

**Bangor University**

**DOCTOR OF PHILOSOPHY**

**Empty categories in Syrian Arabic**

Farhat, Haytham

*Award date:*  
1991

*Awarding institution:*  
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**EMPTY CATEGORIES IN SYRIAN ARABIC**

**BY**

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**A thesis submitted in fulfilment of the requirements  
for the degree of Doctor of Philosophy in Linguistics**

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**1991**



**TO THOSE WHOSE KNOWLEDGE  
I WILL ALWAYS CHERISH**

## ACKNOWLEDGEMENTS

Intellectually, this thesis has been guided by the advice provided by my supervisor **Dr. Robert D. Borsley**. I am greatly indebted to him for his stimulating and wide-ranging discussions, for his admirable patience, and for his unstinting efforts to keep me on the right track. He has taught me, among other things, that the best way to discuss linguistic material is to see how the experts do it. He has been magnanimous all along.

I owe a debt of gratitude for those who introduced me to Syntax at the University of Strathclyde and at the University of Manchester: In particular to Dr. Nigel Fabb, Professor Nigel Vincent, and Mr. John Payne.

My thanks are also extended to Professor Ian Roberts and to all members of staff in the department of Linguistics for conducting weekly research Seminars to widen our scope and keep us abreast of the theoretical and applied issues in an ever evolving field as Linguistics.

A word of thanks goes to the Secretary Angela Roberts for her efficiency, and to the Technician Emlyn Parry for being a troubleshooter.

Last, but not least, my parents' love has been a great boost that kept me going. All credit goes to them for their warmth and devotion.

## ABSTRACT

It is a widely held view that **EMPTY CATEGORIES** (ECs) provide a 'window' through which to probe into the principles of Universal Grammar (UG). This work is concerned with the nature of Empty Categories in Syrian. In particular, we concentrate on their implications for the Government and Binding theory.

Chapter One considers some **THEORETICAL PRELIMINARIES**. Specifically, we introduce grammatical theory within the Chomskyan perspective, note the importance of ECs in GB, and highlight the principles that force their existence in certain situations. We also examine the distribution of overt and empty categories with respect to the conditions of the binding theory, as proposed in Chomsky (1981), and consider both the Lectures (1981) and the Barriers (1986b) version of the ECP.

Chapter Two studies **CLAUSE STRUCTURE**. We discuss how VSO sentences should be analyzed, presenting evidence that VSO order derives from an underlying SVO order. We also look at the nature of verb-fronting, reviewing three analyses. Then, we concern ourselves with verbless clauses. We consider how small clauses are treated in English. We also consider Syrian verbless clauses, highlighting their distribution and provide an analysis. Then, we consider the situation with pronominal subjects, extending the analysis. We conclude with some complications.

Chapter Three deals with **SUBJECTLESS FINITE CLAUSES**. We introduce some of the basic characteristics of Null Subject Languages (NSLs). We review two positions on the nature of the element occupying subject position in NSLs: Chomsky's Lectures (1981) and Chomsky's Concepts & Consequences (1982) - and argue for the pro analysis. Then, we focus on Syrian as an NSL, illustrating how the 'richness' of verb morphology triggers the presence of an EC in subject position of finite clauses.

Chapter Four looks at **CLITIC CONSTRUCTIONS**. We briefly summarize the data, highlight two analyses, and give objections to the movement analysis. Then, we present some further data involving prepositional clitic doubling. Finally, we consider, in the light of Kayne's generalization, Borer's Case absorption analysis and Lyons's approach, some of the theoretical implications of clitic Constructions.

Chapter Five is concerned with what are normally called **WH-MOVEMENT CONSTRUCTIONS**. We look at Wh-questions, considering the variety of positions in which the EC appears. Then, we look briefly at other Wh-movement constructions - i.e. Relative clauses and Topicalization sentences. We identify certain features that an analysis might use in such constructions.

Chapter Six looks at **APPARENT RAISING SENTENCES**. We explain what is meant by a raising sentence in grammatical theory. Then, we present the basic Syrian data, offering tests for raising sentences. Finally, we consider the implications of the Syrian data, illustrating how it poses an apparent problem for GB. We offer a good solution to the problem and show that we are not dealing with raising sentences, but rather with instances of topicalization.

Chapter Seven concentrates on **PASSIVE CONSTRUCTIONS**. We take a closer look at the nature of passives in English, highlighting the distinction between lexical and transformational passives. Then, we consider Syrian Passives looking at ordinary and impersonal passives. We deal with the question of whether or not Syrian has transformational passives, looking at what look like pseudo-passives. We argue against treating Syrian Passives as instances involving NP-movement. Thus, if Syrian has no raising sentences and no transformational passives, then it probably has no NP-traces.

Chapter Eight focuses on what look like **CONTROL CONSTRUCTIONS** (CCs). We look at CCs in English, considering the basic data, highlighting the ways in which control sentences differ from raising sentences. Then, we present the GB analysis of Control Sentences. We consider CCs in Syrian, showing how the Syrian data poses a problem for standard GB, noting that Syrian CCs involve not a **PRO** subject but a pro subject, presenting alternative GB accounts and arguing that there is no problem here.

Finally, Chapter Nine offers a summary of the main conclusions, highlights the questions left open in the thesis, and concludes with a reference to the areas that need further research.

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## CHAPTER ONE

### THEORETICAL FRAMEWORK

#### 1.1. Theoretical Preliminaries

##### 1.1.0. Introduction

This thesis as a whole is concerned with Empty Categories (ECs) in Syrian within the Government-Binding (GB) framework, as outlined in Chomsky (1981). These are of interest because they play a central role in modern linguistics. ECs have been discussed in connection with a variety of languages, but not in Syrian. The reason we are working on Syrian is that it is a worthwhile thing to do for its implications of a discussion of ECs.

This chapter sets out an account of linguistic theory within Chomskyan thinking. Issues to do with the existence of empty categories, some of the principles that make reference to them are also highlighted. In the course of this chapter, we introduce Standard Binding Theory (Chomsky (1981)). we also present a formulation of the Empty Category Principle (ECP) and the way Proper Government is defined in both Lectures (1981) and Barriers (1986b).

This chapter is organized as follows. Section 1.1.1. focuses on the nature of grammatical theory within the Chomskyan paradigm and its relation to language acquisition. Section 1.1.2. highlights the significance of Empty Categories from the Chomskyan perspective, paying special attention to the way children acquire knowledge of their properties. Then, in

section 1.1.3., we introduce the principles that require the existence of ECs in certain situations - namely, the Projection Principle (PrPr) and the Subject Principle. Section 1.1.4. introduces the standard classification of ECs. We are concerned in Section 1.2. with some salient aspects of GB. In subsection 1.2.1., we concentrate on standard binding theory, presenting in subsection 1.2.1.1. a classification of both overt and empty categories, highlighting in 1.2.1.2. the three conditions of binding theory with respect to anaphors, pronominals, and R-expressions. Finally, we concern ourselves in subsection 1.2.3. with the ECP, confining our discussion to the way the definition of Proper Government is presented in the light of two positions: (i) Chomsky's Lectures (1981) and (ii) Chomsky's Barriers (1986b).

#### **1.1.1. Grammatical Theory within the Chomskyan Paradigm**

For Chomsky, the basic challenge for linguistic theory is to develop a model of Universal Grammar (UG), which is, on the one hand, general enough to account for the full variety of languages, and on the other hand, restrictive enough to account for language acquisition. Chomsky (1981:3) stresses the point that:

- (1) The theory of Universal Grammar must meet two conditions. On the one hand, it must be compatible with the diversity of existing (indeed, possible) grammars. At the same time, UG must be sufficiently constrained and restrictive in the options it permits so as to account for the fact that each of these grammars develops in the mind on the basis of quite limited evidence.

Since its inception, generative grammar has always been concerned with the nature of the language faculty and with the explanation of language acquisition. Chomsky (1977:18) believes that:

- (2) **The fundamental problem in the study of language, it seems to me, is to explain how it is possible for a person to attain knowledge of a language, knowledge that is far undetermined by experience**

That is, we need to have some idea about what is acquired if we want to investigate the acquisition process.

Chomskyan linguistics is concerned with a system of knowledge (a cognitive system) - i.e. **Competence**, or to use Chomsky's more recent terminology **I-language** -i.e. an internalized set of rules and principles. Chomsky (1986a:22) points out that:

- (3) **The I-language, then, is some element in the mind of the person who knows the language, acquired by the learner, and used by the speaker-hearer**

Thus, for Chomsky, what we know is a system of mentally represented rules and principles which a generative grammar seeks to characterize. Chomsky assumes that we are endowed with this universal grammar. UG, Chomsky (1980:65) argues, is **'an element of the human genotype'**. UG, for Chomsky (1980:66), is:

- (4) **a system of unifying principles that is fairly rich in deductive structure but with parameters to be fixed by experience**

That is, UG provides the basis from which knowledge of a particular language develops. Armed with this system and exposed to experience, the mind develops a language consisting

of a rich system of rules with experience having set some open parameters. Thus, if the system of UG is sufficiently rich, limited evidence will be enough for the development of rich and complex properties in the mind. It is, for Chomsky (1980:29), a reflection of **'the nature of the language faculty'**. His concern with UG explains why for him (ibid:226), **'Ultimately the study of language is part of the human biology'**.

In support of this, Chomsky (1986a:7) argues that:

- (5) Language poses in a sharp and clear form what has sometimes been called "Plato's problem", the problem of "poverty of stimulus," of accounting for the richness, complexity, and specificity of shared knowledge, given the limitations of the data available

The poverty of the stimulus argument refers to those aspects of the linguistic knowledge that cannot be acquired by induction from the data solely, but necessitate resorting to the rules and principles determined by UG. Thus, Chomsky's approach to language acquisition can be viewed as represented in (6):

$$\begin{array}{ccc} (6) & \text{LINGUISTIC EXPERIENCE} & \\ & \text{UG} & \end{array} \left. \vphantom{\begin{array}{c} \text{LINGUISTIC EXPERIENCE} \\ \text{UG} \end{array}} \right\} \implies \text{I-LANGUAGE}$$

Chomsky believes that there is a huge gap between linguistic experience and I-language - hence UG must be a rich system. Given (6), then, the language learner experiences a mass of linguistic data. Utilizing the resources of UG, which are innate in the mind/brain, he/she arrives at core grammar for his/her native language.

In favour of this position, two kinds of data are put forward. The **first** is that negative evidence -i.e. evidence

that certain strings are ungrammatical - is not available to children. The **second** is that although children produce many ungrammatical strings during the process of language acquisition, they do not make certain kinds of errors.

Taking now the first type of data, Chomsky (1986a:8) illustrates with the following examples:

(7) a. I wonder who [the men expected to see them]

b. [the men expected to see them]

(8) a. John is too stubborn to talk to Bill

b. John is too stubborn to talk to

In (7a), the pronoun them is understood as referring to the antecedent the men, but not in the case of (7b). For Chomsky, facts of this sort, or the principles governing the interpretation of pronouns in such cases are '**known without relevant experience**'. Hence, the data highlights the complexity of the knowledge speakers have at their disposal. It suggests that speakers have innate knowledge of principles from which the facts follow.

Turning to the examples in (8), (8a) implies that the subject of talk to is understood to be John, not some 'arbitrary' person. On the other hand, (8b) means that John is so stubborn that some 'arbitrary' person will not talk to him - i.e. the null subject is understood as some arbitrary person and the null object is understood to be John. Again, Chomsky makes the point that this is known without training or relevant evidence. Given that the relevant facts are unavailable to the language learner, but rather follow from general principles, he



(ibid:8) further asks:

- (9) i. **How does every child know, unerringly, to interpret the clauses differently in the two cases?**
- ii. **And why does no pedagogic grammar have to draw the learner's attention to such facts?**

Given Innateness, the obvious answer is that the relevant principles of interpretation are innate - hence **"known without relevant experience"**. Chomsky (1986a:55) notes that **'there is good reason to believe that children learn language from positive evidence only'**. Positive evidence encompasses readily available sentences of the language. Thus, this is a specific example of the argument for an innate language faculty from the poverty of stimulus.

Illustrating now the second type of data, Chomsky (1972a:63) argues that the **'Structure Dependence Principle'** (which requires that all grammatical rules reflect the structure of the sentence they apply to) is part of UG. The child knows without evidence that linguistic processes are structure-dependent - hence this must be innate.

To explain what is meant by structure-dependence, Chomsky (1976:173) observes that on the basis of data like (10), children do not make mistakes in producing (10b) rather than (10c):

- (10) a. The man that was sleeping was in much pain
- b. **\*Was the man that sleeping in much pain?**
- c. Was the man that was sleeping in much pain?

In (10b), the first auxiliary verb has been fronted irrespective of its structural position, whereas in (10c) the main

clause auxiliary verb has been fronted. The fact that children never make errors like (10b) argues for a principle of structure-dependence belonging to UG, rather than being dependent on the availability of data.

Chomsky traces the linguistic information the child has at his/her disposal back to Universal Grammar. UG, on Chomsky's view, constitute the innate, biologically equipped Language Acquisition Device (LAD) the child is born with. In short, the child is born with innate knowledge -i.e. knowledge not acquired through experience - of universals. This is generally referred to, though not by Chomsky, as the **Innateness Hypothesis**:

- (11) UG may be regarded as a characterization of the genetically-determined language faculty. One may think of this faculty as "Language Acquisition Device", an innate component of the human mind that yields a particular language through interaction with presented experience, a device that converts experience into a system of knowledge attained: knowledge of one or another language

(Chomsky 1986a:3)

The principles of UG severely restrict the space in which natural languages may vary. These restrictions on rules and representations allow for limited parametric variation. The parameterized principles of UG are traced back to the child's initial state; they constitute boundary conditions within which the learner attempts to specify the grammar of the particular language to which he/she is exposed. The function of exposure to a particular linguistic setting is to set the parameters left open in UG: Does the language have Wh-movement in the

syntax (English) or only in LF (Chinese, Japanese)?; Is the language Head first (English) or Head last (Japanese)?; Can tensed sentences be overtly subjectless (Italian) or not (English)?

From this perspective, deep principles of UG can be expected to follow from a careful investigation of a given language. Chomsky (1976:118) illustrates the point along the following lines:

- (12) ... On the assumption of uniformity of language capacity across the species, if a general principle is confirmed empirically for a given language, and if furthermore, there is reason to believe that it is not learned (and surely not taught), then it is proper to postulate that the principle belongs to universal grammar, as part of "pre-existent" knowledge that makes learning possible

The crucial point is that any linguistic principle that cannot be plausibly learned on the grounds of direct evidence must belong to UG.

Having looked at the nature of linguistic knowledge, in the following section we will consider the prominence accorded to ECs from the Chomskyan perspective.

#### **1.1.2. The Importance of ECs within GB**

The special interest in ECs stems from the question of how the language learner can come to have information about them if they are, by definition, void of phonological features. That is, they provide a striking illustration of the poverty of stimulus argument.

