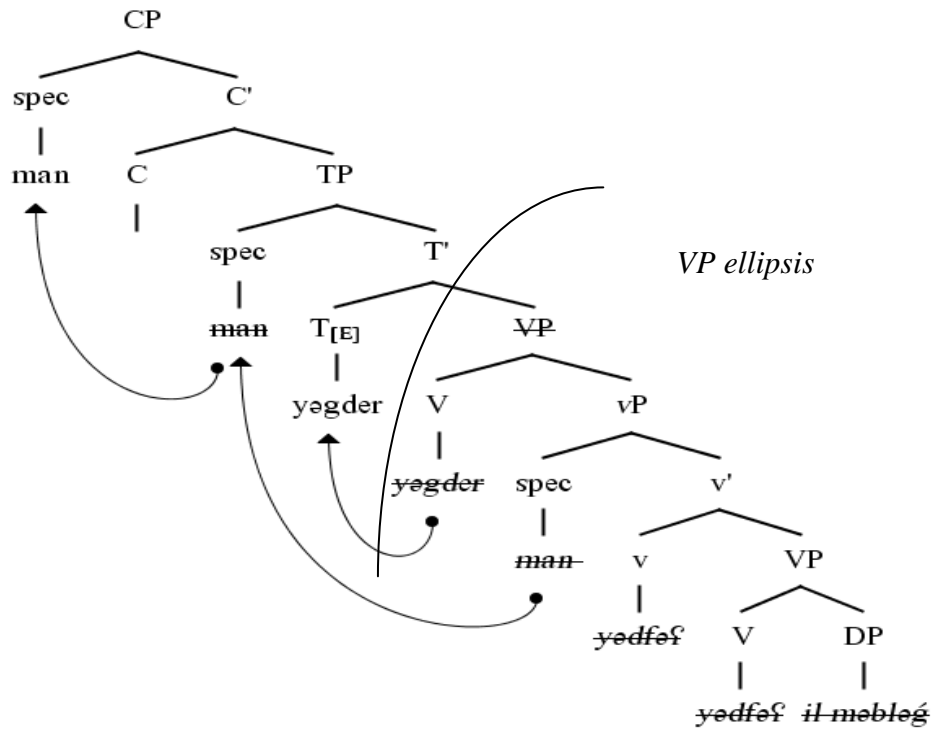
(283) yəgdru kul ʔ-ʔalaba yidīru l-mtiḥaan l-youm.
 can.3MP all the-students.3MP do.3MP the-exam the-day
 ‘All the students can do the exam today.’

(284) ʔ-ʔalaba-_i yəgdru kul-hum-_i yidīru l-mtiḥan l-youm.
 the-students.3MP can.3MP all-them do.3MP the-exam the-day
 ‘The students can all do the exam today.’

Therefore, the analysis of modal ellipsis in (276), repeated in (285), proceeds as follows: the modal *yəgder* undergoes V-to-T movement (as is generally the case for verbs in Arabic; see Fassi Fehri 1993). For ellipsis to take place, I assume that the ellipsis in (285) is licensed by T and triggered by an [E]llipsis feature residing in T. This E feature is coupled with an unvalued [$uV_{[modal]}$] feature that gets checked by raising the modal verb to T; the subject *wh*-phrase *man* raises from spec ν P to spec TP to check the EPP feature. Once T’s features are checked, [E] sends the complement of the head in which it resides (the VP) for non-pronunciation at PF, as illustrated in (286).

(285) anē ʕarəf inna Ali ma-yagder-š yədfəʕ l-məbləġ,
 I know.1MS that Ali NEG-can.3MS-NEG pay.3MS the-sum
 lakən miš ʕarəf man yəgder.
 but NEG know.1MS who can.3MS
 ‘I know that Ali cannot pay the sum, but I don’t know who can.’

(286)



6.3.3.3 Object extraction in modal ellipsis

Unexpectedly, other types of extraction are not possible. Object extraction is degraded in the context of modal ellipsis, as shown in (287) and (288). This militates against the PF deletion account of modal ellipsis which takes extraction possibilities as evidence for the existence of a syntactic structure.

- (287) *anē nəgder nətkellem iṭali, lakən miš
 I can.1S speak.1S Italian but NEG
 ʕarəf ʔayya luḡə Ali yəgder.
 know.1MS which language Ali can.3MS
 ‘I can speak Italian but I don’t know which language Ali can.’ (Intended reading)

- (288) *anē nægder nsafər mʃə Philipp,
 I can.1S travel.1S with Philipp
 lakən miš ʃarəf mʃə man enta tægder.
 but NEG know.1MS with who you.2MS can.2MS
 ‘I can travel with Philipp, but I don’t know with whom you can.’ (Intended reading)

The illicit nature of object extraction in modal ellipsis suggests that the ellipsis site does not contain internal syntactic structure. However, given that modal ellipsis allows for subject extraction and that it exhibits binding effects and missing antecedents, it seems that there must be syntactic structure in the ellipsis site of modal ellipsis.

The fact that *wh*-object extraction is sometimes degraded or illicit has been shown in other languages which do allow it in some contexts. For instance, object extraction is restricted in English VP ellipsis, particularly from embedded contexts, as in (289) and (290). Merchant (2008) points out that movement of a *wh*-phrase whose correlate is an indefinite out of an elliptical VP is degraded (see Lasnik 2001; Fox & Lasnik 2003; and Merchant 2008a for further discussion)³³.

- (289) *They heard a lecture about a Balkan language, but I don’t know which Balkan language they did. (Fox & Lasnik 2003: 148)

- (290) ??They studied a Balkan language, but I don’t know which they did.
 (Merchant 2008a: 139)

In addition, Dutch modal complement ellipsis (MCE) also disallows object extraction, as observed by Aelbrecht (2008, 2010); this is exemplified in (291). Aelbrecht (2008, 2010) attributes this to the presence of the *wh*-phrase within the

³³ Merchant (2008) also notes that for VP ellipsis to be allowed, there must be some kind of contrast between the antecedent and elliptical clause, as in (i):

(i) ABBY attended a lecture on KEATS, but I don’t know what poet BEN did. (Merchant 2008: 140)

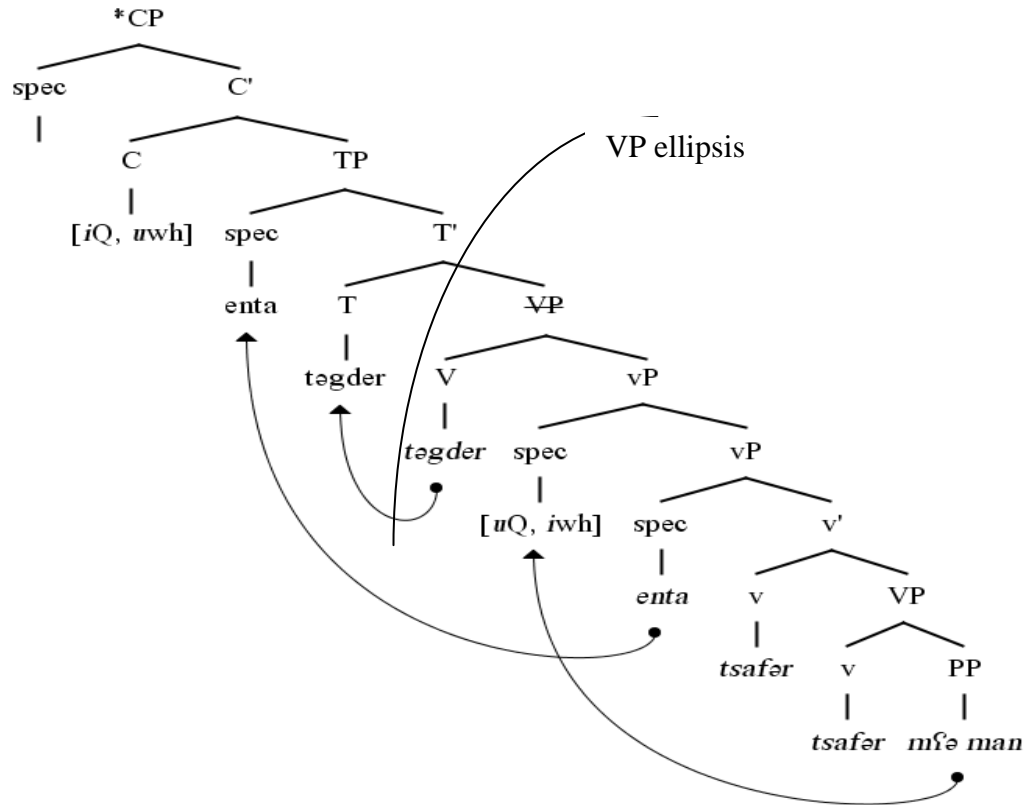
ellipsis, which in such a case is unable to move up to spec CP to check the [*uwh*] (for further details on object extraction in Dutch MCE, see Aelbrecht 2008, 2010).

- (291) *Ik weet niet wie Thomas moet uitnodigen, maar ik
 I know not who Thomas must invite but I
 weet wel wie hij niet mag.
 know aff who he not is.allowed
 ‘I don’t know who Thomas has to invite, but I do know who he isn’t allowed to.’ (Aelbrecht 2010: 131)

One way to explain why object extraction in modal ellipsis is illicit in Libyan Arabic is to adopt Aelbrecht’s (2010) analysis and assume that the *wh*-phrase is stuck in the ellipsis site and thus cannot move up to spec CP to check its *wh*-phrase feature. Bearing this in mind, the derivation of (291) proceeds as follows. By virtue of being a phase just like CP, the *vP* is endowed with a *wh*-edge feature that attracts the *wh*-PP to its outer spec (see Chomsky 2000). The modal verb is merged next, projecting a VP. This VP is then merged with a T constituent endowed with EPP and [E]llipsis features. The modal *yagder* undergoes V-to-T movement, while the subject moves from spec *vP* to spec TP for case and EPP reasons. Once T’s features, including the uninterpretable [*uV*_[modal]] feature of E, are checked, E sends the complement of the head in which it resides, which is the VP in this case, for non-pronunciation at PF.