In itself, the discovery that there is a typology of null elements is of overriding significance. As noted above, by

their very nature, empty elements are invisible or silent entities. Following Chomsky (1981:55, 1982:19), the study of ECs 'has proven to be an important probe into the nature of syntactic rules and representations, revealing many of their properties'. For him, the properties of empty elements are particularly important for language acquisition, since these properties cannot be determined by directly observed phenomena. The point is that there is no obvious avenue to learning them - presumably, they mirror the underlying aspects of the human mind. Chomsky (1982:19) suggests that:

- (13) ... it is reasonable to assume that they reflect deeper principles of UG, the biologically determined endowment that will be the primary concern for those interested more in the nature of the human mind than in the arrangement of the data in the environment

To illustrate the point, here is some data involving what is referred to in the literature as Parasitic Gaps (PGs) (Engdahl 1983):<sup>1</sup>

- (14) a. Which paper did you cite e without reading e  
b.\*This paper was cited e without reading e

In both, we have an EC following the verb cite, but only in (14a) can we have an EC following reading as well. This EC is said to be parasitic. Thus, the Wh-trace in (14a) licenses a PG, whereas the NP-trace in (14b) does not. Some Wh-traces do not either. Normally, a Wh-trace in subject position does not license a PG:

- (15) \*Which paper do you think e was cited e without reading e

Hence, the contrasting pairs in (14) together with (15)

highlight the complexity of and illustrate a very subtle generalization about ECs. It is unlikely that the properties of parasitic gaps are learnt. Thus, it is reasonable to suppose that they reflect some principles of UG.

### 1.1.3. What Forces ECs to Exist?

What follows is a discussion of the Projection Principle (PrPr) and the requirement that sentences (or predicates) have subjects (the Subject Principle). These principles require empty categories in various positions when there are no overt categories.

#### 1.1.3.1. The Projection Principle

A principle that plays a fundamental role in GB is the Projection Principle of Chomsky (1981:29), stated in (16):

- (16) **Representations at each syntactic level (i.e., LF, and D- and S-structure) are projected from the lexicon, in that they observe the subcategorization properties of lexical items**

A consequence of the PrPr is put informally by Chomsky (1986a:84) as follows. If a given element is 'understood' to appear in a particular position, then it must be reflected in syntactic representation, either in the form of a lexically realized category or in the form of an EC. Thus, if see is lexically treated as a transitive verb, it must have an object in a VP at every syntactic level. If, however, there is no overt element occupying this position, then an appropriate EC must be present.

Subcategorization properties are assumed to be predictable from 0-marking properties or thematic structure. Every comple

ment is assigned a  $\theta$ -role directly.  $\theta$ -marking also includes subjects, to which  $\theta$ -roles are assigned indirectly. Chomsky (1981:39,1982:8) makes the point that  $\theta$ -marking entails subcategorization as follows:

- (17) ... all syntactic representations are projections of the thematic structure (hence the subcategorization) indicated in the lexicon, including both direct and indirect  $\theta$ -marking

This is a reformulation of (16) which affects subjects as well as complements, as we will discuss shortly.

A position to which a  $\theta$ -role is assigned is often referred to as a  $\theta$ -position. Conversely, a position to which no  $\theta$ -role is assigned is often called a  $\theta'$ -position. To illustrate this, some of the  $\theta$ -positions are the ones bracketed in the following examples (Chomsky 1981:36):<sup>2</sup>

- (18) a. [They] persuaded [John] [that [he] should leave]  
b. [We] put [the books] [on [the table]]

The expressions which are assigned  $\theta$ -roles in the examples above are known as arguments. Expressions such as idiom chunks, dummy elements like it, there, which are not assigned  $\theta$ -roles, are not arguments.

By the PrPr, then, a verb like hit or see must always take an NP complement at every level, be it phonetically realised or empty - thus insuring that the presence of the trace results from NP-movement or WH-movement from object position (e.g., in questions and passive sentences). Consider the following:

- (19) a. John saw Mary  
       b. [<sub>NP</sub> e] was seen Mary (by John)  
       c. Mary<sub>i</sub> was seen e<sub>i</sub> (by John)

In (19a), the verb saw subcategorizes for an NP complement to which it assigns a  $\theta$ -role. When the verb appears in its past participle form seen as in (19b), the subcategorization frame and the  $\theta$ -assignment properties are assumed not to have changed. Hence, seen must have an object at D-structure. If we assume that (19b) is the D-structure from which (19c) is derived by **Move  $\alpha$** , we now have an S-structure consisting of Mary, and its coindexed trace. It is the PrPr which requires the trace to appear.

Having looked at an example involving NP-movement, let's now illustrate with Wh-movement:

- (20) a. What did you hit?  
       b. You did [<sub>VP</sub> hit what]  
       c. What<sub>i</sub> did you hit e<sub>i</sub> ?

Again, (20b) is the D-structure representation from which (20c) is derived. The position occupied by the trace is a  $\theta$ -marked position, whereas the position of the antecedent what is not. Again, a trace is left behind to satisfy the PrPr.

The PrPr also requires certain subject traces. Specifically, it requires traces in thematic subject positions. When an NP is moved out of a thematic subject position, a trace must be left behind since otherwise there will be a violation of the PrPr. Consider the following example:

- (21) John<sub>i</sub> seems [<sub>S</sub> e<sub>i</sub> to be laughing]

Since seem does not assign a thematic role to its subject position, John can move from its D-structure position as the subject of the bracketed clause to the matrix subject position, bearing in mind that movement is only possible to non-thematic positions. The EC in the bracketed clause is assigned a  $\theta$ -role by the verb laugh - hence required to appear by the PrPr.

Having considered an example involving NP-movement from subject position in (21), let's consider an example involving Wh-movement from subject position:

(22) Who do you think [<sub>s</sub> e<sub>i</sub> was laughing]?

Here, the EC in the bracketed clause receives a  $\theta$ -role from the verb laugh. Again, the PrPr requires it to exist.

The implications of the PrPr can be illustrated further by saying a bit more about PRO. PRO, as we shall see later in this Chapter, is analyzed as a pronominal anaphor:

(23) a. They wondered [whether they should go home]

b. They wondered [whether to go home]

The bracketed complement clause in (23a) contains a lexical subject - i.e. the pronominal NP they. On the face of it, however, the bracketed complement clause in (23b) would appear to be subjectless. But, if we maintain the reformulated PrPr in (17), it follows that the bracketed clause concerned cannot be subjectless, but rather must contain an empty subject of some sort - i.e. an 'understood' subject that is void of all lexical content. Since this subject position is thematic, the PrPr requires it to be filled. Thus, it is assumed that the main difference between (23a) and (23b) is that in the former the



bracketed clause contains an overt NP subject - i.e. they, whereas in the latter it has an empty NP subject -i.e. PRO. (24a-b) will have the following syntactic representations:

- (24) a.They wondered [<sub>CP</sub> whether [<sub>IP</sub> they should go home]]  
b.They wondered [<sub>CP</sub> whether [<sub>IP</sub> PRO to go home]]

In (24a), the subject of the bracketed IP is the overt NP they, but a null NP PRO in (24b). Thus, the claim that clauses which lack fully realized subjects have covert null subjects is a direct result of the requirement imposed by the PrPr that thematic subjects be filled - hence requires thematic subjects to appear.

To complete the picture, Jaeggli & Safir (1989:19) use Spanish data involving a thematic null subject pro (missing element in Null-Subject Languages (NSLs)). pro is referred to as a 'pure' pronominal:

- (25) El/Ø dijo que Ø mato al perro  
he said that killed the dog  
'He said that he/she killed the dog'

Again, being thematic positions, the PrPr requires these ECs to appear as well.

### 1.1.3.2. The Subject Principle

If we accept the assumption made with respect to (21) that some predicates have non-thematic subjects, then the PrPr will not require these subjects to appear at all syntactic levels. As we have seen, the PrPr requires that  $\theta$ -marked positions be maintained at all syntactic levels, making no mention of non-thematic elements (Chomsky 1986a:116). This would suggest, as

Radford (1988c) notes, that nothing would have the power to prevent the possibility that a clause might have a non-thematic subject at one level, but be subjectless at another. To preclude this, Chomsky (1981:27) proposes a 'structural requirement' by means of which '**clauses must have subjects**'. For Chomsky (1982:10, 1986a:116), the PrPr in conjunction with the 'requirement that clauses have subjects' form what is called the extended projection principle.

A rather different position is taken by Rothstein (1983). (cited by Radford (1988c:2) and also by Chomsky (1986a:116)), she (ibid:130) argues that the requirement for clauses to have syntactic subjects at all stems from what she terms the **Predication Principle -i.e. 'all non-argument maximal projections [= all predicates] require syntactic subjects'**. Radford (ibid) further sums up the differences holding between the two formulations of the principle as follows:

(26) **SUBJECT PRINCIPLE**

- (i) **A clause is licensed only if it has a syntactic subject (Chomsky)**
- (ii) **A predicate is licensed only if it has a syntactic subject (Rothstein)**

Contrasts such as the ones given below lend support to principle (26):

- (27) a. It snowed all day yesterday  
b. \*snowed all day yesterday

- (28) a. There is a fly in your soup  
b. \*is a fly in your soup

With the Subject Principle in mind, it follows that the

clauses in (27a) and (28a) are required to contain the underlined syntactic subjects. As a consequence, (27b) and (28b) are ruled out as ungrammatical, since they are subjectless. The assumption that subjects are syntactically required stems from the fact that the underlined subjects are 'pleonastic' or dummy pronouns - it/there. These are treated in GB as lacking semantic content. In other words, they occupy positions to which no  $\theta$ -roles are assigned (they are not NP arguments). It seems, then, that the subject position in an English finite clause is always filled even if non-thematic.

Thus, the subject principle takes care of cases where no  $\theta$ -roles are assigned to subjects. Consider the following set of examples:

(29) a. John seems e to be sleeping

b. It seems e to be raining

(30) a. Who do you think e murdered Bill?

b. Who do you think e was murdered e by Bill?

(31) John hoped e to be liked e

(32) e parece que Juan esta enfermo

seems that John is sick

'(It) seems that John is sick'

(Jaeggli & Safir 1989:12)

In (29a), the EC e is assigned a  $\theta$ -role by the verb sleep hence the PrPr requires it to appear, whereas the EC in (29b) is not  $\theta$ -marked by the verb rain - in this case, the subject principle requires it to exist. Likewise, the EC in (30a) is  $\theta$ -marked by the verb murder. Again, it is the PrPr tha

requires it to occupy this position. In (30b), the EC immediately following the passive verb is required by the PrPr, since it is  $\theta$ -marked; whereas the EC occupying the subject position in the subordinate clause is not  $\theta$ -marked - hence the subject principle requires its existence. We have much the same situation in (31), where the EC following the verb like is  $\theta$ -marked - thus the PrPr ensures its presence, whereas the EC occupying the subject position of the infinitival clause receives no  $\theta$ -marking - hence it has to appear by virtue of the subject principle. Finally, the EC occupying the subject position of the tensed clause in (32) receives no  $\theta$ -marking - hence it has to appear via the subject principle.

#### 1.1.4. A Typology of ECs

Given the necessity of ECs, we may now consider how ECs should be classified (assuming that they are not all the same). The typology of ECs in the chart below has been represented as symmetrically divided by the referential properties [+/- anaphoric] and [+/- pronominal], where, as we shall see, the behaviour of each empty category is determined in terms of how it is treated by the Binding Theory:

(33)

	<b>+pro</b>	<b>-pro</b>
<b>+an</b>	<b>PRO</b>	<b>NP-trace</b>
<b>-an</b>	<b>pro</b>	<b>WH-trace</b>

The features employed in (33) distinguish four types of empty category: NP-trace, WH-trace, PRO and pro. The first is anaphoric but not pronominal, the second neither anaphoric nor pronominal, the third anaphoric and pronominal -i.e. a pronominal anaphor, and the fourth pronominal but not anaphoric. We will return to this question. The relevant properties of the empty elements concerned will be dealt with in depth when discussing the modular classification of both overt and empty categories in GB.

## **1.2. Some Aspects of GB Theory**

### **1.2.0. Introduction**

In this section, we will be mainly concerned with outlining two basic aspects of the GB theory: (i) **the binding theory**, and (ii) **the Empty Category Principle**. Under the binding theory, we will be looking at how nominal expressions: anaphors including reflexives, pronominals, and R-expressions are handled with respect to the binding theory proposed by Chomsky (1981). This analysis will involve dealing with both the overt and empty members of each of the categories. Concerning the ECP, however, we will be mostly interested in the way the notion of **Proper Government** is defined in the light of two main positions: (a) Chomsky's Lectures (1981) and (b) Chomsky's Barriers (1986b)

### **1.2.1. Standard Binding Theory**

#### **1.2.1.1. Classification of Overt & Empty Categories**

In the GB framework assumed in Chomsky (1981), it is claimed that the nominal expressions mentioned above fall into three

main categories. This can be illustrated in the table in (35), which takes into account the distribution of the overt and empty members associated with each of the categories involved:

(34)

CATEGORY	OVERT	EMPTY
Anaphors	Reflexives & Reciprocals	NP-trace PRO
Pronominals	Ordinary Pronouns	PRO pro
R-expressions	Names & Definite Descriptions	Wh-trace

Having tabulated the way nominal expressions are classified, the point to stress, with regard to the table given above, is that PRO is the element that falls into two classes - i.e. anaphors & pronominals.

#### 1.2.1.2. Conditions of the Binding Theory

The standard GB position assumes that the binding theory is crucially concerned with binding by A-positions. To explain what is meant by A-binding and A'-binding, consider these examples:

(35) a. John<sub>i</sub> seems [ e<sub>i</sub> to do it ]]

b. who<sub>i</sub> [ e<sub>i</sub> did it ]]?

(35a) demonstrates A-binding, noting that the movement concerned is to an A-position. A-positions include IP-specifier (subject), object of a verb, and object of a preposition. However, (35b) illustrates A'-binding. An A'-position is the CP-specifier position. This is the main A'-position but not necessarily the only one.

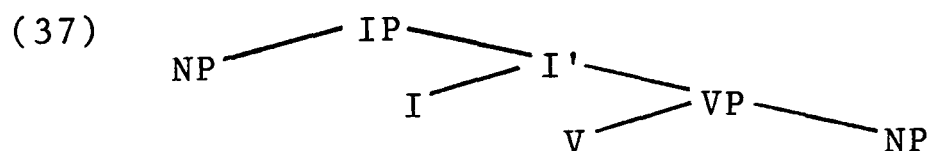
let us start by looking at how anaphors are treated under the binding theory. Consider reflexives such as himself. Chomsky (1981) claims that anaphors obey the following binding condition:

**A. An anaphor is A-bound in its governing category**

**Bound** means coindexed with a c-commanding NP in an A-position - i.e. subject, object, and object of a preposition. In other words, it means A-bound. Following Reinhart (1976), Borsley (1991:42) presents the definition of **C-COMMAND** in a somewhat simplified way:

- (36) **A node X c-commands a node Y iff neither dominates the other and the first branching node (i.e. node with more than one daughter) above X dominates Y**

(36) does not allow a node to c-command what it dominates. What this suggests is that the subject c-commands the object, but that the converse does not hold. We can illustrate with the following tree:



The first NP in (37) c-commands the second given that the first branching node above NP is the IP, which in turn dominates the second NP. The reverse does not hold. That is, the second NP does not c-command the first since the first branching node above the second NP is the VP, which does not dominate the first NP, thus preventing an object from c-commanding its subject.

At this point, we need to say something about government. But instead of going into the labyrinth of the wide range of definitions proposed in the literature, what concerns us most is what governs what. We can point out those general properties all the definitions of government exhibit:

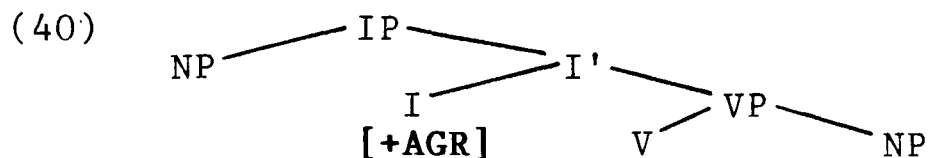
- (38) i. A head governs its complements
- ii. A head governs the subject of an Exceptional clause or Small clause complement
- iii. The AGR(eement) features on a finite INFL govern the associated subject

To illustrate what these mean, consider the following examples:

- (39) a. John likes Mary
- b. John talked to Mary
- c. John believes [<sub>S</sub> Mary to be a genius]
- d. John considers [<sub>SC</sub> Mary a beauty]
- e. John believes [<sub>S'</sub> that [<sub>S</sub> he is clever]]

Taking (38i), the verb in (39a) governs its object, and so does the preposition in (39b). On (38ii), the subject of the Exceptional clause in (39c) and that of the Small clause in (39d) can be governed from outside -i.e. by believes and considers, respectively. Finally, considering (38iii), the subject in (39e) is not governed by the preceding verb, but rather by the agreement features of the following finite INFL. This suggests that a finite INFL, which gets combined with the verb on the surface, governs the subject of a 'bare' IP (S) complement, not the subject of a CP (S') complement - as is the case in (39e). The following tree illustrates this point:





Turning now to what is meant by '**governing category**', Chomsky (1981:188) defines the notion concerned along the following lines:

- (41)  $\alpha$  is the governing category for B if and only if  $\alpha$  is the minimal category containing B and a governor of B, where  $\alpha$  = NP or S

The point to stress here is that for NPs in most positions, the governing category is the minimal NP or S that contains them. We are ignoring here cases where the governing category is an NP. The NP in subject position, if finite, may be governed by I, whereas if nonfinite, may be governed from outside either by a verb or an adjective.

We can now illustrate the effects of Condition A with the following data:

- (42) a. John<sub>i</sub> likes himself<sub>i</sub>  
 b. John<sub>i</sub> believes [<sub>S</sub> himself<sub>i</sub> to be a genius]  
 c. \*John<sub>i</sub> believes [<sub>S</sub> Mary to like himself<sub>i</sub>]  
 d. \*John<sub>i</sub> believes [<sub>S</sub> that [<sub>S</sub> himself<sub>i</sub> is a genius]]

The reflexive in (42a) is governed by the verb likes since, as noted earlier, a head governs its complements; the governing category being the single S containing the governor. The reflexive is c-commanded by John and coindexed with it, hence bound by it, conforming to condition A. The anaphor in (42b) is governed by the preceding verb, given, as we have seen, that a head governs the subject of an exceptional clause. The

governing category of himself in (42b) is the matrix S, given that the verb concerned is in the main S. Hence, the anaphor is bound in its governing category, observing the requirements of condition A.

Now, we can consider (42c). The reflexive is governed by the preceding verb since a head governs its complements. (42c) is ungrammatical because the reflexive is bound, but not within its governing category - i.e. the subordinate S, given that the verb is in the embedded clause. Hence, (42c) is a violation of condition A.

Finally, we can consider (42d). The reflexive in this example is not governed by the preceding verb since we have an S' complement, not a 'bare' S complement. It is governed instead by the agreement features of the following INFL, maintaining the claim that a finite INFL governs its subject. The governing category for the reflexive is the embedded S, given that the verb is in the embedded clause. Like (42c), the reflexive is bound, but not in its governing category, violating condition A.

Consider next the case of the empty anaphor NP-trace. Notice that the examples given below are as similar as possible to the reflexive examples in (42):

- (43) a. John<sub>i</sub> was murdered e<sub>i</sub>  
b. John<sub>i</sub> was believed [<sub>S</sub> e<sub>i</sub> to be a genius]  
c.\*John<sub>i</sub> was believed [<sub>S</sub> Mary to like e<sub>i</sub>]  
d.\*John<sub>i</sub> was believed [<sub>S</sub> that [<sub>S</sub> e<sub>i</sub> is a genius]]

As we have seen, all these examples involve what is normally

referred to as NP-movement. The traces involved are NP-traces and count as anaphors within GB. The NP-trace in (43a) is governed by murdered. Its governing category is the single S containing the governor. Hence, it is bound in its governing category, as condition A requires. In (43b), the NP-trace is governed by believed; the governing category being the matrix S containing the governor. Thus, it is bound in its governing category, obeying condition A. The NP-trace in (43c) is governed by like. Its governing category is the subordinate S containing the governor - hence, it is not bound in its governing category, violating the requirements of condition A. Finally, the NP-trace in (43d) is governed by the agreement features on the following finite INFL. The trace in subject position is contained within an S' complement; the governing category being the the embedded S containing the governor - hence, the NP-trace is not bound within its governing category, thus violating condition A.

Let's now turn to overt pronominals - i.e. ordinary pronouns. They can fulfil either of two functions in English and other languages: (i) they can either take their reference from some other NP - i.e. **ANAPHORIC USE**, or (ii) they can refer independently - i.e. **DEICTIC USE**, as demonstrated in the following example:

(44) Bill<sub>i</sub> thinks he<sub>i/j</sub> is rich

Thus, the overt pronoun in (44) can either refer to Bill or to someone else. What this implies is that overt pronouns, unlike anaphors, do not have to have an antecedent. According to

Chomsky (1981), pronominals observe the following binding condition:

**B. A pronominal is A-free in its governing category**

What is meant by **free** is not bound -i.e. not coindexed with a c-commanding category in an A-position. What this suggests is that overt pronouns never have an antecedent within their clauses or NPs.

- (45) a. John<sub>i</sub> expects [<sub>S</sub> Mary to invite him<sub>i</sub>]  
b. John<sub>i</sub> believes [<sub>S</sub> that [<sub>S</sub> he<sub>i</sub> is lucky]]  
c.\*John<sub>i</sub> likes him<sub>i</sub>  
d.\*John<sub>i</sub> expects [<sub>S</sub> him<sub>i</sub> to win]

Him in (45a) is governed by invite. Its governing category is the embedded S containing the governor - hence it is free in its governing category, as condition B requires. In (45b), he is governed by the agreement features of INFL since the agreement features of INFL govern the subject. As a consequence, its governing category is the embedded S containing the governor - thus it is free within its governing category, as condition B strictly requires. (45c) is ruled out as ungrammatical because him is governed by likes given that a head governs its complements; the governing category being the single S containing the governor - hence him is not free within its governing category, violating the requirements of condition B. Finally, Him in (45d) is governed by the preceding verb expects since a head governs the subject of an exceptional clause complement; the governing category being the matrix S containing the governor - hence the pronominal, like (45c), is

not free in its governing category, again giving a violation of condition B.

We can now turn to consider empty pronominals, looking first at 'little' pro, since unlike 'big' PRO, it is a 'pure' pronominal, as noted earlier.

It has been pointed out that Null Subject Languages differ from Non-Null Subject Languages in allowing the subject position of finite clauses to remain empty. Perlmutter (1971:107) claims that languages such as Italian, Spanish, Greek etc., permit the pronominal subject of tensed clauses to remain null.

Our primary concern here bears on the basic observation that null subject languages involve missing subjects (an issue we will deal with in Chapter Three). Presenting GB ideas, a null-subject language like Italian allows the empty element found in subject position to be present, as illustrated in the following example, taken from Riemsdijk & Williams (1986:300):

- (46) EC parlano di linguistica  
they-speak of linguistics  
'they talk about linguistics'

Chomsky (1982), as we have seen, refers to EC in (46) as pro. For him, EC cannot be anaphoric or it will violate condition A of the binding theory. That is, it does not have to be bound in its governing category. Consider the following Syrian example:

- (47) Kamal<sub>i</sub> biḏan [S pro<sub>i</sub> biḥab Layla]  
Kamal think3SGmpres like3SGmpres Layla

The pronominal in (47) is not an anaphor; it is A-bound outside

its governing category -i.e. the subordinate S - violating condition A. It is not an R-expression either because it is not free altogether, as condition C requires.

Unlike PRO, as we shall see later, pro can be governed, in line with Chomsky's (1981:241) assumption that AGR, if overt, permits null-subjects. If so, pro will satisfy only condition B of the binding theory. Moreover, Aoun (1985:101), presenting Chomsky's (1982) ideas, claims that the only crucial requirement regarding pro is that it must be 'identified', providing pro is either 'phonetically realised' or coindexed with a 'rich enough' inflection. For Aoun, the motivation behind the 'identification strategy' is that it is related to the 'recoverability of deletion'. Since null-subject languages display 'richer' verbal morphology than non-null-subject languages, this entails the need for pro to be identified - i.e. among the European languages, we can have pro only with fairly complex verbal morphology to identify it.

Let's proceed to consider another example of pronominals lacking a 'phonetic matrix'. Chomsky regards PRO as a pronominal anaphor. But PRO is problematic, as noted earlier, in that it is subject to contradictory requirements:

- (48) a. John<sub>i</sub> tried [<sub>S</sub> [<sub>S</sub> PRO<sub>i</sub> to swim]]  
b. [<sub>S</sub> [<sub>S</sub> PRO to succeed]] would be great  
c. John<sub>i</sub> wondered [<sub>S</sub> whether [<sub>S</sub> PRO<sub>i</sub> to go home]]

In (48a), PRO cannot be interpreted freely. In (48b), however, PRO is free and cannot be interpreted as an anaphor since it does not have an antecedent. PRO, for standard GB, is subject

to both the binding conditions A and B. Moreover, (48c) supports the view that PRO subject infinitives are S's (CPs), and not just Ss (IPs). What we have in (49c) is a nonfinite clause with a PRO subject and overt complementiser. But the question we should ask is how an element can be both free and bound in its governing category. It cannot, but this is no problem if it has no governing category, and it will not if it is ungoverned. Chomsky (1986a:183) formulates the crucial property of PRO as follows:

(49) PRO is ungoverned

This is a consequence of assuming that PRO is both an anaphor and a pronominal - hence the term 'PRO Theorem'.

Given (49), the only available position for PRO to occupy is the subject position of infinitival S'. This is the main position, but it may not be the only position, in which a phonologically null element cannot have a governing category. Consequently, PRO cannot be a complement or the subject of a finite clause or an exceptional clause or small clause, because these positions are governed. The ungrammaticality of the following illustrate the distribution of PRO as a pronominal anaphor:

(50) a.\*John loves PRO

b.\*John considers [<sub>S</sub> that [<sub>S</sub> PRO is a fool]]

c.\*John considers [<sub>S</sub> PRO to be a fool]

d.\*John considers [<sub>S</sub> PRO a fool]

We have briefly discussed conditions A and B of the binding theory. Let's turn now to principle C to see the binding

requirement it imposes. Chomsky (1981:188) asserts that R-expressions observe the following binding condition:

**C. An R-expression is A-free**

What principle C states is that R-expressions must not be bound by any c-commanding category in an A-position in the sentence containing them. Consider the following:

(51) a.  $He_i$  thinks [<sub>S</sub> she likes  $Bill_j$ ]

b. \* $He_i$  shot  $Bill_i$

Bill in (51a) is not coindexed with He - hence it is free, as required by condition C. In (51b), however, Bill is coindexed with He - hence bound by it. Thus, Bill is not free, violating condition C.

**What about Wh-traces?** A Wh-trace is neither anaphoric nor pronominal. In other words, it is an R-expression - i.e. it cannot be coindexed with a c-commanding category in an A position. As noted earlier, the C-specifier position is an A'-position. Take the examples in (52):

(52) a. \* $who_i$  did [<sub>S</sub>  $he_i$  see  $e_i$ ]?

b. \* $who_i$  did [<sub>S</sub>  $he_i$  think [<sub>S'</sub> that [<sub>S</sub> I saw  $e_i$ ]]]?

The reason (52a-b) are ruled out is that the trace of Wh-movement is bound by the subject A-position, containing the pronoun he. Thus, the Wh-trace is A-bound, violating principle C of the binding theory. Consider now the following grammatical example:

(53)  $who_i$  [<sub>S</sub>  $e_i$  thinks [<sub>S'</sub> that [<sub>S</sub>  $he_i$  will resign]]]?

In (53), the subject trace is A'-bound by who in the C-specifier position -i.e. perfectly A-free. The pronoun he is A-



bound by the subject A-position. Despite the fact that the empty category A-binds the pronoun, the pronoun is free in its governing category.

### **1.2.3. The Empty Category Principle**

Having looked at how both overt and non-overt categories behave under the Binding Theory, our next step will involve presenting the standardly accepted formulation of the Empty Category Principle, confining our discussion to the way the notion of '**Proper Government**' is defined in Lectures (1981), and Barriers (1986b).

Although there are various different positions on the ECP (cf. Lasnik & Saito (1984)), what we will be dealing with is the standard GB position.

What the two analyses above have in common is that they agree on the formulation of the ECP. But, as the discussion progresses, we will discover that they differ on what constitutes 'proper government'. The two analyses concerned define the ECP as follows:

(54) **A trace must be properly governed**

Having presented the formulation of the ECP, let us concentrate on how the notion of proper government is defined.

#### **1.2.3.1. Proper Government**

##### **A. The Lectures-Position (1981)**

Starting with the Lectures-position on proper government, we can formulate the definition of proper government as follows:

- (55)  $\alpha$  is properly governed if and only if  $\alpha$  is governed by an  $X^0$  other than AGR or a coindexed category

The definition in (55) states that  $\alpha$  is properly governed if and only if  $\alpha$  is governed by an  $X^0$  - i.e. N, V, A, or P, not by AGR or a coindexed category. It follows fairly straightforwardly that, under the Lectures-approach, we are distinguishing between two possibilities: (i) proper government by an  $X^0$  - i.e. **LEXICAL GOVERNMENT**, preventing the agreement element in INFL from functioning as a proper governor; and (ii) proper government by a co-indexed category -i.e. **ANTECEDENT GOVERNMENT**.

#### i. Lexical Government

To explain how proper government is maintained via lexical government, consider the following set of examples:

- (56) a.  $\text{who}_i$  did John see  $e_i$ ?  
b.  $\text{Mary}_i$  was deceived  $e_i$  by John  
c.  $\text{who}_i$  did Fred talk to  $e_i$ ?  
d.  $\text{who}_i$  did John consider [<sub>S</sub>  $e_i$  to be guilty]]?  
e.  $\text{who}_i$  did John consider [<sub>SC</sub>  $e_i$  a genius]]?

In (56a-b), the trace is governed by the immediately preceding verb, hence properly governed. By the same token, prepositions in English are assumed to act as proper governors, although in many languages they are not. In (56c), then, the trace is properly governed by the immediately preceding preposition. More important, despite the fact that the traces in (56a-c) are governed by sisters -i.e. see, deceived, and to respectively, it is assumed that government is a broader notion than sisterhood, as noted earlier. What we have in (56d-e) is a verb

governing the subject of the following exceptional or small clause complement.