The next step is merging C bearing [*u-wh*, *iQ*] features. The C probes down to get its features checked. Since the *wh*-phrase, which has an [*u-Q*] feature that has to be checked against an interrogative C, is in the ellipsis site, neither checking nor *wh*-movement can take place (see Aelbrecht 2010). As a result, the derivation crashes and results in ungrammaticality, as shown in (292).

(292)



If this reasoning is on the right track, the fact that object extraction is degraded in modal ellipsis is accounted for. This also supports the claim that modal ellipsis contains a syntactic structure that can be analysed as a VP deletion process at PF.

6.4 Verb-stranding VP ellipsis: a crosslinguistic perspective

VP ellipsis is not as pervasive as other ellipsis phenomena such as sluicing, gapping and stripping. However, recent studies have revealed that VP ellipsis exists widely, though under different requirements. For instance, some verb-raising languages like Hebrew, Portuguese, or Farsi exhibit a type of VP ellipsis referred to as verb-stranding VP ellipsis in which the internal arguments of the verb go missing, while the main verb raises to T before the entire vP layer gets deleted at PF. Cases of predicate ellipsis which resemble verb-stranding VP ellipsis do arise in Libyan Arabic too, as shown in (293). This section discusses this type of ellipsis and argues

that putative cases of verb-stranding VP ellipsis in the language are not instances of VP ellipsis, but are rather a result of argument/constituent drop strategy.

- (293) Ali ma-ʕta-š flus l-Yasin, lakən Sami ʕtē.
 Ali NEG-gave.3MS-NEG money to-Yasin but Sami gave.3MS
 ‘Ali didn’t give money to Yasin, but Sami did.’ (Intended meaning)

Verb-stranding VP ellipsis is an elliptical construction involving the deletion of an entire VP. It has been analysed as VP ellipsis in several languages, including Farsi (Toosarvandani 2009), Hebrew (Doron 1999, Goldberg 2005), Swahili (Goldberg 2005), Finnish (Holmberg 2001) and Portuguese (Cyrino & Matos 2002); below are examples of verb-stranding VP ellipsis from these languages.

- (294) Portuguese

A Ana não leva o computador para as aulas,
 the Ana not brings the computer to the classes
 porque os amigos também não levam [-].
 because the friends too not bring [-]
 ‘Ana does not bring her computer to the classes because her friends do not
 either.’ (Cyrino & Matos 2002: 180)

- (295) Finnish

Matti ei löytänyt avaintaan, mutta minä löysin.
 Matti not found key-POSS but I found
 ‘Matti didn’t find his key, but I did.’ (Holmberg 2001: 147)

- (296) Hebrew

Q: (Ha-'im) Miryam hisi'a et Dvor la-makolet?
 Q Miryam drive[PST.3FS] ACC Dvora to.the-grocery.store
 ‘(Did) Miryam [drive Dvora to the grocery store]?’

A: Ken, hi hisi'a.
 yes she drive[PST.3FS]
 ‘Yes, she drove [Dvora to the grocery store].’

(Goldberg 2005: 53)

Libyan Arabic displays elliptical constructions resembling the verb-stranding VP ellipsis cases above. The data in (297)-(299) illustrate some instances of these putative verb-stranding VP ellipsis cases, which may involve verb movement to T followed by VP deletion.

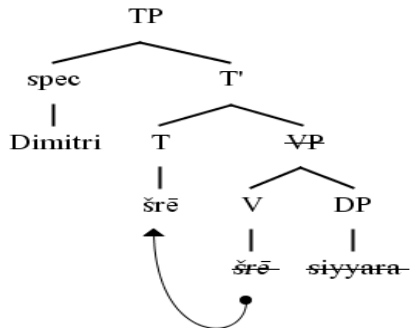
(297) Ali ma-bʕəṭ-š flus l-Yasin, lakən Sami bʕəṭ.
 Ali NEG-sent.3MS-NEG money to-Yasin but Sami sent.3MS
 ‘Ali didn’t send money to Yasin, but Sami did.’

(298) anē šrēt siyyara liʔəna Dimitri šrē.
 I bought.1S car because Dimitri bought.3MS
 ‘I bought a car because Dimitri did.’

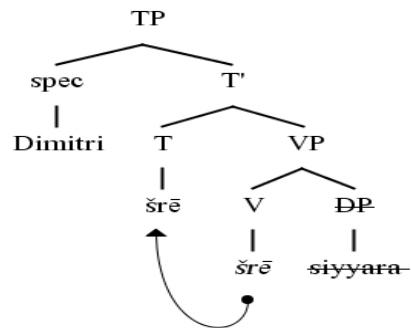
(299) Ali yədfəʕ fi l-ažār kul šahər w hətta Sara tədfəʕ.
 Ali pay.3MS in the-rent every month and too Sara pay.3FS
 ‘Ali pays the rent every month, and Sara does too.’

Despite resembling verb-stranding VP ellipsis, the elliptical structures in (297)-(299) cannot be distinguished from null object constructions in some contexts. For instance, in (298) only the direct object is deleted, a fact that makes it rather difficult to distinguish between verb-stranding VP ellipsis and null objects (see Doron 1999 and Goldberg 2005 for discussion of this issue in Hebrew). The ambiguity in analysing the elliptical constructions in (297)-(299) lies in the fact that there are two possible syntactic structures for their surface structures. Thus, (301) can be analysed in two possible ways, as shown in the tree diagrams (300) and (301).

(300)



(301)



In order to find out whether (397)-(399) can be analysed as verb-stranding VP ellipsis or null object constructions, it is worthwhile to determine the contexts in which the putative verb-stranding VP ellipsis and null object constructions are allowed in Libyan Arabic since this will make it clear what kind of ellipsis we are dealing with.

6.4.1 Verb-stranding VP ellipsis in Libyan Arabic

The putative cases of verb-stranding VP ellipsis appear with different classes of verbs: transitive, intransitive and verbs that take prepositional complements. As seen in (302)-(304), the putative verb-stranding VP ellipsis involves the deletion of all internal verb arguments and vP-related material. This implies that these can be VP ellipsis, null objects or cases of individual constituent drop yielding a null vP.

- (302) Ali šrē gahwa min s-sug, lakən anē ma-šrēt-š.
 Ali bought.3MS coffee from the-market but I NEG-bought.1S-NEG
 ‘Ali bought coffee from the market, but I didn’t.’

- (303) Ali zawəg ḥoš-əh, lakən Omar ma-zawəg-š.
 Ali painted.3MS house-his but Omar NEG-painted.3MS-NEG
 ‘Ali painted his house, but Omar didn’t.’

- (304) Ali ʕaddə l-ʒ-ʒamʕə, lakən anē ma-ʕadēt-š.
 Ali went.3MS to- the-university but I NEG-went.1S-NEG
 ‘Ali went to the university, but I didn’t.’

In order to provide an adequate analysis of this ellipsis phenomenon, I will investigate these possibilities and compare them to the putative cases of verb-stranding VP ellipsis.

6.4.2 Null objects in Libyan Arabic

Libyan Arabic exhibits null objects but only in limited contexts. Broadly speaking, languages impose licensing conditions according to which null objects are licit. For instance, in some languages, null objects are only licit if there is rich morphology on the verb, as in Swahili and Ndendeule (see Ngonyani 1996; Goldberg 2005); in some other languages, direct objects can only surface as null provided that they are inanimate, as in Hebrew (Goldberg 2005), or indefinite, as in Greek and Bulgarian (Dimitriadis 1994).

The licensing of null objects in Libyan Arabic depends on the semantic/syntactic features of the DP in the antecedent clause to which the null category refers. Typically, a null object is only licit when referring to an antecedent indefinite DP regardless of the DP type, which can be singular, plural, count or mass noun. If the antecedent DP is definite, animate or inanimate, objects cannot surface as null. The following are examples of null objects:

- (305) *Nadia grət r-riwaya, w ʔəttə Samir grē.
 Nadia read.3FS the-novel and too Samir read.3MS
 ‘Nadia read the novel, and Samir did too.’ (Intended reading)

- (306) Nadia grət riwaya, w ʔəttə Samir grē.
 Nadia read.3FS novel and too Samir read.3MS
 ‘Nadia read a novel, and Samir did too.’ (Intended reading)

(307) a. Ali gəl l-stad / Omar l-ž-žamfə?
 Ali took.3MS teacher / Omar to-the-university
 ‘Did Ali take the teacher/ Omar to the university?’

b. la, gəl *__ /√-ah l-s-sūg
 no took.3MS __ /-him to-the-market
 ‘No, he took *(him) to the market.’

(308) a. l-stad bʕət rissala li ʔaləb?
 the-teacher sent.3ms letter to student
 ‘Did the teacher send a letter to a student?’

b. ēh, bʕət.
 yes sent.3MS
 ‘Yes, he did’. (Intended reading)

(309) Omar šrē maləbəs l-lkbār w anē šrēt
 Omar bought.3MS clothes to-the-adults and I bought.1S
 l-š-šgār.
 to-the-young
 ‘Omar bought clothes for the adults and I bought (clothes) for the young.’

The data in (205)-(309) illustrate that direct objects which are indefinite can surface as null. However, the constraint on definiteness does not apply to all verbs; it seems that there is a class of verbs that allow null objects regardless of whether the antecedent DP is definite or indefinite. This class of verbs is restricted in the language and it includes verbs such as ‘paint’, ‘pay’, ‘speak’ and ‘sell’, which allow their object to surface as null, as evidenced in (310) and (211).

(310) Ali zawəg ʔoʃ-əh, lakən Omar ma-zawəg-š.
 Ali painted.3MS house-his but Omar NEG-painted.3MS-NEG
 ‘Ali painted his house, but Omar didn’t.’ (Intended reading)

- (311) Omar yədfəʕ fi l-žār kul šahər, w hətta anē nədfəʕ.
 Omar pay.3MS in the-rent every month and too I pay.1S
 ‘Omar pays the rent every month, and I do too.’ (Intended reading)

The fact that the ellipsis cases in (310) and (311) are grammatical suggests the constraint on definiteness is not very robust and that such cases could be cases of verb-stranding VP ellipsis. However, this cannot be so given that transitive verbs in the language are subject to the definiteness constraint and that the ellipsis cases in (310) and (211) do not pattern with VP ellipsis with respect to deletion of vP-related material. Section 6.5.2.2 provides evidence that such exceptional cases cannot be analysed as verb-stranding VP ellipsis.

6.5 Verb-stranding VP ellipsis vs. null objects/constituents

6.5.1 Definiteness restrictions

The definiteness constraint can be a diagnostic in determining whether the putative cases of verb-stranding VP ellipsis are instances of VP ellipsis or just instances of null argument/constituent drop. It is widely attested that both standard VP ellipsis and verb-stranding ellipsis impose no restrictions on definiteness, as illustrated in the examples (312) and (313) from English and Hebrew respectively.

- (312) Barbara read this novel and Luca did too.

- (313) a.Q: Salaxt etmol et ha-yeladim le-beit-ha-sefer.
 Q: you-sent yesterday ACC the-children to-house-the-book
 ‘Did you send the children to school yesterday?’

b. A: Salaxti.

A: I-sent

‘I did.’

(Hebrew; Doron 1999: 129)

The putative cases of verb-stranding VP ellipsis in Libyan Arabic are ungrammatical if the object DP in the antecedent VP is definite, as shown in (314) and (315). This fact can be used to argue against analysing these cases of ellipsis as VP ellipsis.

- (314) Omar grē r-riwaya hedi, lakən Nadia
 Omar read.3MS the-novel this but Nadia
 *ma-grət-š / √ ma-grət-ha-š.
 NEG-read.3FS-NEG NEG-read.3FS-it-NEG
 ‘Omar read this novel, but Nadia didn’t read it.’

- (315) a. Ali gəl Omar l-ž-žamʕə?
 Ali took.3MS Omar to-the-university
 ‘Did Ali take Omar to the university?’

- b. *ēh, gəl.
 yes took.3MS
 ‘Yes, he did.’ (Intended reading)

- c. *la, ma-gəl-š.
 no NEG-took.3MS-NEG
 ‘No, he didn’t.’ (Intended reading)

6.5.2 Ellipsis of individual constituents yielding a null *vP*

Goldberg (2005) points out an alternative analysis in which the verb phrase in the putative verb-stranding VP ellipsis remains intact while its internal constituents and adjoined material elide independently. Testing the possibility of eliding *vP*-internal constituents and the material adjoined to the *vP*, I argue that such material cannot always elide as part of VP ellipsis, but that it can elide independently. This claim is supported by the fact that *vP*-internal constituents such as benefactive and locative PPs and *vP* adverbs can elide not only as part of VP ellipsis but also individually, indicating that the putative verb-stranding VP ellipsis differs from VP ellipsis which elides the entire *vP* layer.

6.5.2.1 Locative and benefactive PPs

The locative (316) and benefactive (317) PPs can not only elide as part of VP ellipsis, but can also do so independently. The elided *v*P in (316) can have two interpretations depending on the context. It can be interpreted as ‘Yasin didn’t sleep on the couch’ and as ‘Yasin didn’t sleep at all’. Equally, (317) can be interpreted as ‘I bought a gift for Yasin’ and/or ‘I bought a gift’. I take these two cases to support the argument that the ellipsis in (316) and (317) does not behave like VP ellipsis; therefore, it should not be analysed as VP ellipsis.

(316) anē rgədət ʕəl ʃ-ʃalon, lakən Yasin ma-rgəd-ʃ.
I slept.1S on the-sofa but Yasin NEG-slept.3MS-NEG
‘I slept on the sofa, but Yasin didn’t.’ (Intended reading)

(317) Sara šrət hadiya l-Yasin w ʔetta anē šrēt.
Sara bought.3FS gift to- Yasin and too I bought.1S
‘Sara bought a gift for Yasin, and I did too.’ (Intended reading)

6.5.2.2 Adverbial ellipsis

Xu (2003) argues that adverbials such as manner adverbs in the second conjunct are deleted along with the verb only if they are identical to the adverbials in the first conjunct (Xu 2003). For instance, the ellipsis in (318) is interpreted as ‘John cleaned his teeth carefully and Peter cleaned his teeth carefully too’. In Libyan Arabic, the requirement on adverbial deletion does not hold as in VP ellipsis constructions. For instance, the ellipsis in (319) is interpreted as ‘Ali doesn’t speak Italian’, while a reading such as ‘Ali doesn’t speak Italian fluently’ is unavailable. This casts doubts on the treatment of the ellipsis in (319) as VP ellipsis.

(318) John carefully cleaned his teeth, and Peter did as well.

(Xu 2003: 164)

- (319) David yətkəlləm l-italiya bi-ṭalaqa, lakən Ali ma-yətkəlləm-š.
 David speaks.3MS the-Italian with-fluency but Ali NEG-speaks.3MS-NEG
 ‘David speaks Italian fluently, but Ali doesn’t.’ (Intended reading)

The elided verb phrase in (320) is interpreted as ‘Ali speaks Italian, but not necessarily fluently’. This suggests that the null category is not a *vP* containing and modified by an adverbial identical to the one in the antecedent *vP*. Likewise, the adjunct ‘every month’ in (321) can elide independently, since the elided *vP* does not necessarily imply that ‘Omar pays the rent every month’.

- (320) Omar yətkəlləm l-italiya bi-ṭalāqa, w ḥetta Ali yətkəlləm.
 Omar speaks.3MS the-Italian with-fluency and too Ali speaks.3MS
 ‘Omar speaks Italian fluently, and Ali does too.’ (Intended reading)

- (321) Ali yədfəṣ fi l-žār kul šahər, w ḥetta Omar yədfəṣ.
 Ali pay.3MS in the-rent every month and too Omar pay.3MS
 ‘Ali pays the rent every month, and Omar does too.’ (Intended reading)

In summary, the fact that *vP*-internal constituents such as locative and benefactive PPs and *vP* adverbs can drop independently indicates that the VP ellipsis analysis is not adequate for the putative verb-stranding VP ellipsis.

6.6 Conclusion

The chapter has discussed two cases of verb phrase related ellipsis referred to as modal ellipsis and verb-stranding VP ellipsis. In the former, the complement of the modal verb is deleted, while in the latter, where the lexical verb is assumed to have been raised to T, the complement of the main verb plus all *vP*-related material are elided.

Based on the observation that modal ellipsis exhibits missing antecedents, binding effects and allows for extraction in some contexts, it is proposed that such ellipsis is

a gap with internal syntactic structure, which in such a case can be analysed as VP deletion at the PF interface. As for the putative verb-stranding VP ellipsis, I claim that this should not be analysed as VP ellipsis as it is in Farsi (Toosarvandani 2009), Hebrew (Doron 1999, Goldberg 2005) and Finnish (Holmberg 2001). Rather, it should be reducible to null objects and/or individual argument drop. This is because, unlike VP ellipsis, the putative verb-stranding VP ellipsis is subject to definiteness restrictions, and it also differs from VP ellipsis with respect to the deletion of *v*P-related material such as locative and benefactive PPs and *v*P adverbs.

Chapter 7

Stripping and Negative Contrast in Libyan Arabic

7.0 Introduction

The chapter discusses two types of clausal ellipsis referred to as stripping and negative contrast with special focus on their syntactic properties and distribution, on the one hand, and their interaction with information structure on the other. The chapter is organized as follows: section 1 introduces stripping and negative contrast from a crosslinguistic perspective. Section 2 then discusses cases of stripping and negative contrast in Libyan Arabic, while section 3 discusses stripping in syntactic theory and reviews previous analyses of the phenomenon. Section 4 discusses the interaction between ellipsis and information structure. Section 5 provides an account and explanation for stripping and negative contrast in LA. Finally, section 6 presents the conclusions.

7.1 Stripping and negative contrast: a crosslinguistic perspective

Hankamer and Sag (1976: 409) define stripping as ‘a rule that deletes everything in a clause under identity with corresponding parts of the preceding clause, except for one constituent (and sometimes a clause-initial adverb or negative)’. Stripping is also referred to as bare argument ellipsis. It is widespread crosslinguistically and has been attested in a number of languages as illustrated in the data (322)-(326).

(322) English

Abby speaks passable Dutch, and Ben, too.

(Merchant 2003: 1)

(323) Greek

O Petros milaei aglika (ala) ohi galika.

the Petros-NOM speak.3MS English but not French

‘Petros speaks English but not French’.

(Kolokonte 2008: 118)

(324) German

Peter wurde eingeschult und Anna _ auch.
Peter was sent-to-school and Anna too

(Winkler 2005:159)

(325) Dutch

Hij heft gisteren met Peter gepraat, en
he has yesterday with Peter talked and
waarschijnlijk met Charlotte
probably with Charlotte.

‘He talked to Peter yesterday, and probably to Charlotte.’

(Aelbrecht 2006: 2)

(326) Standard Arabic

raʔaitu Zaid-an (wa) *laysa* xalid-an
saw.1MS Zaid-ACC (and) not Khalid-ACC
‘I saw Zaid not Khalid.’

(Al Horais 2008: 10)

The elliptical clauses in (322)-(326) are characterized by two salient features. First, they are not well-formed structures in isolation; second, they are only interpreted as full sentences with reference to the antecedent clause in the discourse (Culicover & Jachendoff 2005: 234). Thus, the ellipsis in (322) is interpreted as ‘Ben speaks passable Dutch.’