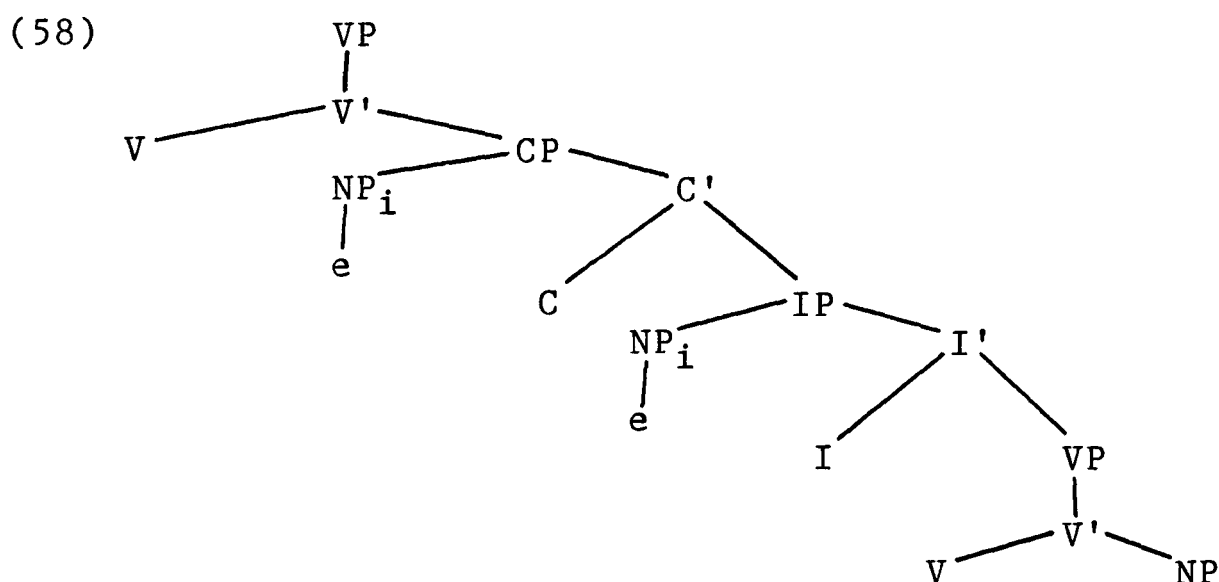
## ii. Antecedent Government

Concerning antecedent government, it allows a trace in the CP-specifier position or an overt Wh-NP to properly govern the subject position of S, as illustrated in the following examples:

(57) a. [ who<sub>i</sub> ] did you say [ S' [ e<sub>i</sub> ] [ S [ e<sub>i</sub> ] robbed the bank ] ]?

b. \*[ who<sub>i</sub> ] did you say [ S' [ e<sub>i</sub> ] that [ S [ e<sub>i</sub> ] robbed the bank ] ]?

To illustrate the mechanism under which this can be achieved, consider the following structure, corresponding to (57a):



Since antecedent government requires that a trace be properly governed by a coindexed category, each case in (57a-b) contains two traces. In (57a), we are concerned with the trace in subject position. What allows the trace in subject position is that it is properly governed by the immediately preceding trace. However, (57b) is ruled out on the basis that the

presence of the intervening complementiser that blocks antecedent government. Therefore, (57b) is an ECP violation:

#### B. The Barriers-Position (1986b)

Having looked at the Lectures-approach to proper government, we now need to see what the Barriers-position on proper government is. The Barriers-definition of the ECP is formulated in the same way as in Lectures -i.e. requiring that a trace be properly governed, but proper government is defined differently. Chomsky (1986b:17) defines proper government as follows:

- (59)  $\alpha$  properly governs B iff  $\alpha$   $\theta$ -governs or  
antecedent-governs B

##### i. $\theta$ -Government & Antecedent Government

What distinguishes the definition in (59) from that of the Lectures is that lexical government is replaced by  $\theta$ -government. Thus, on the Barriers-position, we have two cases of proper government: (i)  $\theta$ -GOVERNMENT; (ii) ANTECEDENT GOVERNMENT. Chomsky assumes that a complement is  $\theta$ -governed by its 'head', whereas a subject can only be antecedent-governed in order to meet the requirements of proper government. The two versions of the definition of proper government treat subject position in exceptional clauses and small clauses differently. This position is lexically governed (by the preceding verb), but not  $\theta$ -governed. Chomsky (1986b:19) defines  $\theta$ -government as follows:

- (60)  $\alpha$   $\theta$ -governs B iff  $\alpha$  is a zero-level category  
that  $\theta$ -marks B, and  $\alpha$ , B are sisters

(60) states that  $X^0$  categories assign  $\theta$ -roles to their complements. But, as we said earlier,  $\theta$ -government is a

narrower notion than lexical government - i.e. a lexical category can govern some element it does not assign a  $\theta$ -role to. Consider the following examples:

- (61) a. John<sub>i</sub> seems [<sub>S</sub> e<sub>i</sub> to be innocent]]  
 b. Mary<sub>i</sub> was considered [<sub>SC</sub> e<sub>i</sub> a genius]]

Both these examples only involve lexical government. The traces involved are properly governed by their matrix predicates - without being  $\theta$ -governed by them. Unlike the examples in (61), (56a-c) involve both lexical and  $\theta$ -government.

Furthermore, instead of (56d-e) on the Lectures-position, on the Barriers-position, we have (62a-b):

- (62) a. who<sub>i</sub> did Mary [<sub>VP</sub> e<sub>i</sub> [<sub>VP</sub> consider [<sub>S</sub> e<sub>i</sub> to be a thief]]]]?  
 b. who<sub>i</sub> did Mary [<sub>VP</sub> e<sub>i</sub> [<sub>VP</sub> consider [<sub>SC</sub> e<sub>i</sub> a thief]]]]?

In (62a-b), we have two instances of Wh-movement operating in two distinct ways: (i) **adjunction** of Wh-word to VP; and (ii) **substitution** -i.e. movement of Wh-word to the CP-specifier position. The innovation in the Barriers framework is that VP-adjunction is necessary to allow antecedent government in various places. It should be pointed out in this connection that the wh-words are too far away from the traces in subject position to act as antecedent governors. What is interesting is that we have traces adjoined to VP. **But how does this help us?** The intermediate traces act as antecedent governors of the traces in subject positions.<sup>3</sup>

#### 1.2.4. Summary

In 1.1.1. of this chapter, we were concerned with highlighting grammatical theory within the Chomskyan perspective. We began by showing the importance of ECs in GB. Then, we presented the principles that require the presence of ECs in certain situations. In 1.2.1., we examined the distribution of overt and empty categories with respect to the conditions of the binding theory. We also considered the ECP, and how the notion of proper government was defined in both Lectures (1981) and Barriers (1986b).

## NOTES TO CHAPTER ONE

1. For textbook discussions of this phenomenon, see Lasnik and Uriagereka (1988:72-85) and Haegeman (1991, 8.5.)

2. Jackendoff (1987) criticizes the treatment of  $\theta$ -roles in GB. With respect to the  $\theta$ -Criterion, he illustrates both with examples where a single NP has multiple  $\theta$ -roles, and where multiple NPs allow a single  $\theta$ -role. His account is defined in terms of semantic predicate-argument relationships.

3. Aoun (1985:27) attempts to replace the ECP by a generalized binding principle A:

### **Generalized Binding Principle A**

**An X-anaphor must be X-bound in its governing category** where X means A or A'. He suggests that a Wh-trace must be treated as an anaphor 'bound to an A'-position'. Aoun's basic idea is that we have to combine those bits of the theory under the notion of local binding - i.e. there is no disjunctive ECP.

## CHAPTER TWO

### CLAUSE STRUCTURE

#### 2.0. Introduction

The aim of this chapter is to consider how Syrian VSO sentences and Verbless Clauses (VCs) should be analyzed within a GB framework. The analysis of VSO sentences involves looking first at how the analysis of various phenomena in English SVO sentences requires a VP node, and then looking at how the same phenomena occur in Syrian VSO sentences, perhaps necessitating the assumption that they also involve a VP node. We will be particularly concerned with Binding Theory data which essentially involves anaphora and disjoint reference. As noted in chapter One, anaphors are elements that must select their reference from something else in the sentence - hence the coreferentiality. However, items are said to be disjoint in reference if not designated exactly the same index - hence the noncoreferentiality.

This chapter is organized as follows. In section 2.1.1., we show how binding theory requires a constituent containing verb and object, but not subject. In section 2.1.2., we consider two analyses of Syrian - namely the **Flat Struture Analysis** (FSA) and the **Verb-Fronting Analysis** (VFA). In section 2.1.3., we present the full range of Syrian VSO data, showing that it is like English SVO data, and concluding that it can only be explained if we assume a VP and hence a verb-fronting process. In section 2.2., we consider precisely what form the verb-



fronting analysis should take, reviewing Chomsky's (1986b) Barriers-analysis, the 'Adjunction' analysis, and Fassi Fehri's (1987) approach. Finally, in section 2.3., then, we have a closer look at Syrian verbless clauses. In 2.3.1., we discuss Small Clauses (SCs) in English, showing how they differ from ordinary clauses. We introduce verbless clauses in 2.3.2., highlighting their distribution, and providing an analysis. Then, in 2.3.4., we present some further data involving pronominal subjects, providing a further analysis. We conclude in 2.3.6. with some complications

## **2.1. The Analysis of VSO Sentences**

### **2.1.1. Binding Theory Facts**

The GB approach to a variety of phenomena requires a VP node - i.e. it is crucial in GB that the verb and its object form a constituent. Let us see what this means in practice by demonstrating how anaphors, pronominals, and R-expressions in SVO sentences are handled under the Binding Theory. Consider first anaphors such as himself. As sketched in Chapter One, Chomsky (1981) assumes anaphors to be subject to the following binding principle:

#### **A. An anaphor is A-bound in its governing category**

Bound, as we have seen, means coindexed with a c-commanding NP in an A-position.

As we have seen in 1.2.1.2., the notion of **C-command** plays a significant role in capturing antecedence relations. Being central to what follows, the point to stress again is that the object does not c-command the subject (and hence cannot bind

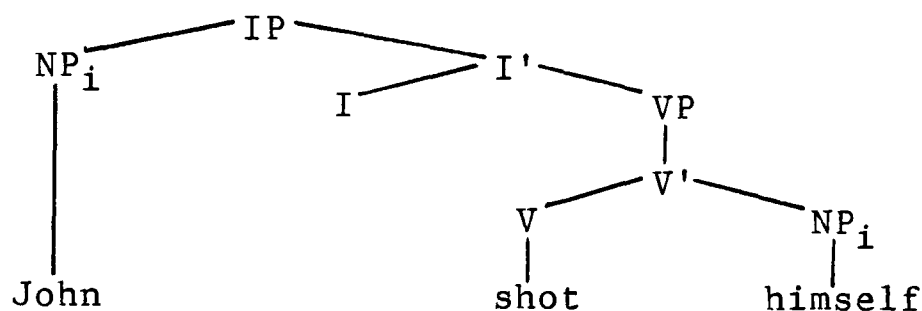
it) because of the VP.

Let us return now to condition A. Take the examples in (1), and their corresponding structures in (2),

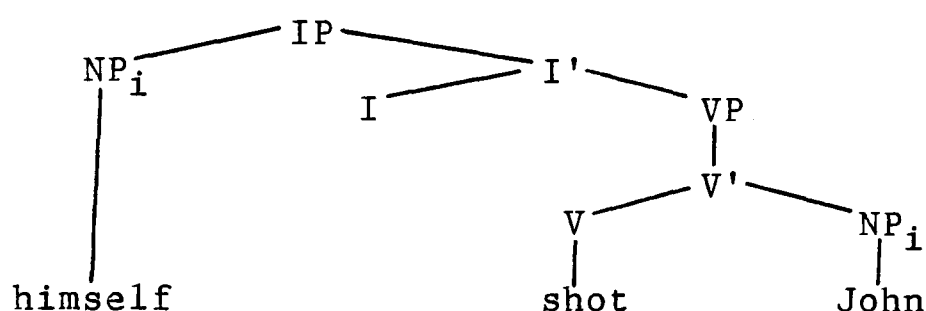
(1) a. John<sub>i</sub> shot himself<sub>i</sub>

b. \*himself<sub>i</sub> shot John<sub>i</sub>

(2) a.



b.



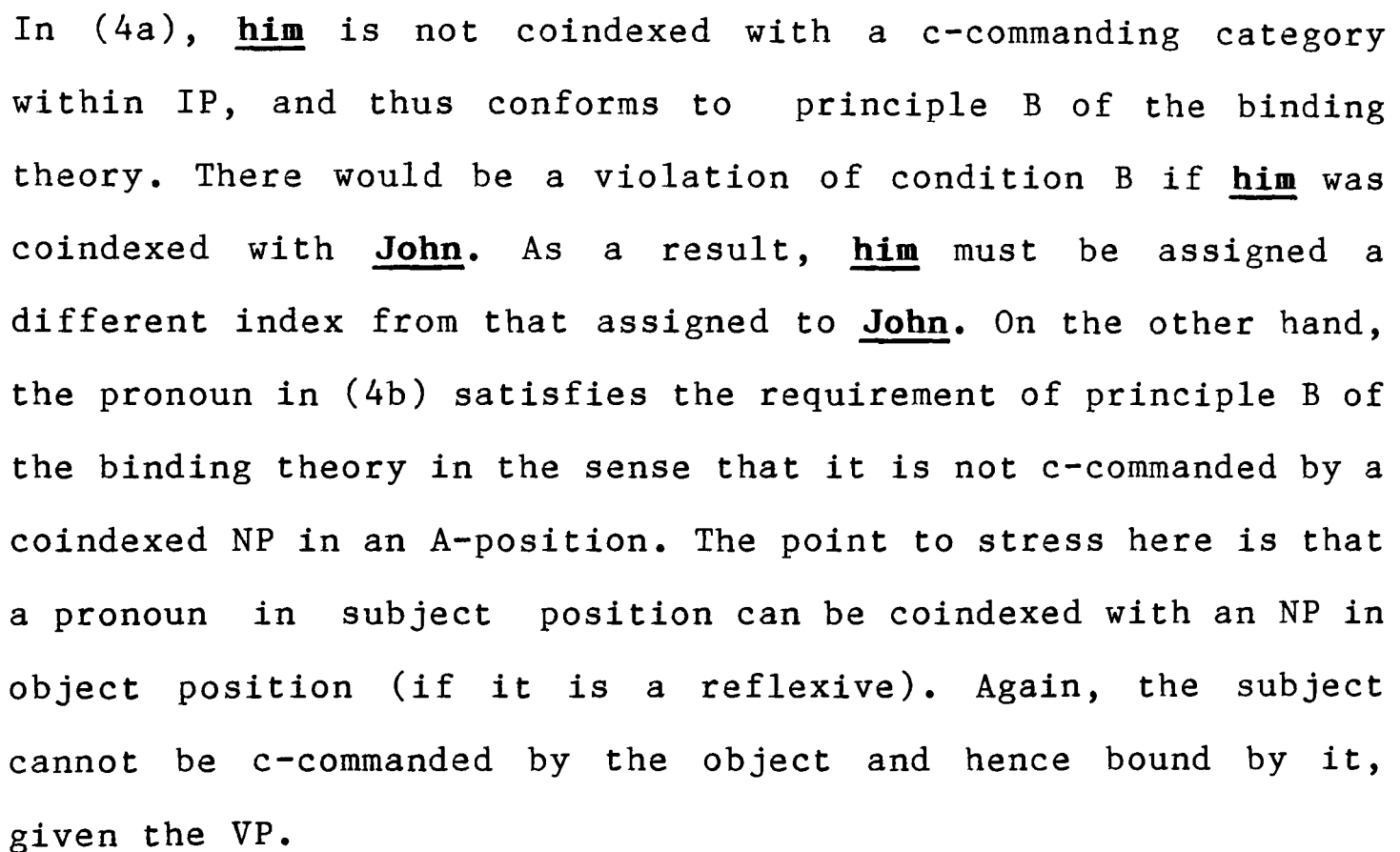
The reflexive in (2a) is c-commanded by John and hence bound by it. (2b), on the other hand, is ruled out because the anaphor is not bound at all in its governing category -i.e. the first branching node above John is the VP node, and this does not dominate himself.

According to Chomsky (1981), as remarked in Chapter One, Pronominals obey the following binding principle:

**B. A pronominal is A-free in its governing category**

Again, free means not bound - i.e. not coindexed with a c-commanding category in an A-position. Consider now the examples in (3):

- These have the corresponding structures:



- 40 -

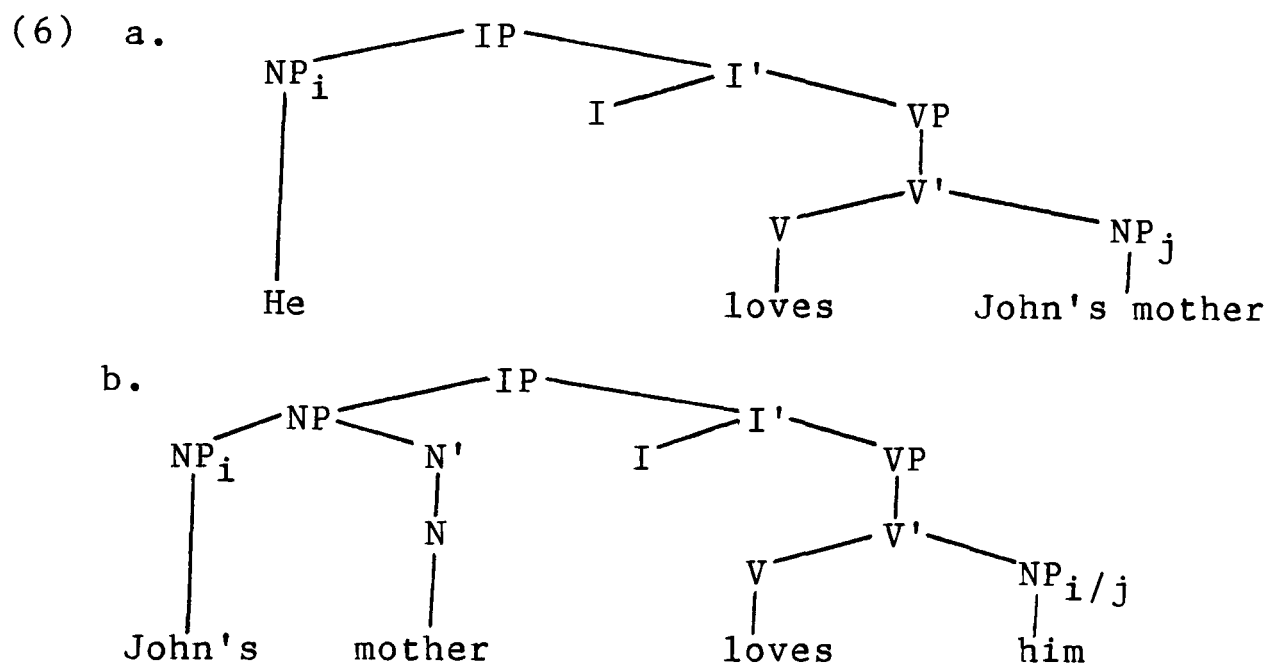
R-expressions observe the following binding condition:

**C. An R-expression is A-free**

Yet again, free means not coindexed with any c-commanding category in an A-position. Consider the examples in (5),

- (5) a. He<sub>i</sub> loves John's mother<sub>j</sub>  
 b. John<sub>i</sub>'s mother loves him<sub>i/j</sub>

These have the corresponding structures in (6):

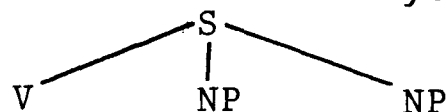


In (6a), John's mother is not bound by a c-commanding category in an A-position. The point is that he cannot be coreferential with John in (6a), since, as we have seen, the subject must c-command the object, taking into account that the converse does not hold. In (6b), John's mother c-commands him, but John does not, given that the first branching node dominating John -i.e. the NP John's mother - does not dominate him. In other words, in (6b), coreference is possible, but it would not be if him c-commanded John's mother. Hence, John and him can be coreferential here, not John's mother and him.

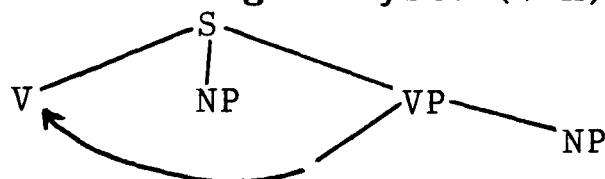
### 2.1.2. Analyses

The preceding discussion was to provide a basis for considering the analysis of VSO sentences. At this point, then, we need to see how Syrian VSO constructions can be analyzed. Generally speaking, there are essentially these two possibilities (ignoring details here):

(7) a. **Flat Structure Analysis (FSA)**



b. **Verb-Fronting Analysis (VFA)**



According to (7a), VSO sentences have a flat representation, where subjects and objects are sisters, both daughters of S.<sup>1 2</sup> (7b), however, suggests the object is inside a VP. The verb, moreover, starts out inside a VP and is fronted by a V-fronting rule. We argue, using binding theory data, for the V-fronting analysis.

### 2.1.3. The Motivation for a VP Node

Having demonstrated how VP is involved in the GB account of a range of phenomena involving English SVO sentences, let's now turn to show that these phenomena occur in Syrian VSO sentences so that a verb-fronting analysis is necessary if the GB account is to be extended to Syrian.

What we are doing here is showing that Syrian VSO sentences show the same phenomena as the English SVO sentences discussed in the last section. Consider the examples in (8):

- (8) a. qawwaṣ                      Kamal<sub>i</sub>      ḥalu<sub>i</sub>  
          shoot3SGmpast      Kamal      himself  
          'Kamal shot himself'
- b. \*qawwaṣ                      ḥalu<sub>i</sub>      Kamal<sub>i</sub>  
          shoot3SGmpast      himself      Kamal

(8a), taking principle A of the binding theory into account, is well-formed in the sense that the anaphor ḥalu is coindexed with a c-commanding category in an A-position - i.e. ḥalu is c-commanded by the antecedent Kamal. Note that, on the FSA, the R-expression Kamal in (8a-b) is also bound in its governing category -i.e. S , hence violating condition C of the binding theory. Both FSA and VFA, however, rule out (8b) on the basis that ḥalu c-commands Kamal. This, as is the case with English SVO sentences, cannot be allowed because the object neither c-commands nor binds the subject. Given the FSA, the reflexive ḥalu is bound by Kamal - hence the analysis predicts the grammaticality of the asterisked example. On the FSA, both examples conform to condition A, but both violate condition C. On the VFA, (8b) violates both condition A and condition C. In short, on both analyses, the subject in (8a) will c-command the object - hence will bind it as well. But, the FSA incorrectly predicts the grammaticality of both, whereas the VFA predicts the data correctly. Consider the following schematic structures:

- (9) a. [qawwaṣ    Kamal [vp --- ḥalu]]  
                               ↑                      |  
                               └──────────────────┘
- b. [qawwaṣ    ḥalu [vp --- Kamal]]  
                               ↑                      |  
                               └──────────────────┘

The point to stress about the examples given in (8) is that they suggest that Kamal c-commands halu but not vice versa, and hence that halu is within a VP that does not contain Kamal.

Let's consider now further examples together with their corresponding schematic derivations:

- (10) a. qawwaṣ                      huwweh<sub>i</sub>    ḥalu<sub>i</sub>  
           shoot3SGmpast    he            himself  
           'He shot himself'
- b. \*qawwaṣ                      ḥalu<sub>i</sub>       huwweh<sub>i</sub>  
           shoot3SGmpast    himself       he
- (11) a. [qawwaṣ huwweh [VP --- ḥalu]]  
           ↑  
           └──────────────────────────┘
- b. [qawwaṣ ḥalu [VP --- huwweh]]  
           ↑  
           └──────────────────────────┘

The FSA predicts that the subject will be bound by the object in (10a-b) - hence the noncoreference. That is, both conform to condition A, but both violate condition B. However, on the VFA, (10a) is well-formed and satisfies the requirement of principle B of the binding theory in that huwweh is not bound by halu, given the VP - hence free in its governing category, as required by condition B of the binding theory. But, (10b) violates both condition A and condition B.

Presenting Marantz's (1984) ideas, Hasan (1990:45) employs, among other things, '**idiomatic expressions**' facts to show that the verb and its object form a constituent in Standard Arabic. The assumption widely made about idioms is that they are underlying constituents. That is, the verb and object in a VSO sentence can constitute an idiom. Consider the following Syrian

idiomatic expression:

- (12) Kamal šamma9 l-xeit  
Kamal wax3SGmpast the-thread  
Lit. 'Kamal waxed the thread'  
**= Kamal disappeared**

In (12), the combination of verb and object refers to a unit which can be described via an intransitive verb. Such relation between verb and object is also operative in the VSO counterpart of (12). Consider (13):

- (13) šamma9 Kamal l-xeit  
wax3SGmpast Kamal the-thread

Here, the subject separates the verb from its object. This does not affect the idiomatic reading concerned. Therefore, the verb and object in a VSO sentence must be an underlying constituent.<sup>3</sup>

Summing up, the GB account of binding theory facts requires that the verb and its object form a constituent. We have argued for a VP node with V being the head - hence the untenability of the FSA. Assuming now that the facts we have tackled both in English SVO and Syrian VSO sentences are very much the same - i.e. the only difference being the order of the subject and the verb, this suggests that Syrian cannot have a flat structure and that V-fronting is necessary.

## 2.2. The Nature of Verb Fronting

### 2.2.0. Introduction

Having looked, relying on Binding theory facts, at how the GB assumptions require a VP node in the analysis of both SVO



and VSO sentences - hence the need for a verb-fronting analysis of VSO sentences, our aim in what follows is to consider the nature of V-fronting, looking at three main analyses which we will refer to as: (i) the '**Barriers-analysis**'; (ii) the '**Adjunction-analysis**'; and (iii) the **Fassi Fehri's**-approach, sketching in some of the mechanisms under which each operates, and concluding why we prefer the '**Fassi Fehri's**-approach' to the others.

### 2.2.1. The Barriers-Analysis

What V-fronting amounts to depends on whether fronting of the verb is obligatory. If so, the subject has to be fronted to the CP-specifier position to give us surface SVO sentences. The **Barriers-analysis** says that subjects are IP-specifiers and pre-subject verbs are in C. The question we should ask here is: **Are pre-subject verbs always fronted?** Case-marking gives us one reason that they are. On one assumption (Sproat, 1985), I and VP are sisters under I', and the subject can only be Case-marked if I moves to clause-initial position. Koopman (1984:217) assumes that VSO languages are characterized by the following features:

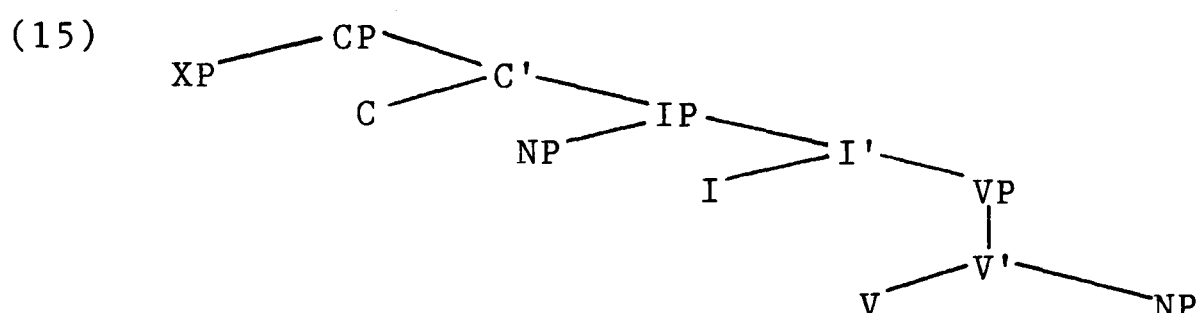
(14) (i) **lexical categories assign a  $\theta$  role to the right**

(ii) **Case is assigned to the right**

For her, it follows from these that the subject must be assigned Case by a Case assigner '**to its left**', providing the subject is not topicalized. Along Koopman's lines, the assumption that V-fronting is obligatory is attributed to Case theory - i.e. I must contain 'a verbal element' in order for

nominative Case assignment to operate.

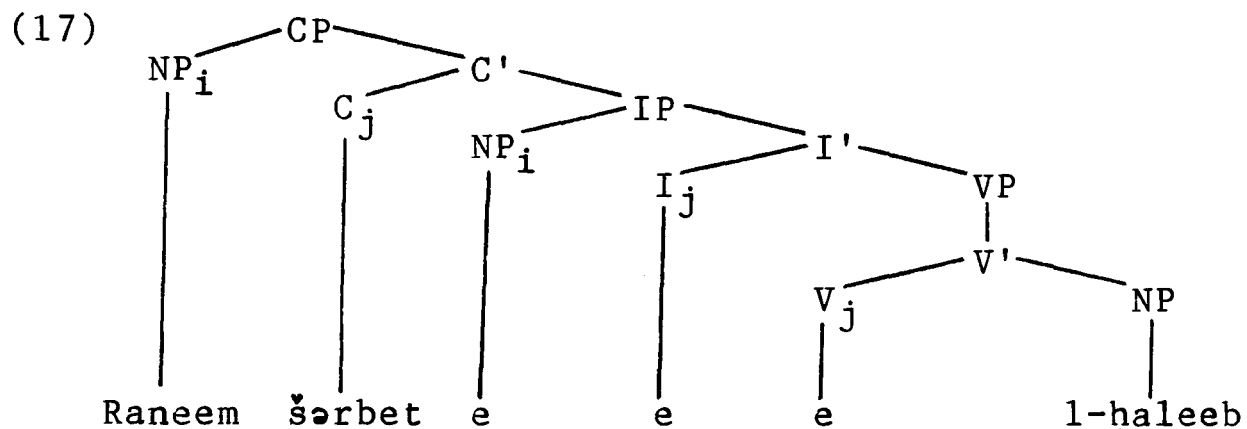
It should be noted here that the Barriers-analysis is proposed by Chomsky for English auxiliary-initial sentences. Chomsky (1986b:68) assumes that movement of V to I is "permissible - indeed, it is obligatory, since otherwise the affix would lack a bearer", taking into account that I is lexically regarded as an affix, as shown in the following tree structure:



The first step involves moving the verb into the head position I of IP, combining with I; this is how the verb obtains agreement and tense features. It is also essential to claim that the moved V leaves behind a trace capable of Case-governing any object NP. This is true in any Verb-fronting analysis.<sup>4</sup> This process of raising V to I is often referred to in the literature as 'head-to-head' movement, so is the process of I to C movement.<sup>5</sup> The second step involves moving I to C - the head position of CP. Moreover, movement of V to the position of C in one swoop is blocked under the assumption that the V head of VP cannot move to the head position C of CP unless it goes through the head position I of IP, combining with inflection. Movement of V directly to C is blocked by the ECP. So, the whole process is characterized by being stepwise.