It is worth noting that stripping needs to be differentiated from a similar clausal ellipsis construction referred to as negative contrast. Negative contrast differs from stripping in that it lacks the conjunction ‘but’, as illustrated in (327) and (328) from English and Catalan respectively. Accordingly, when the conjunction is used, ellipsis is interpreted as stripping and when it is not, the structure is interpreted as negative contrast (see Drübig 1994; Busquets 2006; Kolokonte 2008).

(327) English

John bought the book, not Peter. (Kolokonte 2008: 35)

(328) Catalan

- a. Va venir al cinema [la MARTA], no [EN MIQUEL]
It came to the movies MARTA not MIQUEL
- b. Va venir al cinema [la MARTA], però no [EN MIQUEL]
It came to the movies MARTA but not MIQUEL

(Busquets 2006: 167)

Negative contrast constructions differ also from stripping in that they are licit with antecedents containing negation, whereas stripping is not, as in (329) (Kolokonte 2008: 36).

(329) A: I thought it was Peter who didn't pass the exams.

B1: No, MARY didn't pass the exams, not Peter. (Negative-contrast)

B2: *MARY didn't pass the exam, but not Peter. (Stripping)

(Kolokonte 2008: 37)

7.2 Stripping and negative contrast in Libyan Arabic

Both stripping and negative contrast occur in Libyan Arabic. In such constructions, ellipsis elides an entire clause except for one constituent (the remnant). In stripping, the remnant is typically preceded by a sentential modal adverb such as 'probably', 'possibly', or 'maybe' and the focusing adverb *ḥatta* 'too', as in (330) and (331). The remnant in negative contrast is preceded by the negative marker *miš* 'not', as in (332).

(330) Ali yətkəlləm iṭali, w taqrīban ḥatta bu-h.
Ali speak.3MS Italian and probably too father-his
'Ali speaks Italian, and probably his father too.'

(331) Ali šrē šəgga, w iḥtimal ḥatta siyyara.
Ali bought.3MS flat and possibly too car
'Ali bought a flat, and probably a car too.'

- (332) Philipp yəxdəm fi London, miš fi Berlin.
 Philipp work.3MS in London, not in Berlin
 ‘Philipp works in London, not in Berlin’.

Libyan Arabic stripping differs from stripping structures in other languages in that negative stripped clauses cannot be preceded by the conjunction ‘but’. In English, for example, stripping is grammatical with the presence of the conjunction ‘but’, as in (333). However, this is not the case in Libyan Arabic, as illustrated by the examples in (334) and (335).

- (333) John plays football but not basketball.

- (334) *anē mšēt l-s-sinəma, lakən miš l-s-sūg.
 I went.1S to-the-cinema, but not to-the-market
 ‘I went to the cinema, but not to the market.’ (Intended reading)

- (335) anē mšēt l-s-sinəma, miš l-s-sūg.
 I went.1S to-the-cinema, not to-the-market
 ‘I went to the cinema, not to the market’.

Furthermore, the fact that the elliptical clause in (335) can have an antecedent with overt negation indicates that the cases of ellipsis with the negative marker ‘miš’ such as (336) are negative contrast.

- (336) Ali ma-mša-š l-s-sinəma, miš Omar.
 Ali NEG-went.3MS-NEG to-the-cinema, not Omar.
 ‘It is Ali who didn’t go to the cinema, not Omar’.

Stripping and negative contrast display several properties. As mentioned above, the remnant in stripping is typically accompanied by the focusing adverb *ħatta* and a modal adverb such as ‘possibly, probably, or maybe’, as in (337). The remnant in

negative contrast, on the other hand, is only preceded by the negative (polarity) marker *miš* ‘not’, as in (338).

(337) Omar safər aməs, w ʔhtimal ɸætta Ali.
 Omar left.3MS yesterday and probably too Ali
 ‘Omar left yesterday, and probably Ali too.’

(338) Omar safər aməs, miš Ali.
 Omar left.3MS yesterday not Ali
 ‘Omar left yesterday, not Ali.’

Stripping occurs in coordinated clauses and across utterance boundaries, as in (337) and (339) respectively. In negative contrast, the remnant is preceded by the negation marker *miš*, and it attaches to the end of a clause and stands in contrast to a correlate in the antecedent clause. Negative contrast cannot appear across utterance boundaries.

(339) A: sməʃt inna Ali səʒʒəl fi kors iʔali.
 heard.1MS that Ali enrolled.3MS in course italian
 ‘I heard that Ali enrolled in an Italian course.’

B: ʃarəf, w ɸætta Omar.
 know.1MS and too Omar
 ‘I know, and Omar too’.

Languages that lack an equivalent to standard VP ellipsis are argued to realise VP ellipsis via an equivalent elliptical construction, namely stripping (e.g. Chao 1987 for French). However, stripping and negative contrast in LA differ from VP ellipsis in that, while remnants in the latter can precede the antecedent, as in (340), remnants in stripping and negative contrast obligatorily follow the antecedent, as in (341).

(340) kan ma-təgder-š, anē nəmši.
 if NEG-can.2MS.NEG I go.1S
 'If you can't, I'll go.'

(341) a. Omar bi-žži l-lhəfla, w yəmkən hətta Ali.
 Omar FUT.come.3MS to-the-party and maybe too Ali
 'Omar will come to the party, and maybe Ali too.'

b. *w yəmkən hətta Ali, Omar bi-žži l-lhəfla.
 and maybe too Ali Omar FUT.come.3MS to-the-party
 '*and maybe Ali too, Omar will come to the party.'

c. *miš Ali, Omar bi-žži l-lhəfla.
 NEG Ali Omar FUT.come.3MS to-the-party
 '*not Ali, Omar will come to the party.'

Finally, both constructions also differs from VP ellipsis in that they are illicit in both embedded contexts and island domains, as shown in the contrasts in (342) and (343) respectively.

(342) a. gal inn-əh ma-yəgder-š, yiži, lakən řaʔtəqəd
 said.3MS that-he NEG-can.3MS-NEG come.3MS but think.1S
 inn-əh yəgder.
 that-he can.3MS
 'He said that he can't come, but I think that he can.'

b. *Ali řžžər hoš w ařtəqid inna Zayd gal hətta/miš filla.
 Ali rent.3MS house and think.1S that Zayd said.3MS too/not villa
 '*Ali rented a house and I think that Zayd said a villa too/ not a villa.'

(343) a. Omar gdər ysafər lakən waḥəd nšər išāfə
 Omar could.3MS travel.3MS but someone spread.3MS rumor
 inn-əh ma-gdər-š.
 that-he NEG-could.3MS-NEG

‘Omar could travel, but someone circulated a rumor that he couldn’t.’

b. *Omar gdər ysafər, lakən waḥəd nšər išāfə
 Omar could.3MS travel.3MS but someone spread.3MS rumor
 inna ḥəttə Yasin / miš Yasin.
 that too Yasin / not Yasin.

‘*Omar could travel, but someone circulated a rumor that Yasin too/not Yasin.’

7.3 Stripping in syntactic theory

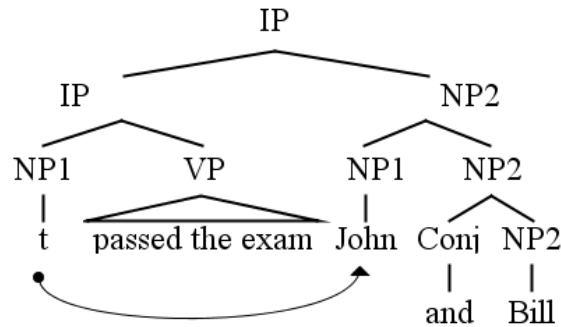
Two main analyses of stripping have been proposed. These are the non-ellipsis and the ellipsis approaches. This section discusses these approaches.

7.3.1 The non-ellipsis approach

The non-ellipsis approach was proposed by Reinhart (1991) and argues that stripping (BAE) does not involve clausal deletion as it is devoid of syntactic structure. The remnant that appears in the stripped clause, for example in (344) is base-generated in its surface position. Stripping is derived by the adjunction of the correlate at LF to the remnant in the second conjunct via Quantifier Raising, thus forming a coordinated structure. This is illustrated in (345).

(344) John passed the exam and Bill too.

(345)



The analysis assumed by Reinhart (1991) argues that stripping involves DP conjunction, which means that it is not clausal ellipsis. However, Merchant (2003) provides a number of arguments showing that stripping does involve clausal ellipsis and that the relationship between the antecedent and stripped clause cannot be just a DP conjunction.

In the spirit of Yoon (1996), Merchant (2003) argues that the behaviour shown in stripping in the context of partial predicates such as ‘be dirty’ provides evidence that stripping involves clausal conjunction and is thus clausal ellipsis³⁴. For instance, with the predicate ‘be dirty’, the conjoined phrase can be true if the predicate holds for one subpart of the conjoined entities, as in (346a), or for both of the conjoined entities in the coordination as in (346b) yielding a ‘split interpretation’.

(346) a. The plates and the bowls are still dirty

b. The plates are still dirty and the bowls are still dirty.

(Merchant 2003: 2)

Consequently, if stripping involves an elliptical conjoined XP, then it follows that it should have the two interpretations in (346a) & (346b). However, this is not the case,

³⁴ Yoon (1996) makes a distinction between ‘partial’ and ‘total’ predicates, as illustrated in (i):

- (i) a. Are the plates dirty? (yes, if some of the plates are dirty): *Partial predicate*
b. Are the plates clean? (yes, this means that all the plates are clean): *Total predicate*

as illustrated in (347); stripping can only give rise to the split interpretation, which indicates that it involves clausal conjunction. This confirms that the ellipsis in stripping is clausal ellipsis.

(347) The plates are still dirty, and the bowls, too.