To put it another way, on the 'Barriers-analysis', a V-fronting rule must exhibit two movements: (i) V-to-I and (ii) I-to-C. The movements above are illustrated in the structure below, corresponding to the sentence in (16):

- (16)  $\check{\text{šarbet}}$  Raneem l-ḥaleeb  
 drink3SGfpast Raneem the-milk  
 'Raneem drank the milk'



English examples fit in nicely with this analysis on the basis that pre-subject verbs do not co-occur with complementizers, given that the pre-subject verb will be in the C slot. The following illustrate this point:

- (18)
- a.  $\left\{ \begin{array}{l} \text{She wondered} \end{array} \right\} \left\{ \begin{array}{l} \text{would he marry her} \\ \text{whether he would marry her} \\ \text{*whether would he marry her} \end{array} \right.$
- b.  $\left\{ \begin{array}{l} \text{If he had told me} \\ \text{had he told me} \\ \text{*If had he told me} \end{array} \right\}, \text{ I would have helped him}$

However, the 'Barriers-analysis' can easily be ruled out on two counts. **Firstly**, an example of a complementizer and a pre-subject verb co-occurring would be Syrian sentences like the ones given below:

- (19) a. bzən            ənnu            nəjeh            Kamal    b    l-faḥəs  
           think1SGmpres    that    pass3SGmpast    Kamal in the-exam  
           'I think that Kamal passed the exam'
- b. bzən            ənnu            şaret            l-9eešeh    şa9beh  
           think1SGmpres    that    become3SGfpast    the-life difficult  
           'I think that life became complicated'

What (19a-b) suggest is that the 'Barriers-analysis' fails to account for subordinate clauses introduced by complementizers followed by pre-subject verbs. This analysis, then, does not allow the sequence [COMP V Subject].

**Secondly**, if we assume that V is always fronted, the subject has to move to the CP-specifier as well, thus leaving no room for a **Topic** preceding the subject - i.e. on this analysis, we cannot have the sequence [NP Subject V]. The following illustrate:

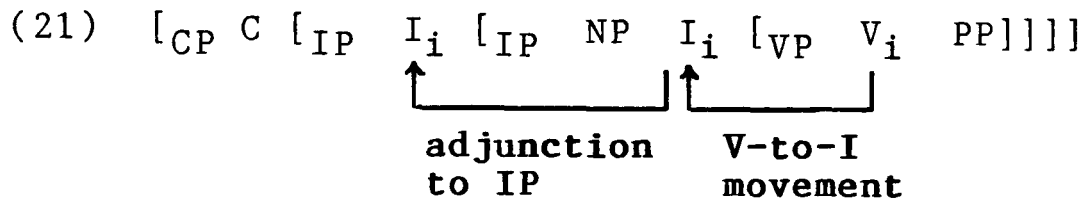
- (20) a. wein        Kamal        byəštəgel?  
           where        Kamal        work3SGmpres  
           'Where does Kamal work?'
- b. meen        Layla            bəthəb?  
           who        Layla            like3SGfpres  
           'Who does Layla like?'

The point to stress is that such examples are unexpected on the Barriers-analysis and hence suggest that it is not appropriate for Syrian VSO sentences.

## 2.2.2. The Adjunction-Analysis

Having argued that the 'Barriers-analysis' cannot account for the case where we get a complementizer and a pre-subject

verb co-occurring in VSO subordinate clauses, let's proceed to consider the '**Adjunction-analysis**'. Essentially, this analysis says that subjects are IP-specifiers, and pre-subject verbs are adjoined to IP. This process involves first movement of the verb to I, and then adjunction of I to IP, as illustrated in the structure corresponding to (19a):



It is worth noting here that if we assume an optional adjunction-process, this process would simply involve V-to-I movement, with no movement of the subject. In other words, if we just have V-to-I movement, we would have an SVO clause, assuming that subjects, as noted above, originate in the IP specifier position. However, if we assume an obligatory adjunction-process - in order to claim that all Case-marking is to the right, this process would involve V-to-I movement, adjunction to IP, and movement of the subject to the CP-specifier position. Along these lines, movement of the inflected verb to a pre-subject position will be obligatory.

Moreover, what distinguishes the '**Adjunction-analysis**' of V-fronting from the '**Barriers-analysis**' is that the former, as noted earlier, does not claim that the fronted verb is in the C slot. Hence, on this analysis we expect [COMP V Subject] sequences. Thus, the first objection to the '**Barriers-analysis**' disappears on the '**Adjunction-analysis**'.

Although the 'Adjunction-analysis' obeys the principle proposed by Chomsky (1986b:6),

- (22) **Adjunction is possible only to a maximal projection (hence X") that is nonargument**

it poses, like the 'Barriers-analysis', certain problems as regards having a **Topic** preceding the subject, as shown in the examples in (20a-b), repeated here as (23a-b) for convenience:

- (23) a. wein      Kamal      byəʃtəʒel?  
         where      Kamal      work3SGmpres  
         'Where does Kamal work?'
- b. meen      Layla      bəthəb?  
         who      Layla      like3SGfpres  
         'Who does Layla like'

Assuming, under the 'Adjunction-analysis', that the moved subject is already in the CP specifier position, we do not expect a topicalized subject in this position. Thus, this analysis shares the second objection to the 'Barriers-analysis'.

### 2.2.3. The Fassi Fehri-Approach

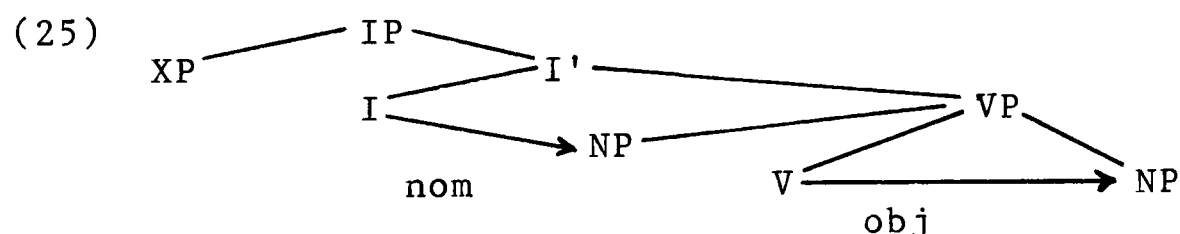
Having looked at how Verb-fronting is analysed under both the 'Barriers' and 'Adjunction' analyses, and demonstrated the flaws each has, let's move on to consider Fassi-Fehri's (1987) handling of V-fronting.

At core, Fassi Fehri's central idea is that subjects originate in the VP specifier position. This is a widely held position (cf. Sportiche (1988)). This analysis involves a more uniform version of X'. For Fehri, pre-subject verbs are in I;

V-to-I movement is morphologically necessary to support the I affix.<sup>6</sup> The subject moves to a preverbal position in the case of SVO sentences. As we have seen, the movement of a lexical head V to an inflectional I is assumed to be triggered by the directionality of Case assignment in Standard Arabic (SA) - i.e. a finite I cannot assign Case without combining with V on supportive grounds. For Fehri (1987:16),

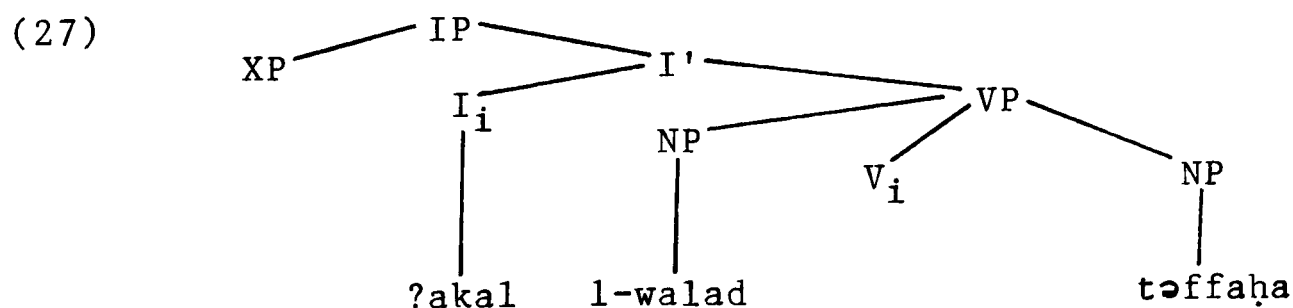
(24) In SA, Case is assigned uniformly to the right

This is illustrated in the structure given below, in which the arrows serve to indicate the direction of Case-marking:



Consider the sentence given in (26), together with its corresponding structure in (27),

(26) ?akal            l-walad            təffaḥa  
 eat3SGmpast the-boy            apple  
 'The boy ate an apple'



Being the feature of all the analyses at issue, V-to-I movement in (27) is obligatory in order to support I. What is more, the subject NP - i.e. the one immediately dominated by VP - is a specifier of VP, where it is governed and Case-marked by I.

In short, from the three analyses we have looked at regarding V-fronting, we are tempted to favour the '**Fassi Fehri**-approach' for two reasons: **Firstly**, it only involves one movement -i.e. V to I, and the subject moves to a preverbal position to give us SVO sentences. The '**Barriers**-analysis' involves two movements: V to I and I to C, and the subject moves to the CP-specifier position in the case of SVO sentences. We also have a two-step movement on the '**Adjunction**-analysis': V-to-I movement and adjunction to IP, and the subject moves to the CP-specifier position to derive SVO sentences. **Secondly**, it is a more symmetrical analysis in the sense that it has a VP specifier position. What we have argued for in this section is that an analysis of V-fronting along Fehri's lines is more likely to be right.

Having looked at how VSO sentences should be analyzed and reviewed three analyses of verb-fronting, the following section will be mainly concerned with the analysis of Verbless Clauses in Syrian.

## **2.3. Verbless Clauses**

### **2.3.0. Introduction**

The main purpose of this section is a study of a body of Syrian clauses which look rather like what are referred to in the literature as 'Small Clauses'. SCs, as we shall see, involve NP, AP, PP and VP predicates, since they lack both complementisers and I-constituents. Before we undertake any such step, it is appropriate to give an indication of the sort



of data we are concerned with throughout this section:

- (28) a. Rami     qaḍi  
         Rami     judge  
         'Rami is a judge'  
      b. l-qaṣər     kbeer  
         the-palace     big  
         'The palace is spacious'  
      c.     ʔax-u             b             š-šəgəl  
         brother-3SGm     in     the-work  
         'His brother is at work'

In section 2.3.1., we look at how SCs are analysed in English, offering some criteria for distinguishing SCs from other types of clause structure in English. In section 2.3.2., we look at the distribution of verbless clauses in Syrian. Section 2.3.3. offers an analysis of Syrian VCs. In section 2.3.4. we present further data involving pronominal subjects in VCs. A further analysis is presented in 2.3.5., as to what the status of Syrian VCs is. Finally, some complications are highlighted in 2.3.6.

### 2.3.1. Small Clauses in English

#### 2.3.1.1. Differences between SCs & Ordinary Clauses

As noted earlier, small clauses lack both complementisers and I-constituents - i.e. C and I nodes. As a result, it is assumed that they have the following structure:

- (29)                      SC  
         NP                      XP

(29) is one possibility. There are two others. Some people, for example, Chomsky in Barriers (1986b), thinks SC is another XP (30a). Others, for example, Stowell (1981), thinks the predicate is an X' (30b). However, some proponents of GB reject SCs, e.g., Williams (1983:287-308), and claim that putative SCs are two separate constituents:



where XP= NP, AP, PP, and VP, as illustrated in the following examples:

- (31) a. We consider [John a genius]  
 b. They find [mountaineering risky]  
 c. I want [you out of my office]  
 d. We saw [him leave]

Radford (1988b:7) claims that SCs, unlike Ordinary and Exceptional clauses, lack a C-system - hence cannot have CP status. **Firstly**, they cannot be introduced by overt complementisers, as the ungrammaticality of the following illustrates:

- (32) a. \*Swimming keeps [**that** you in shape]  
 b. \*Let [**for** there be a solution]

**Secondly**, they can never contain preposed auxiliaries - hence the ungrammaticality of the following:

- (33) \*Let [**be** there a solution]

And **thirdly**, SCs, unlike their finite clause counterparts, cannot contain an initial Wh-phrase in pre-subject position, as demonstrated by the following contrast:

(34) a. We considered [**how** stupid Cynthia was]

b.\*We considered [**how** stupid Cynthia]

Moreover, since SCs have no I-system either, they cannot contain the infinitive particle to, or a Modal such as can - hence the following are ruled out:

(35) a.\*Let [there **to/can** be a solution]

b.\*We consider [the castle **to/can** a beauty]

The absence of I also has its bearing on the system of negation employed in SCs. Finite ordinary clauses, for example, can be negated by a negative auxiliary - such as can't/won't/shan't/don't - the natural position of which is I. But, as we have seen with (35), if we cannot have modals in SCs, we would not expect negative modals. SCs are negated by the negative particle not so that negative SCs are of the following form: [NP not XP]. The following illustrate:

(36) a. We consider [boxing **not** a pleasant sport]

b. We found [the players **not** fit enough]

c. We consider [that film **not** in good quality]

d. They might let [ you **not** cross the border]

Thus, these examples show that SCs are invariably negated by the negative particle not, whereas Ordinary Clauses can be negated via a negative auxiliary positioned in I. The following illustrate:

(37) a. We found that the chair **wouldn't** be fixed

b. We are told that the meeting **won't** take place

c. The police found out that the story **couldn't** be  
true

Another noticable difference between ordinary clauses and SCs is that the latter may not contain verbs reflecting Tense and Agreement, since, as already noted, SCs lack an I constituent. It is in the I constituent that properties of Tense and Agreement are located. Thus, in SCs we can only have nonfinite verbs in their base, gerundial, and participial forms. The following contrasts illustrate the point:

- (38) a. Don't let [Bill **have**/\*has any more biscuits]  
 b. We didn't like [him **swimming**/\*went against the current]

On the other hand, since ordinary clauses contain an I constituent exhibiting Tense and Agreement features, we can expect them to really have finite verbs, as illustrated in the following:

- (39) a. They said that he **went** there alone  
 b. The boss suggested that we **changed** the plan

A further difference between SCs and ordinary clauses is that in the former - being void of I - we can have non-verbal elements (40a-c), whereas in the latter - containing a finite I with **AGR** - verbs are required to exist. What we are assuming here is that I only takes a VP complement (41a-b).

- (40) a. Many MPs consider [Thatcher **a cheat**]  
 b. I find [your idea **quite gripping**]  
 c. You've got [your plan **in a mess**]

- (41) a. We really should  $\left\{ \begin{array}{l} \text{keep calm} \\ \text{*very calm} \\ \text{*good boys} \end{array} \right\}$

- b. We want you to  $\left\{ \begin{array}{l} \text{Keep calm} \\ *very\ calm \\ *good\ boys \end{array} \right\}$

In short, what the examples in (41a-b) suggest is that I must take a VP complement irrespective of whether it is **finite** - i.e. contains a modal auxiliary like should, or **nonfinite** - i.e. contains the particle to.

Yet another crucial difference between SCs and Ordinary Clauses is that their subjects are assigned Case differently. That is, in finite ordinary clauses, subjects are assigned **Nominative** Case via AGR within a finite I (42a). On the other hand, subjects in SCs are assigned **Objective** Case **Exceptionally** (44b). This is true of Exceptional clauses as well.

- (42) a. I consider that [Robson should be fit for the match]

- b. I consider [Robson fit for the match]

A simple test like replacing Robson by a pronominal clearly shows how Case-marking works with respect to the examples in (42). Naturally, what we would expect is the **Nominative** form he in (43a), whereas the **Objective** form in (43b):

- (43) a. I consider that [he/\*him would be fit for the match]

- b. I consider [him/\*he fit for the match]

**Why is this contrast?** Well, the standard position is that the subject NP in (43a) is assigned **Nominative** Case by AGR within a finite I, as already remarked. But, in the SC (43b) there is no obvious I constituent to assign case to the Subject NP.

Within GB, the subject concerned receives its Case from the immediately preceding transitive verb consider, and since transitive verbs assign **Objective** Case to NPs immediately following them, the SC subject is assigned **Exceptional Objective** Case in (43b). This contrast in Case-marking follows from the assumption that ordinary clauses contain an I but SCs do not, since only a clause containing a finite AGR within I assigns **NOMINATIVE** Case to its subject.

For a fuller picture, SCs do not allow PRO subjects, nor do they occur in cases where the clause containing PRO acts as a subject - hence the ungrammaticality of the following:

(44) a.\*The police want [PRO alive]

b.\*[PRO famous] would be great

The data in (44) is a further reason for thinking that there is no C-system in SCs, as we have seen. If there were, the subject position would not be governed and a PRO subject would be possible.

We can now summarize the relevant facts about ordinary clauses and SCs as follows:

(45) Since Ordinary Clauses have a C-system,

- i. Ordinary clauses may be introduced by Complementizers, SCs may not
- ii. Ordinary Clauses may contain preposed auxiliaries, SCs may not
- iii. Ordinary Clauses may contain preposed Wh-phrases, SCs may not

(46) Since Ordinary Clauses contain an I-system,

- i. Ordinary Clauses may contain infinitival to, or a Modal, SCs may not
- ii. Ordinary Clauses require a VP predicate, SCs do not

Thus, the two fundamental properties that draw the line between Ordinary Clauses and SCs are that the former contains both a C-system and an I-system, whereas the latter contains neither.

Remaining unexplained so far, however, is the question of the categorial status of SCs. We will not enter into this matter, as this would take us further afield: see Radford (1988:515-20), Stowell (1981:259), Chomsky (1986a:93; 1986b:-20), and McCloskey & Chung (1987:175-89) for various views on this issue.

### **2.3.2. A Distribution of Verbless Clauses**

As noted at the outset, Syrian verbless clauses look rather like English SCs. The predicates involved may be of any sort - i.e. nominal, adjectival, or prepositional, as illustrated in the following examples, where **non-pronominal subjects** are used:

#### **(47) i. Nominal Predicates**

- a. Hasan            šərṭi  
         Hasan       policeman  
         'Hasan is a policeman'
- b. Layla            šərṭəyyeh  
         Layla       policewoman  
         'Layla is a policewoman'

#### **ii. Adjectival Predicates**

- a. Salma            qaṣeera  
         Salma       short  
         'Salma is short'

b. Talal            taweel

**Talal**            tall

'Talal is tall'

iii. **Prepositional Predicates**

a. l-wlad            b            l-madərseh

the-boys            in            the-school

'The boys are at school'

b. l-banat            b            l-beit

the-girls            in            the-house

'The girls are at home'

Having looked at this basic data, the most obvious similarity holding between VCs in Syrian and SCs in English involves the fact that both do not contain a finite verb.

We can now show that VCs have the same distribution as ordinary clauses (unlike English SCs). In other words, like ordinary clauses, VCs in Syrian can **firstly** appear as complements of Verbs, Nouns, and Adjectives. **Secondly**, they can be preceded by Wh-phrases and complementisers. And **thirdly**, they can appear as main clauses.

Let us consider first some data involving VCs as complements of **VERBS**.

(48) a. byə9təber            ənnu    Layla    mažnooneh

consider3SGm    that    Layla    crazy

'He considers that Layla is crazy'

b. byə9təber            Layla    mažnooneh

consider3SGm    Layla    crazy

What is characteristic about the examples in (48a-b) is that



they both contain a non-pronominal subject in the complement position. (48b) shows that a complementizer is optional in VC complement of a verb.

We can now move on to consider cases where Syrian VCs are complements of **NOUNS**. Consider the following:

- (49) a. qəʃʃət ənnu Fuʔad b l-məstaʃfa təl9et  
           story that Fuad in the-hospital appear3SGf  
           tərkeebeh  
           fix-up

'The story that Fuad was in hospital turned out to be a lie'

- b. \*qəʃʃət Fuaʔad b l-məstaʃfa təl9et tərkeebeh  
       story Fuad in the-hospital appear3SGf fix-up

'The story that Fuad was in hospital turned out to be a lie'

Both these examples contain a non-pronominal subject, but (49a) differs from (49b) in that the former contains a complementizer, whereas the latter does not. The point to note is that the obligatoriness of a complementizer with a noun is like English. The following illustrate the point:

- (50) a. The fact that John was late upset them  
       b. \*The fact John was late upset them

Finally, we can now proceed to see what the data is going to look like with VCs as complements of **ADJECTIVES**.

- (51) a. ʔana mətʔakked ənnu Saleem ġabi  
           I sure that Saleem foolish  
           'I (am) certain that Saleem (is) foolish'  
       b. ʔana mətʔakked Saleem ġabi  
           I sure Saleem foolish

In much the same way, both (51a-b) have non-pronominal subjects. They seem to highlight no difference at all, irrespective of the presence or absence of complementizers.

As stated above, verbless clauses in Syrian can also be introduced by Wh-phrases with complementizers, as illustrated by the following:

(52) a. 9rəfət        meen lli Naşer xayef        mənn-u  
              know1SGpast    who    that Naser afraid        from-3SGm  
              'I knew who Naser was afraid of'

b. \*9rəfət        meen        Naşer xayef        mənn-u  
              know1SGpast    who        Naser    afraid        from-3SGm

(52a-b) have non-pronominal subjects, but (52a) contains a complementizer, whereas (52b) does not, and it is ungrammatical.

VCs in Syrian can be main clauses as well -i.e. their existence in isolation is quite legitimate, as the following demonstrate, repeated here as (53):

(53) a. Hasan        šərṭi  
              Hasan        policeman  
              'Hasan is a policeman'

b. Layla        qaşeera  
              Layla        short  
              'Layla is short'

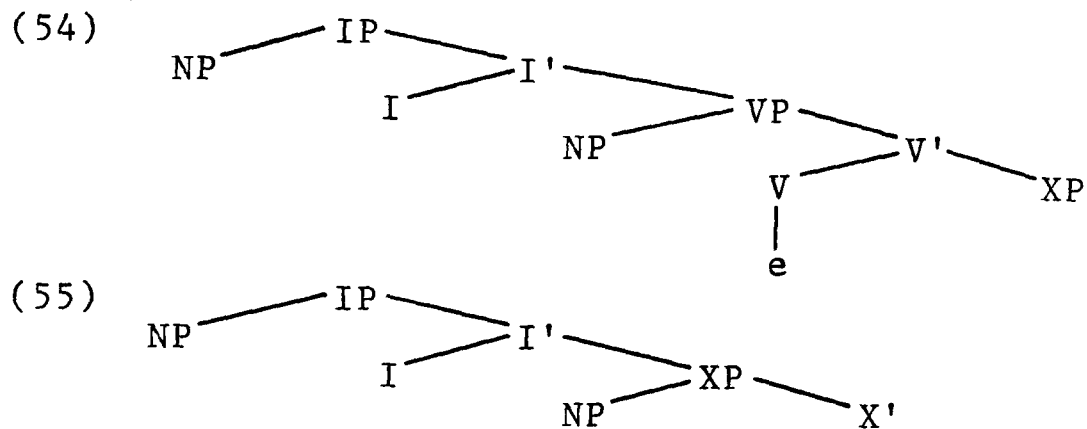
c. 1-wlad        b        1-madərseh  
              the-boys    in    the-school  
              'The boys are at school'

In (53a), we have a nominal predicate; in (53b) an adjectival predicate; and in (53c) a prepositional predicate - all functioning independently.

Having demonstrated what verbless clauses in Syrian look like, the question to ask here is how exactly they should be analyzed.

### 2.3.3. An Analysis

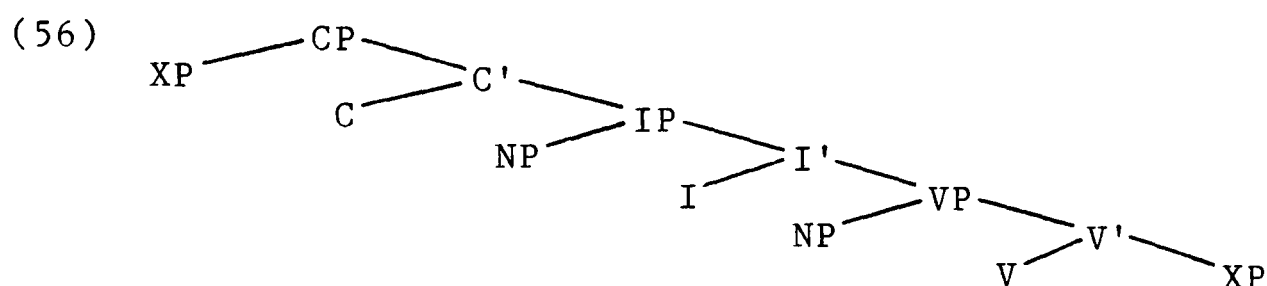
As already noted, Syrian VCs are rather like ordinary clauses. But, the question is: **how similar are they?** There are these two possible analyses:



In (54) we have an IP involving a VP complement with an empty V, whereas in (55) an IP containing an XP complement. The reasons we favour the former are: **Firstly**, it does make VCs look like ordinary clauses with related past tense verbs, **Secondly**, it allows us to maintain the assumption that I only takes a VP complement. The point is that VCs have essentially the same analysis as ordinary clauses - i.e. they are IPs at least sometimes embedded in CPs. In 2.3.5., we will argue that VCs are 'bare' IPs.

Since, as we have seen, Syrian VCs can be introduced by

complementizers, it is clear that we have the following structure:



Our task in the following section is to show what happens if we have pronominal subjects in VCs.

#### 2.3.4. Pronominal Subjects in VCs

We can consider first some data:

- (57) a. Nada    btə9təber            ənnu    huwweh    9abqari  
           Nada consider3SGfpres that    he            genius  
           'Nada considers that he is a genius'

- b.\*Nada    btə9təber            huwweh    9abqari  
           Nada consider3SGfpres    he            genius

Given just this data, (57a) is an example of a VC containing a pronominal subject introduced by a complementizer. Unlike (57a), (57b) is an example of a VC containing a pronominal subject introduced by no complementiser, and it is ungrammatical.

Let's highlight some further data:

- (58) a. Nada            btə9təbr-u            (huwweh)    9abqari  
           Nada consider3SGf-3SGm            he            genius  
           'Nada considers him a genius'

- b.\*Nada    btə9təbr-u            ənnu    huwweh    9abqari  
           Nada consider3SGf-3SGm that    he            genius

(58a) is a grammatical counterpart of (57b). The contrast in (58a-b) provides a good deal of evidence that in Syrian we do

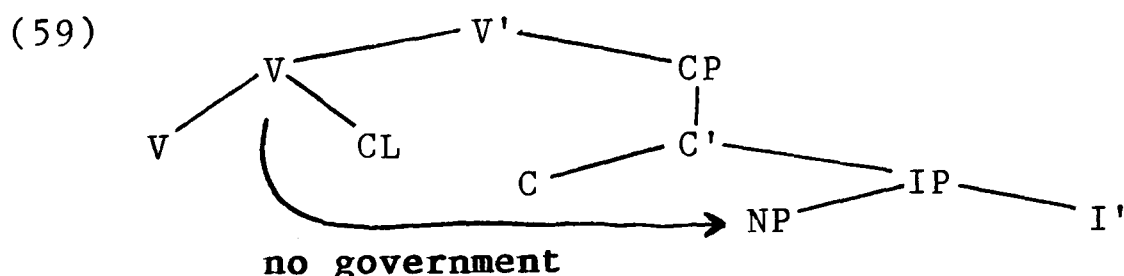
not have a clitic with a complementizer following - hence the ungrammaticality of (58b). Unlike the situation with VCs containing non-pronominal subjects, complementizers in VCs containing pronominal subjects are obligatory, unless there is a clitic.

Summing up, When the subject of a VC is a pronoun, we can have **either a clitic without a complementizer or a complementizer with no clitic, but not both.**

Let's see what sort of analysis will capture the generalization highlighted above.

#### 2.3.5. A Further Analysis

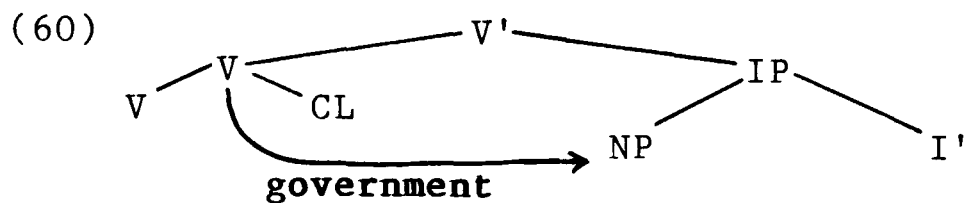
Assuming with Borer (1984) that the combination of host and clitic must govern the associated NP, this calls into question the validity of the CP-analysis. That is, The combination of host and clitic fails to govern the associated NP in the schematic form [NP V+CL COMP NP]. The following slightly modified structure corresponding to (56) demonstrates the point:



Note that CP, as we shall see in Chapter Five, is a barrier, thus preventing the associated NP being governed.

The question then is: **how do we account for the appearance of clitics with some examples involving VCs?** A plausible answer would be that some VCs are 'bare' IP complements. So, if we

get clitics alone in the form [NP V+CL NP[+PRO]], we would expect Syrian verbless clauses to have the following structure:



As noted earlier, the combination of host and clitic must govern a coindexed category - be it NP or pronoun. This suggests that the subject position within IP is governed by the preceding verb, as indicated by the arrow. If we want to maintain this principle, we have to have a bare-IP structure like (60) to account for Syrian VCs. The point is that VC complements are 'bare' IPs when there is no overt complementizer. In the next section, we will consider cases where we have neither a clitic nor a complementizer.