(Merchant 2003: 2)

Another counterargument against the non-ellipsis approach involves the preposition stranding phenomenon observed by Depiatne (2000). The argument here is that languages that do not allow p-stranding under movement do not permit p-standing in stripping, as shown in (348) from Greek; while p-stranding languages such as English allow both options, stranding or pied-piping, as in (349).

(348) a. Milisa me ton Saki xthes, kai *(me) tin Anna.

I.spoke with the Sakis yesterday and with the Anna
'I spoke with Sakis yesterday, and (with) Anna.'

b. Milisa me ton Saki kai tin Anna xthes.

I.spoke with the Sakis and the Anna yesterday
'I spoke with Sakis and Anna yesterday.'

(349) I spoke with Sakis yesterday, and (with) Anna.

(Merchant 2003: 2)

The contrast between (349a) and (349b) illustrates that p-stranding is impossible in the context of stripping, while it is grammatical in DPs, as in (349b). This is not predicted under the assumption that the remnant and the correlate DPs in stripping constitute a conjoined DP. Instead, it supports the claim that the remnant in stripping is in a separate clause conjoined with the antecedent.

Finally, as pointed out by Merchant (2003), the occurrence of certain sentential and speaker-oriented adverbs in stripping indicates that it involves clausal/sentential conjunction and not DP conjunction, as shown in (350).

(350) Abby speaks passable Dutch, and [probably/possibly/fortunately] Ben, too.

(Merchant 2003: 2)

To sum up, stripping involves a clausal conjunction, and thus it should be considered a form of clausal ellipsis. The next section discusses whether or not the ellipsis site in stripping has a structure and how ellipsis in stripping operates.

7.3.2 The ellipsis approach

The ellipsis account was first advocated by Hankamer and Sag (1976: 409) and argues that stripping is a type of surface anaphora with a fully articulated syntactic structure that deletes via a syntactic rule under identity with a corresponding antecedent. Recent research has shown that ellipsis in stripping involves the deletion of a fully-fledged clausal structure (see Depiante 2000; Merchant 2003; Al Horais 2008; Kolokonte 2008). There is sufficient evidence in favour of this analysis, such as from morphological-case marking, p-stranding, and sloppy identity readings.

7.3.2.1 Morphological case-marking

Given that the stripped remnant can be a subject or object DP, it is predicted that such a DP will display the features it displays in non-elliptical constructions. Among the classical arguments is the morphological case marking in sluicing observed by Ross (1969) and Merchant (2001), in which the case of the remnant *wh*-phrase has to match the case of its correlate in the antecedent clause (see section 3.2.1.2). For instance, the *wh*-phrase in (351) requires the nominative case, not the accusative, which is assigned by the verb *ksero* ‘know’, as in (352). This is accounted for if we assume an internal structure in which case assignment can take place prior to movement and deletion.

(351) Greek

Kapjos irthe, alla dhe ksero {pjos / *pjon}.
someone came, but not know.Isg who.NOM/who-ACC
‘Someone came, but I don’t know who.’

(352) Dhe ksero { * i apantisi / tin apantisi }.
 not know.1sg the answer.nom the answer-ACC
 ‘I don’t know the answer’.

(Merchant 2001: 43)

The remnant in stripping also has to agree in case with its correlate, suggesting that the elliptical clause contains a syntactic structure as in (353) and (354), indicating that the ellipsis site has a syntactic structure in which the case-assignment of the remnant takes place prior to movement and ellipsis.

(353) Modern standard Arabic

ʔaʕtaitu zaid-an l-kitab-a laysa xalid-an/*xalid-un
 gave.1s Zaid-acc the-book-acc neg Khalid-acc/Khalid-nom
 ‘I gave Zaid the book not Khalid’.

(Al Horais 2008: 7)

(354) Greek

Irthe o Yanis, oxi o Yorgos / *oxi ton Yorgo
 came the John-NOM, not the George-NOM / not the George-ACC
 ‘John came, not George.’

(Kolokonte 2008: 22)

7.3.2.2 Identity readings

Identity readings can be an argument in favour of the deletion account in that they provide evidence that ellipsis has a syntactic structure. The ellipsis site in (355) can have strict and sloppy identity readings, indicating that there exists a pronoun in the ellipsis site. Consequently, on the strict reading, such a pronoun has a referent identical to that of the pronoun in the antecedent clause, while on the sloppy reading, the pronoun behaves as a variable bound by the subject of the second conjunct, which is the stripped clause.

(355) Libyan Arabic

Zayed bʕət flus l-xu-h, w ihtimal ḥəttə Ali.

Zayed sent.3MS money to-brother-his and probably too Ali

‘Zayed sent money to his brother, and probably Ali too.’

Sloppy reading: ‘Ali sent money to his brother.’

Strict reading: ‘Ali sent money to Zayed’s brother.’

In conclusion, stripping contains a syntactic structure and it involves a clausal conjunction. The question now is how ellipsis is derived and how the displaced remnant is interpreted. As for the derivation of ellipsis, I follow the deletion approach and assume that the ellipsis in stripping is a PF phenomenon; and, with respect to the interpretation of stripping, recent research has argued that it has to do with information structure. This latter point is discussed in the following section.

7.4 Ellipsis and information structure

The notion of information structure refers to ‘the linguistic encoding of notions such as focus versus background and topic versus comment, which are used to describe the information flow’ (Schwabe & Winkler 2007: 1). Focus and topic are expressed by syntactic or phonological means such as word order and pitch accent respectively (Richter & Mehlhorn 2006: 247-8). It has been argued that ellipsis in stripping is linked to information structure, since the remnant in such constructions is interpreted in terms of focus (see for example, Brunetti 2003; Merchant 2003; Basquet 2006; Al Horais 2008; Kolokonte 2008). With respect to stripping and negative contrast in Libyan Arabic, I propose that, while the former involves new information focus, the latter involves contrastive focus.

7.4.1 Focus constructions

Focus is related to the notion of information structure. There are two types of foci that need to be distinguished, namely informational focus and identificational (contrastive focus). Informational focus conveys new, non-presupposed information

which is assumed not to be shared by the speaker and the hearer (see Kiss 1998, Kenesei 2006). This is illustrated in (356), where the constituent ‘Zayd’ carries a new informational focus.

- (356) Q: Who did Omar call?
 A1: Omar called *Zayd*.
 A2:# *Omar* called Zayd.

Contrastive/identificational focus ‘represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate actually holds’ (Kiss 1998: 245). Contrastive focus does not only convey an identificational reading, but also ‘requires a limited number of contextually given alternatives’ (Molnár 2006: 204); it operates on a closed set of entities whose members are known by participants to which the focused element is identified and contrasted (see Kenesei 2006). For example, among the various pieces of clothing available for Mary in (357), Mary picked only a ‘hat’ and not anything else.

- (357) Mari **egy kalapot** nézett ki magának.
 Mary a hat.ACC picked out herself.ACC
 ‘It was **a hat** that Mary picked for herself.’ (Kiss 1998: 249)

The two types of foci are distinguished syntactically by the fact that, while contrastive focus involves syntactic reordering in the sense that it occurs in a particular syntactic position, informational focus imposes no such requirement. For example, contrastively focused constituents in Hungarian must occur in a preverbal position, as in (357), while new information focus appears normally in post-verbal positions, as in (358).

- (358) Mari ki nézett magának EGY KALAPOT.
 Mary out picked herself.ACC a hat.ACC
 ‘Mary picked for herself **A HAT**.’ (Kiss 1998: 249)

7.4.2 Focus constructions in Arabic

Focus in Arabic is realised by different means depending on the type of focus in question; a focused constituent can appear in situ or in a left peripheral position, as in (359) (see Moutaouakil 1989; Ouhalla 1997, 1999; Aoun et al. 2010). The former is perceived as new informational focus, while the latter is normally interpreted as contrastive focus.

(359) Standard Arabic

- a. šariba zayd-un ŠAY-AN.
drank.3MS zayd-NOM tea-ACC
'Zayd drank TEA'.
- b. ŠAY-AN šariba zayd-un.
tea-ACC drank.3MS zayd-NOM
'It was tea that Zayd drank.'

(Aoun et al 2010: 202)

The focus construction in (359a) is perceived as new information; it can be a felicitous answer to a question such as 'what did Zayd do?'. The structure in (359b), where the focused constituent appears in the left periphery, is understood contrastively, that is, the focused constituent is contrasted with existing conflicting information (see Moutaouakil 1989; Ouhalla 1997, 1999). Furthermore, focus can be expressed by cleft constructions (Ouhalla 1999), as in (360), and pseudo-cleft constructions as in (361) (Moutaouakil 1989: 24).

(360) Standard Arabic

- ZAYNAB-u hiyya llatii ʔallaf-at l-riwaayat-a.
Zaynab-NOM PRON.she RM wrote.3FS the-novel-ACC
'It was ZAYNAB who wrote the novel.' (Ouhalla 1999: 341)

(361) Standard Arabic

l-laḏī	sāfahtuhu	Zaydun
the-one	greeted-1S-3SA	Zayd-NOM
‘The one I greeted was Zayd.’		(Moutaokil 1989: 24)

Arguably, focus in Libyan Arabic can be expressed via exactly the same means, as in (362). Thus, the in-situ strategy in (362a) expresses new information focus, whereas the structure in (362b), where the focused constituent is in the left periphery, is interpreted with a contrastive reading. Likewise, the cleft structure in (363) is a strategy of realising contrastive focus in the language.

(362) Libyan Arabic

a. šrabət ŠAHI.
drank.1MS tea
‘I drank tea.’

b. ŠAHI šrabət.
tea drank.1MS
‘It was tea that I drank.’

(363) ZAYD huwwa illi ʔallef r-riwaya.
Zayd PRON.he that wrote.3MS the-novel
‘It’s Zayd who wrote the novel.’

However, based on ellipsis data, it is proposed that not all constituents that appear in the left periphery in Libyan Arabic are interpreted contrastively; rather they can also be interpreted as new information focus. The next section discusses this issue.

7.4.3 Focus restrictions and ellipsis

Ellipsis in stripping and in fragment/short answers is constrained by information structure since the remnant in such structures is interpreted as a focused element (see

Brunetti 2003; Merchant 2003, 2004, 2006b; Kolokonte 2008). Based on ellipsis data, Brunetti (2003) proposes that new informational focus in Italian can appear in the left periphery. Kolokonte (2008) supports this view, claiming that there are two focus projections in the left periphery; one, the lower, is occupied by new focus, while the other is designated for contrastive focus. I adopt this view and assume that new information focus can also appear in the left periphery in Libyan Arabic in the context of ellipsis.

A first argument is based on short/fragment answers which are assumed to involve ellipsis (Merchant 2004, 2006b; Krifka 2006). The structure in (364) is analysed as IP ellipsis derived by focus movement of the remnant to the left periphery followed by deletion or non-realisation of the IP which constitutes the background information (see Krifka 2006).

(364) Question: Who did John introduce to Sue?
 Answer: Bill_F.

(Krifka 2006: 130)

There is evidence in support of this analysis from connectivity effects such as case-marking, p-stranding, and binding and locality effects (Merchant 2004, 2006b). It has been observed that the remnant in short/fragment answers displays the same connectivity effects that it displays in non-elliptical counterparts, that is, in full answers.

With respect to morphological case-marking, the remnant in short answers bears only the same case that it would display in full answers. The remnant in (365) bears the accusative case, indicating that it originates as an object of the verb ‘sucht’. The short answer in (366) can be explained in the same way; the remnant starts as a subject bearing the nominative case which is expected in full answers prior to movement and ellipsis³⁵.

³⁵ However, as shown in 3.2.1, English behaves somewhat differently, in showing accusative case where nominative might be expected.

(365) German

Q: Wen sucht Hans?
 who.ACC seeks Hans
 ‘Who is Hans looking for?’

A: *Dem Lehrer.
 the.DAT leader

A: Den Lehrer.
 the.ACC leader

(Merchant 2004: 677)

(366) Greek:

Q: Pjos idhe tin Maria?
 who.NOM saw the Maria
 ‘Who saw Maria?’

A: O Gianni.
 the Gianni.NOM

A: *Ton Gianni.
 the Gianni.ACC

(Merchant 2004: 676)

Fragment answers show binding effects, which supports the analysis that they are derived from focus movement followed by TP ellipsis. This is exemplified in example (367). The anaphor in the fragment answer is acceptable despite the absence of any antecedent. The grammaticality of (367a) can be explained under the assumption that there is a clausal structure in the ellipsis site hosting the antecedent, which in such a case leads to satisfying Condition A of the binding theory (see Merchant 2004, 2006b).

(367) Who does John like?

- a. Himself.
- b. John likes himself.

(Merchant 2006b: 76)

The p-stranding phenomenon also supports the movement and ellipsis analysis. P-stranding is permitted in fragment answers only if it is permitted in full answers. In (368), stranding a preposition is unacceptable since German is a non-p-stranding language; the preposition in such cases has to be pied-piped. In p-stranding languages such as Swedish, both options are available, as shown in (369)

(368) German

- a. Mit wem hat Anna gesprochen?
with who has Anna spoken?
- b. Mit dem Hans.
- c. *Dem Hans.
the Hans

(Merchant 2004: 686)

(369) Swedish

- a. Vem har Peter talat med?
who has Peter talked with?
- b. Mary.

(Merchant 2004: 685)

Extending the case-marking effect to Libyan Arabic data is not possible since case is not morphologically marked in this language. This is illustrated in (370), where the remnant, which functions as an object, bears no case-marking. However, since this is a non-p-stranding language, p-stranding is not permitted in fragment/short answers, as in (371); and it is not allowed in full answers either.

(370) Q: šen šrē Omar?
 what bought.3MS Omar
 ‘What did Omar buy?’

A: siyyara.
 car
 ‘A car.’

- (371) Q: mʕə man təkəlləm Omar?³⁶
 with who talked.3MS Omar
 ‘With whom did Omar talk?’
- A1: *Ali.
 A2: √mʕə Ali.
 ‘With Ali.’

The p-stranding effect can be straightforwardly accounted for by the deletion analysis, according to which the remnant PP starts as a complement of the verb ‘yətəkəlləm’ and moves up to the left periphery before the entire TP gets deleted at the PF interface. Such an analysis, if on the right track, accounts not only for the assumption that the ellipsis site contains a structure and thus can be treated as a PF phenomenon, but also for the argument that the remnant which expresses new informational focus can appear in the left periphery (see Brunetti 2003)³⁷.

The second argument in favour of the assumption that the remnant undergoes A'-movement to the left periphery is the fact that the remnant in fragment answers is sensitive to island domains, as mentioned in 3.3.4 (see Merchant 2004 for further discussion). This is exemplified in (372)-(373) from English.

- (372) a. Did Ben leave the party because *Abby* wouldn't dance with him?
 b. *No, Beth.
 c. No, he left the party because Beth wouldn't dance with him.

³⁶ Resumptive wh-questions, which are compatible only with nominal constituents, do not permit PP remnants as fragment answers, as shown in (i):

- (i) A: man hu illi Omar təkəlləm mʕə-ah?
 who PRON.he that Omar talked.3MS with-him
 ‘Who is it/the person that Omar talked with?’
- B: (*mʕə) Ali.
 with Ali

³⁷ The assumption that the remnant, e.g. in (370) can be in situ, that is, in the TP, and that all of the TP except for the constituent that surfaces as a remnant, as illustrated in (ii), elides is unacceptable since it would entail that a syntactic operation can apply to a string of words that do not make up a constituent.

- (ii) ~~Omar~~ šrē siyyara.
 Omar bought.3MS car

- (373) a. Did Abby vote for a *Green Party* candidate?
 b. *No, *Reform Party*.
 c. No, she voted for a *Reform Party* candidate.

(Merchant 2004: 688)

The ungrammaticality of (372b) & (373b) is expected if we assume that the fragment DPs derive from the structures in (c) and that they have moved across island domains to the left periphery. The same locality effects are found in Libyan Arabic fragment answers; examples (374) & (375) indicate that the remnant in short answers is sensitive to island constraints.

(374) Adjunct island

Q: huwa žē liʔan Ali ma-ʕzəm-š Omar?
 huwa came.3MS because Ali NEG-invited.3MS-NEG Omar
 ‘Did he come because Ali didn’t invite Omar?’

A1: *la, Ahmed.
 no, Ahmed.

A2: la, huwa žē liʔan Ali ma-ʕzəm-š Ahmed.
 no he came.3MS because Ali NEG-invited.3MS-NEG Ahmed
 ‘No, he came because Ali didn’t invite Ahmed.’

(375) Relative clause island

Q: Ali šrē l-ktab illi Omar ʔllfə-h l-Samir?
 Ali bought.3MS the-book that Omar wrote.3MS-it for-Samir
 ‘Did Ali buy the book that Omar wrote for Samir?’

A:1 *la, l-Asma.
 no for-Asma.

A2: la, Ali šrē l-ktab illi Omar ʔllfə-h l-Asma.
 no Ali bought.3MS the-book that Omar wrote.3MS-it for-Asma
 ‘No, Ali bought the book that Omar wrote for Asma.’

To sum up, these facts show that remnants in fragment answers involve movement to the left periphery.

7.5 Analysis of stripping and negative contrast

7.5.1 Analysis of stripping

Stripping has been analysed as a PF deletion process (see Depiante 2000; Merchant 2003; Kolokonte 2008). In the spirit of the deletion approach, I propose that stripping in Libyan Arabic can be derived by the movement of the remnant to the left periphery plus PF deletion. There are several pieces of evidence to argue in favour of the PF deletion account. First, locality effects can be diagnostic of movement; that is, if there is movement, it must obey island constraints. This prediction is borne out as the remnant in stripping is sensitive to islands, as illustrated in (376)-(378). The ungrammaticality of the elliptical structures below can be ascribed to the fact the remnant has moved from within an island domain.

(376) Complex noun phrase

*Ali saddəq l-wəld illi təkəllemt mʕə Omar, w hətta
 Ali believed.3MS the-boy that talked.3MS with Omar and too
 mʕə Sami.
 with Sami
 ‘*Ali believed the boy who talked with Omar, and with Sami too.’

(377) Adjunct islands

*Ali zʕəl liʔan-i təkəllemt mʕə Omar w hətta
 Ali got sad because-I talked.1MS with Omar and too
 mʕə Asma.
 with Asma
 ‘*Ali got sad because I talked with Omar, and with Asma too.’

(378) Relative clause island

*Ali šrē l-ktab illi Omar ʔallfa-h l-Samir,
 Ali bought.3MS the-book that Omar wrote.3MS-it to-Samir
 w ḥætta l-Asma.
 and too to-Asma.

‘*Ali bought the book that Omar wrote to Samir, and to Asma too.’

Second, as noted by Depiante (2000), the existence of preposition stranding can be used in arguing for the movement and deletion analysis of stripping (see 7.3.1). In Libyan Arabic, preposition stranding is not allowed in stripping, as illustrated in (379) and (380). The ungrammaticality of (379) can be ascribed to the ban on p-stranding in the language³⁸. The structure in (380) is acceptable since it involves the movement of the prepositional phrase to the left periphery³⁹.

(379) *Ali təkəlleṃ mʕə Omar, w ʔḥtimal ḥætta Asma_i
 Ali talked.3MS with Omar and probably too Asma
 [Ali təkəlleṃ — mʕə — t_i]
 Ali talked.3MS with

‘Ali talked with Omar, and probably Asma too.’ (Intended reading)

(380) Ali təkəlleṃ mʕə Omar, w ʔḥtimal ḥætta
 Ali talked.3MS with Omar and probably too
 mʕə Asma_i [~~Ali — təkəlleṃ~~ t_i].
 with Asma Ali talked.3MS

‘Ali talked with Omar, and probably with Asma too.’

³⁸ The structure in (381) is grammatical when the remnant interpreted as a subject, as illustrated in (i):

(i) Ali təkəlleṃ mʕə Omar, w ʔḥtimal ḥætta Asma_i
 Ali talked.3MS with Omar and probably too Asma
 [t_i təkəlleṃ — mʕə — Omar]
 talked.3FS with Omar

³⁹ It is worth noting that p-stranding is not allowed in Standard Arabic stripping either, as in (i).

(i) sa-ʔəḥab-u illa r-rabaT-i (wa) *laysa* *(illa) l-Gahirat-i
 will-go.1ms to Rabat-Gen (and)neg *(to) Cairo-Gen
 ‘I will go to Rabat not to Cairo.’ (Al-Horias 2008: 13)

Despite, by hypothesis, being displaced to a left peripheral position in the elided clause, the remnants in (379) and (380) are interpreted as new informational focus. They are not in contrast with any existing information, but rather they express new information that is not shared by the speaker and the addressee. The very same case can be observed in constituent questions. In such constructions, such as in (381), interrogative pronouns are assigned new focus and thus are normally answered with declarative clauses containing new information focus. The fact that the remnant appears in the left periphery in ellipsis is an indication that it undergoes focus movement (see Brunetti 2003 for discussion of the same issue in Italian).

(381) Q: šen šrēt?
 what bought.2MS
 ‘What did you buy?’

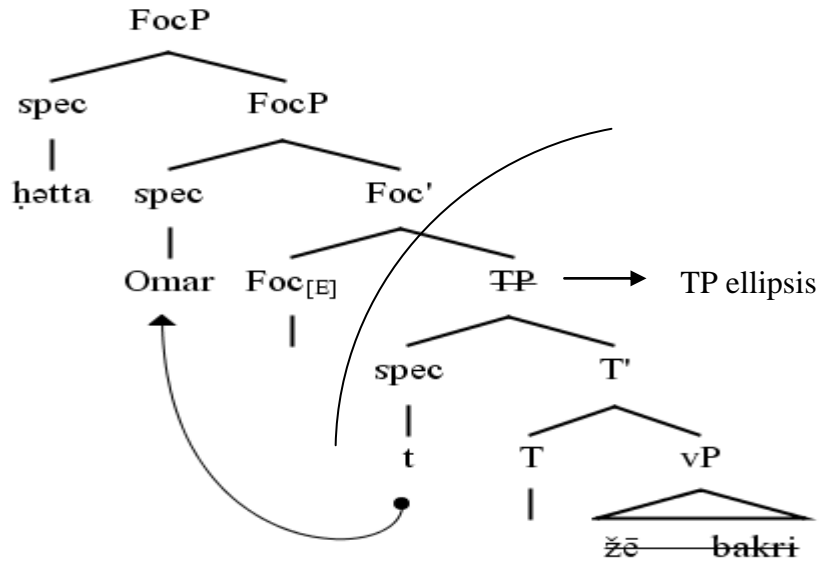
A: ktab.
 book
 ‘A book.’

Given that the remnant in (382) is not in contrast with any existing information and constitutes new information that is not shared by the speaker and the hearer, I assume that it undergoes movement to a focus projection in the left periphery.

(382) Ali žē bakri, w ʔħtimal ħəтта Omar.
 Ali came.3MS early and probably too Omar
 ‘Ali came early, and probably Omar too.’

For the derivation of (382), I follow the PF deletion approach to ellipsis and argue that it is a PF phenomenon and that the ellipsis is licensed by an [E]llipsis feature residing in the head of FocP. Consequently, once the remnant has moved to spec FocP, E sends off the complement of the head in which it resides, which is the TP, for non-pronunciation at PF, resulting in TP ellipsis.

(383)



7.5.2 Analysis of negative contrast

Negative contrast constructions are preceded by the negation particle *miš*. Negation in LA is realised by a two-pattern negation system depending on clause typology (see section 2.6). The negation of verbal sentences with past and/or present tense interpretation is expressed by the negative markers *ma-* and *-š* being attached to the verb: the former as a proclitic and the latter as an enclitic, as in (384). Copular clauses are negated with the marker *miš*, as in (385). The former is referred to as ‘discontinuous’ negation and the latter as ‘independent’ negation.

(384) anē ma-təkəllemt-š mʕə Omar.
 I NEG-talked.1S-NEG with Omar
 ‘I didn’t talk with Omar.’

(385) l-hoš miš kweiys.
 the-house NEG nice
 ‘The house is not nice.’

Pursuing the PF deletion approach to sentences like (386), and assuming that the contrasted remnant has moved out of TP to the left periphery followed by TP deletion, the question is how the structure in (386) can be derived given that verbal clauses cannot be negated by the particle *miš*, as in (387).

(386) anē təkəllemt mʕə Ali, miš mʕə Omar.
 I talked.1s with Ali not with Omar
 ‘I talked with Ali, not with Omar.’

(387) *miš lʔəbt kura.
 NEG played.1s football
 ‘I didn’t play football.’ (Intended reading)

However, verbal clauses in Libyan Arabic can be negated by the negation marker ‘*miš*’ in certain contexts. Unlike in English, which does not have a full grammatical version of negative contrast with ‘not’, as in (388), negative contrast can have a grammatical continuation in Libyan Arabic⁴⁰. This is due to the fact that the negation of verbal clauses can be realised by the negative particle *miš*, although only in restricted contexts such as yes-no questions⁴¹, as in (389) and (390).

(388) English

I spoke with Joe, not with Jane [~~I spoke~~].

⁴⁰ Al Horais (2008) observes that a well-formed overt counterpart of negative stripping is available in Najdi Arabic, a dialect spoken in Saudi Arabia, as in (i):

- (i) a. shift Omar bas *mu* xalid.
 saw.I Omar but neg Khalid
 ‘I saw Omar but not Khalid’.
 b. shfit Omar bas *mu* xalid (ana) shfit.
 saw.I Omar but neg Khalid (I) saw.I

(Al Horais 2008: 16)

⁴¹ Aoun et al. (2010: 101) point out that the structure in (389) is interpreted as ‘isn’t it the case that you were in the house?’. Therefore, they propose that such clauses are complex clauses in which the negation morpheme ‘*miš*’ and the inflected verbs are located in different clauses. Since expletive subjects and present tense copulas are null in Arabic, the negation particle ‘*miš*’ surfaces alone. This can be schematised as [TP NegP *miš* [TP]].

(389) Moroccan Arabic

maši kunti f d-daar?
Neg were.you in the-house
'Weren't you in the house?'

(Aoun et al. 2010: 100)

(390) Libyan Arabic

miš lʔəbt kura?
NEG played.2MS football
'Didn't you play football?'

Furthermore, the negative *miš* is used in Libyan Arabic to negate verbal declarative clauses in constructions involving contrastively focused constituents, as in (391)-(393).

(391) miš fi l-hoš šuft Ali.
NEG in the-house saw.1MS Ali
'It is not in the house that I saw Ali.'

(392) miš mʕə Ali mšēt.
NEG with Ali went.1MS
'It is not with Ali that I went.'

(393) miš s-siyyara (illi) šrat-ha.
NEG the-car (that) bought.3MS-it
'It's not the car that he bought.'

The structures in (391)-(393) involve preposing constituents to the left periphery. The preposed PPs in (391) and (392) are expected, since indefinite NPs and non-nominal constituents can only make use of the preposing strategy, and not the cleft strategy such as (393), when contrastively focused (see Moutaouakil 1989; Ouhalla 1999: 341; Aoun et al. 2010). Consequently, given that non-nominal constituents can

only make use of the preposing strategy when contrastively focused, it is proposed that the remnant in (386) moves to the left periphery prior to deletion of the TP.

The claim that negative contrast can be derived by focus movement to [Spec, FocP] followed by TP deletion is supported by facts related to p-stranding effects. With respect to p-stranding, the absence of morphological case-marking on the remnant seems to give rise to p-stranding effects in (394).

(394) anē təkəllemt mʕə Omar, miš Ali.
 I talked.1s with Omar not Ali
 ‘I talked with Omar, not Ali.’

(395) a. anē təkəllemt mʕə Omar, miš mʕə Ali_i [pro təkəllemt t_i].
 I talked.1s with Omar not with Ali pro talked.1MS
 ‘I talked with Omar, not with Ali.’

b. *anē təkəllemt mʕə Omar, miš Ali_i [təkəllemt mʕə t_i].
 I talked.1s with Omar not Ali talked.1MS with

The p-stranding effects in (394) are merely superficial. The elliptical clause does not involve p-stranding. The lack of case-marking on the remnant in (394) is what gives rise to such apparent p-stranding effects. The fact that the remnant can only be interpreted as a subject can be an argument that the elliptical clause in (394) does not involve p-stranding⁴². The ungrammaticality of (395b) is ascribed to the ban on p-stranding in the language.

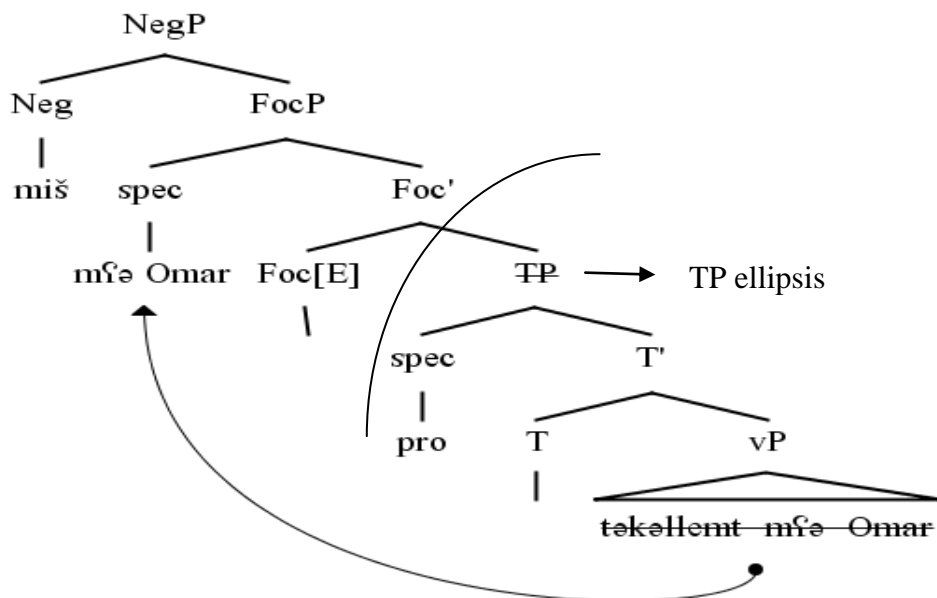
⁴² However, for some informants, the remnant can be understood in relation to the correlate (the prepositional complement) when it is being contrasted with it; in such a case, apparent preposition stranding arises, as in (i). The grammaticality of the structure can be ascribed to the fact that the remnant in such a structure functions as a subject of a clefted clause, as in (ii).

- (i) anē təkəllemt mʕə **Omar**, miš **Ali**.
 I talked.1MS with Omar not Ali
- (ii) miš Ali illi təkəllemt mʕə-ah
 Neg Ali that talked.3MS with-him

The above facts indicate that ellipsis in negative contrast contains a syntactic structure, which consequently can be analysed as a PF deletion process. Therefore, it is proposed that the negative contrast structure in (396) can be derived by the focus movement of the contrasted constituent out of TP followed by TP deletion at PF, as shown in (397). Despite the fact that the remnants in stripping and negative contrast end up in a focus position in the left periphery, the former expresses new information focus whereas the latter is interpreted as contrastive focus⁴³.

(396) anē təkəllemt mʕə Ali, miš mʕə Omar_i [pro təkəllemt_{t_i}].
 I talked.1S with Ali not with Omar pro talked.1MS *t*
 ‘I talked with Ali, not with Omar.’

(397)



⁴³ I follow Kolokonte (2008) and assume that there are two focus projections in the left periphery; one is occupied by new focus, while the other is designated for contrastive focus.

7.6 Conclusion

This chapter has discussed stripping and negative contrast in Libyan Arabic. Based on facts of locality, binding and p-stranding effects, it is proposed that stripping and negative contrast can be derived by the movement of the remnant to the left periphery followed by TP deletion. However, the two structures exhibit differences in information structure; that is, while the remnant in stripping expresses new information focus, its counterpart in negative contrast can only be interpreted contrastively as a contrastive focus.

Chapter 8

Conclusion

This dissertation has been concerned with three elliptical structures, namely sluicing, verb phrase ellipsis, stripping and negative contrast in Libyan Arabic (LA). It aims primarily to provide a comprehensive description of these types of ellipsis and put forward an account for them from a generative perspective. The dissertation consists of seven chapters and a conclusion. The first chapter, as usual, is an introductory chapter describing the study, the data, the issues, objectives, significance and organization of the study.

Chapter two has provided an overview of some syntactic aspects of Libyan Arabic relevant to the issues under discussion. It discussed clause structure and typology, word order, verb movement, negation, yes-no questions and wh-questions. With respect to clause structure and typology, there are two types of clauses: verbless and verbal clauses. The former lack a verbal element while the latter contain a verb. The basic word order is SVO, however, other word orders such as VSO, OVS and VOS are permissible and they are used to realize certain functions such as focus and topicalisation. Meanwhile, there are three strategies for wh-question formation; these are the gap, in-situ and resumptive strategies. The gap strategy involves fronting the wh-expression to a clause initial position, leaving a gap bound by the displaced wh-expression. This type of wh-question is referred to as regular and it is subject to locality effects. The in-situ strategy involves wh-phrases appearing in their base-generated position; such wh-questions are interpreted as echo questions. The resumptive strategy is characterized by (a) the complementiser 'illi', (b) a resumptive pronoun filling the gap assumed to be left by the wh-phrase, and (c) an optional pronominal copula.

Chapter three dealt with ellipsis and its status in syntactic theory and reviewed the structural and non-structural approaches proposed for ellipsis. The former assumes

syntactic structure while the latter argue that ellipsis is devoid of any syntactic structure. It was shown that there are several challenges for the approaches discussed in this chapter, suggesting that ellipsis cannot be explained by just one theory. However, the chapter provided several arguments showing that ellipsis contains syntactic structure. That ellipsis patterns with non-elliptical counterparts in exhibiting morpho-syntactic effects such as case-marking and other phenomena such as extraction, missing antecedents, locality effects and binding effects provides empirical evidence that ellipsis has a syntactic structure. Consequently, ellipsis can be treated as a PF deletion of a fully articulated structure.

Chapter four was concerned with sluicing and attempted to determine whether sluicing exists in Libyan Arabic and, if so, can be analysed as an elliptical wh-question. There have been two main analyses of sluicing. The first view considers sluicing as an elliptical wh-question derived by wh-movement and TP deletion. The second argues that sluicing derives from an underlying copular clause. However, recent research has shown that both analyses cannot be correct despite the fact that the former has advantages over the latter. Van Craenenbroeck (2010b) and Martín González (2010) propose that sluicing can have both copular and non-copular sources as its underlying structure.

The chapter has shown that the cross-linguistic properties of sluicing such as form-identity effects are not clearly manifested in Libyan Arabic sluicing. First, as a non-case-marking language, wh-remnants surface in the same form regardless of their position in the clause. Therefore, the case-marking generalisation cannot be extended to this language. Second, the language displays p-stranding effects under sluicing, which is a challenge to the 'p-stranding generalisation' and therefore can be used to argue against the analysis of sluicing as an elliptical wh-question derived by wh-movement and TP deletion. Third, the implementation of Merchant's (2001) diagnostics reveals that not all cases of sluicing instantiate as sluicing, but rather as pseudosluicing, that is, as elliptical clefts, despite their superficial appearance as sluicing. This follows from the fact that, as a null subject language with covert copulas in cleft structures and no case-marking on wh-expressions, sluicing and

pseudosluicing are indistinguishable in some contexts. This conclusion accords with those of van Craenenbroeck (2010b) and Martín González (2010) that sluicing can have both copular and non-copular sources as an underlying structure; the latter is typically used in those contexts where a regular wh-question is unavailable.

Chapter five discussed the interaction between sluicing and p-stranding. Libyan Arabic is a non-p-stranding language that seems to display p-stranding effects under sluicing despite the fact that p-stranding is prohibited under regular wh-movement. This can be taken as *prima facie* evidence against the p-stranding generalisation articulated by Merchant (2001). From a crosslinguistic perspective, the chapter reviewed previous studies of p-stranding in other non-stranding languages such as Spanish and Brazilian Portuguese. In such languages, p-stranding effects are assumed to derive from a copular source. Taking into account the properties and functions of pronominal copulas and the complementiser ‘illi’ in resumptive wh-questions, it is proposed that sluicing under p-stranding in Libyan Arabic derives from a cleft source, and thus is an instance of pseudosluicing despite its superficial appearance as sluicing. The lack of case-marking on the wh-remnants and the absence of the pronominal copula make the distinction between sluicing and pseudosluicing rather difficult.

This conclusion indicates that there are two sources of TP ellipsis in the language: sluicing and pseudosluicing. Sluicing is an instance of an elliptical wh-question, and conforms to the p-stranding generalisation. Pseudosluicing is an elliptical cleft resulting from the deletion of a clefted TP whose pivot is an extracted wh-phrase. These two types of TP ellipsis can be derived by wh-movement plus TP deletion at PF. Furthermore, only pseudosluicing displays apparent p-stranding effects, which is due to the fact that wh-pivots of clefts cannot be headed by a preposition. The fact that the preposition in resumptive wh-questions resides in the relative clause, which eventually gets deleted at PF in pseudosluicing, yields the illusion that sluicing involves p-stranding. Finally, the proposed analysis for sluicing under p-stranding provides novel evidence from sluicing for Shlonsky’s (2002) analysis of Arabic Class II wh-questions as copular clauses.

Chapter six discussed two cases of verb phrase related ellipsis which are referred to as modal ellipsis and verb-stranding VP ellipsis. In the former, the complement of the modal verb is deleted, while in the latter, where the lexical verb is assumed to have raised to T, the complement of the main verb plus all *v*P-related material are elided. Based on the observation that modal ellipsis exhibits missing antecedents, binding effects and allows for extraction in some contexts, it is proposed that such ellipsis is a gap with an internal syntactic structure, which in such a case can be analysed as VP deletion at the PF interface. As for the putative verb-stranding VP ellipsis, it is proposed that this should not be analysed as VP ellipsis as in Farsi, Hebrew and Finnish. Rather, it should be reducible to null objects and/or individual constituent drop. This claim rests on two arguments. First, unlike with VP ellipsis, the putative verb-stranding VP ellipsis is subject to definiteness restrictions; second, it differs from VP ellipsis with respect to the deletion of *v*P-related material.

Finally, chapter seven discussed two kinds of clausal ellipsis, namely stripping and negative contrast. Both constructions involve TP ellipsis. It is proposed that the remnant in these constructions undergoes focus movement to the left periphery followed by the deletion of the TP. Such a movement-based analysis is supported by facts related to locality and *p*-stranding effects. However, stripping and negative contrast are different in terms of their interaction with information structure, that is, the remnant in stripping is perceived as new informational focus, whereas in negative contrast, it is interpreted as a contrastive focus.

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