### 2.3.6. Some Complications

It is useful to highlight the contrast holding between (61a) and (61b):

- (61) a. Layla qalet                      huwweh                      9abqari  
              Layla say3SGfpast                      he                      genius
- b.    ba9təbr-u                      (huwweh)                      9abqari  
              consider1SGm-3SGm                      he                      genius

One important difference between the sentences concerned is that in an example like (61a) we do not have a clitic on the verb, as the gloss indicates, whereas in (61b) we do have a clitic attached to the verb. Another important difference is that in the former the pronominal subject is obligatory, whereas it is, as noted earlier, optional in the latter - hence

the ungrammaticality of the following:

- (62) \*Layla qalet 9abqari  
Layla say3SGfpast genius

The complementizer ənnu is optional in (61a), whereas impossible with a clitic preceding in (61b), as already remarked. But, what we can say about cases such as (61a) is that verbs like qal 'said' always have a CP complement even if there is not any visible complementizer. On the other hand, verbs like yə9təber 'consider', yzən 'think' have just an IP complement when there is no overt complementiser. In other words, normally where we have a VC as a complement of verb, it is a CP if there is an overt complementiser or Wh-phrase except with the Syrian counterpart of say.

Another complication arises with respect to VCs acting as complements of adjectives. Consider the following:

- (63) a. ?ana mətʔakked ənnu huwweh ġabi  
I sure that he foolish  
'I (am) certain that he (is) foolish'  
b. ?ana mətʔakked huwweh ġabi  
I sure he foolish

There are two possibilities here: either we have a CP with an empty complementizer, or clitics just do not attach to adjectives. We leave this issue open.

We can summarize the relevant facts about Syrian VCs containing pronominal subjects as follows:

(64)

	COMP	NO COMP
CLITIC	X	✓
NO CLITIC	✓	Adjectives <u>qal</u>

Thus, we hope to have achieved a sort of analysis as far as Syrian verbless clauses are concerned - an analysis that rests on the distribution of VCs, and the distinction we have made between the CP and the 'bare' IP analyses.

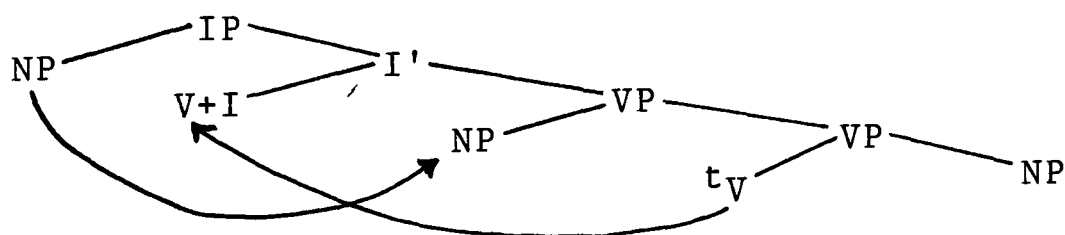
#### 2.4. Summary

By way of recapitulating the points made above, we began this Chapter by considering how VSO sentences should be analysed. Then, in 2.2., we looked at the nature of verb-fronting, reviewing three analyses. In 2.3., we concerned ourselves with Syrian clauses that look rather like English SCs. We discussed how SCs are treated in English. We also considered Syrian VCs, highlighting their distribution and providing an analysis to the effect that VCs have essentially the same analysis as ordinary clauses. Then, we considered the situation with pronominal subjects, providing a further analysis to the effect that VC complements of verbs are 'bare' IPs. We concluded with two exceptional cases as regards the Syrian counterpart of English 'say', and the situation with VCs serving as complements of adjectives.



## NOTES TO CHAPTER TWO

1. Using Standard Arabic data, Hasan (1990:32-39) has utilized binding theory data to account for an underlying S [VO] word order.
2. Relying on evidence from binding, word order, NP-movement, and control constructions in Jacaltec, Niuean, Chamorro, and Berber, Woolford (1991) assumes that VSO languages have VP-internal subjects. This approach assumes that the subject and object are sisters, given the flat structure analysis of VSO languages.
3. For similar views advancing the VFA of various languages, see Koopman (1984) and Sproat (1985), among others.
4. For further evidence in favour of VP in VSO languages, see Hasan (1990:43-53) and Shlonsky (1989:105). Shlonsky gives the following structure to support his preference for verb raising to I:



5. Pollock (1989:398) notes that we have movement of V to I in the case of auxiliary be and have, and I to V in the case of other verbs. Chomsky (1991) adopts this position.
6. It is worth noting that Berber (cf. Choe (1986:83)), which is known to be a VSO language, shows no SV0 basic order, thus not respecting Greenberg's (1966) Universal (6): '**All languages with dominant VSO order have SV0 as an alternative or as the only alternative basic order**'. A similar proposal is made for Irish (cf. McCloskey (1983)).

## CHAPTER THREE

### SUBJECTLESS FINITE CLAUSES

#### 3.0. Introduction

What we intend to do in this chapter is to investigate a phenomenon referred to in the GB literature as the '**Null Subject Parameter**' (Perlmutter 1971; Chomsky & Lasnik 1977; Borer 1981; Chomsky 1981,1982; Jaeggli 1982; and many others). It is also known (somewhat confusingly) as the 'pro-drop Parameter', and McCloskey & Hale (1984) speak of a more general '**Null Argument Parameter**'.<sup>1</sup>

Here is some indication of the sort of data we will be concerned with throughout the chapter:

- (1) a. e ba9et            səyyart-a  
              sell3SGfpast        car-3SGf  
              '(She) sold her car'
- b. e nṭazarna        b    l-mḥaṭṭah  
              wait1plpast    in the-station  
              '(We) waited at the station'
- c. e bzən            e        raḥ        9a        ž-žeiš  
              think1SGpres    go3SGmpast    on    the-army  
              '(I) think (he) joined the army'

This chapter is organized as follows: In section 3.1., we outline some of the basic properties of Null Subject Languages (henceforth NSLs) as proposed in Chomsky (1981). In section 3.2., we sketch some proposals on the nature of the element allowed to occupy the missing subject position in Null Subject

Languages. In particular, we consider two positions: Chomsky's Lectures-position (1981), and Chomsky's Concepts & Consequences-position (1982), presenting how the Phonologically-Null Element in Null Subject Languages is analyzed as the pronominal anaphor **PRO** in the former, but as the pure pronominal pro in the latter, considering the question of what exactly determines the distribution of Null Subjects, and the mechanism by means of which they are assigned Case. In section 3.3., we focus on Syrian as a Null Subject Language, illustrating the presence of an empty category in subject position of finite clauses, highlighting its distribution, and showing the role of agreement in triggering the appearance of the EC in subject position of finite clauses. We argue that the EC in Syrian subjectless finite clauses is pro and not **PRO**.

### 3.1. Basic Properties of Null Subject Languages

Chomsky (1981:240) suggests that Null Subject Languages have a cluster of properties. For our present purpose, we can concentrate on three of them:

- (2) **i. missing subject(i.e. in simple finite clauses)**
- ii. free inversion in simple sentences**
- iii. apparent violations of the \*[that-t] filter**

Chomsky illustrates the properties in (2) with Italian

- (3) a. ho trovato il libro  
("I found the book")
- b. ha mangiato Giovanni  
("Giovanni ate")
- c. chi credi [che partira]  
("who do you think [(that) will leave]")

In (3a), unlike English and French, the grammar of Italian allows zero subject pronouns. In (3b), it permits the subject to appear at the end of VP freely. And finally in case (3c), it illustrates that the subject of a that clause may be extracted by Wh-movement.

Having presented some Syrian data and looked at some of the crucial features of NSLs, we can move on to consider how null-subject sentences should be analyzed, reviewing how the 'missing subject' in NSLs is handled both in Lectures (1981) and Concepts & Consequences (1982).

### 3.2. Analyses

#### 3.2.1. The Lectures-Position (1981)

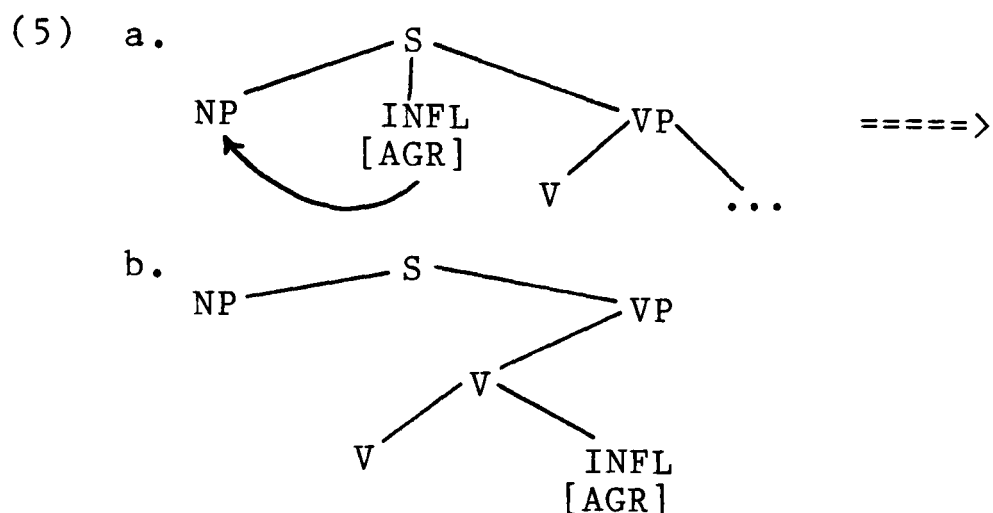
In essence, the Lectures-analysis tries to capture the presence of an empty subject position and of postverbal nominative Case assignment. Relying on the 'Avoid Pronoun Principle'<sup>2</sup> which imposes a choice of PRO over an overt pronoun, Chomsky (1981:256) relates the distinction between NSLs and non-NSLs to the fact that in the former PRO 'may be used instead of a pronoun in subject position'. It is because Chomsky suggests that the EC is PRO that he thinks it must be ungoverned.

What is more, Chomsky proposes a rule that assigns the 'elements of INFL to the initial verbal element of VP'. He calls this rule R - a rule attaching INFL to the following verb, applying either in the phonological component or in the syntactic component of the grammar. In other words, either before or after S-structure (at which Binding Theory and hence

the requirement that PRO is ungoverned is applicable).

(4) **R may apply in the syntax**

To illustrate how the rule in (4) works, consider the following structures:



(5a) indicates that INFL governs the subject before it is lowered, but not after. Hence, the subject is governed at S-structure if R applies in the phonology, but not if it applies in the syntax - hence PRO is permitted to appear in subject position in (5b). The application of rule R produces (5b) irrespective of whether or not R applies in the syntax.<sup>3</sup>

Chomsky's (ibid:258) position on the nature of the EC occupying the subject position of a tensed clause is summed up as follows:

(6) **The subject of a finite clause is PRO if and only if R has applied in the syntax**

Given Binding Theory, Pronominals, as we have seen, have to be free (i.e. not bound from an A-position) in their governing categories, while at the same time Anaphors must be bound in their governing categories. Since, as already noted, PRO is both a pronominal and an anaphor, it follows that PRO may not

appear in a governing category without violating one or the other of these requirements - hence may not appear in a governed position. If R may apply in the syntax, non-pronominal NPs will be possible in subject position and so will traces if they can be antecedent-governed.

For Chomsky, PRO is '**base-generated**' in subject position of NSLs. Presumably, it need not be; we can have subjectless passive sentences. They presumably involve a moved PRO. He stresses the point that R may be able to apply in the syntax. On the other hand, if R does not apply in the syntax, then we would expect phonologically realized elements to appear in subject position.

Let's see how Chomsky discusses free inversion. Consider the following schematic derivation, where the arrows involved indicate some sort of movement. This is in fact Rizzi's (1982, Ch. 4) analysis:

- (7) i.  $[_{CP} C [_{IP} NP VP]] \implies$   
       ii.  $[_{CP} C [_{IP} t_i [_{VP} VP NP_i]]] \implies$   
       iii.  $[_{CP} NP_i C [_{IP} t_i [_{VP} VP t_i]]]$

The trace left after NP-movement has applied in (7ii) is reinterpreted as PRO. But, the postverbal trace in (7iii) is regarded as the real trace in the sense that it is a properly governed position - hence extraction is possible. What Chomsky suggests is that extraction does not start out from the 'subject' position, but rather from the 'postverbal' position in which subjects may appear, conforming to (2ii). Thus, (7) is an example of an NP-postposing rule in an NSL like Italian.

We can now turn to explain how Chomsky accounts for the occurrence of that-trace filter in NSLs. Informally, the filter simply says that in English any structure containing the complementizer that followed by the trace of a subject NP is ruled out as ungrammatical. The question to ask in this context is why NSLs allow that-trace violation. The observation that they do goes back Perlmutter (1971). A feasible answer is that they allow free inversion.

Essentially, Wh-movement of the subject in NSLs, which seems to be a possible violation of the \*[that-t] filter, starts out from the postverbal rather than the subject position; and thus does meet the requirements of the \*[that-t] filter. Chomsky (ibid:254) illustrates with an example from Italian:

(8) chi pensi che parlerà

("who do you think (that) will speak")

(9)  $chi_i$  pensi [<sub>S</sub> che [<sub>S</sub> PRO<sub>i</sub> parlerà  $e_i$  ]]

He uses (9) to show that it is this subject-postposing process that allows apparent violations of the \*[that-t] filter.

### 3.2.2. The Concepts & Consequences-Position (1982)

At core, Chomsky in Concepts & Consequences (1982) argues that it is unsatisfactory to analyze the empty subject position in NSLs as PRO. This has prompted Chomsky to seek an alternative element to occupy the empty subject position concerned. He claims this element is an EC, carrying the features [-anaphor, +pronominal]; which he labels as pro. The reason Chomsky prefers pro rather than PRO to occupy the empty

subject position in NSLs is that the former reflects all the fundamental properties of pronouns with the exception of 'lexical content'. The null subject of a subjectless finite clause does not have to have an antecedent or be interpreted as arbitrary in reference as PRO does. For Chomsky, then, pro is a pure pronominal, conforming only to principle B of the binding theory.

To support his claim, Chomsky (1982:79) offers the following examples from Italian:

- (10) a. e     parla  
         'he is speaking'  
      b. e arriva un ragazzo  
         'there arrives a boy'

The EC e in (10a), for Chomsky, shares definiteness in reference with its corresponding element in translation - i.e. in this case he; and in (10b) the EC acts in just the same way as the dummy or expletive element of the translation.

Chomsky proceeds to suggest that the EC cannot be PRO because it can be governed in some languages.

To substantiate this assumption, Torrego (1981), cited in Chomsky (1982:82), claims that Spanish interrogative constructions undergo 'obligatory' verb fronting, by means of which the subject can be governed by the 'fronted' verb. This holds true of both direct and embedded questions, as illustrated in Torrego's own examples:



- (11) a. con quién podrá Juan ir a Nueva York  
           with whom will be able Juan go to New York  
           'with whom will Juan be able to go to New York'
- b. no me acuerdo a quién prestó Juan el diccionario  
           not I know to whom lent Juan the dictionary  
           'I don't know to whom Juan lent the dictionary'

Torrego claims that the position occupied by Juan can be governed. In addition, it is regarded as an available position for an EC missing subject to fill in NSLs. The following illustrate:

- (12) a. con quién podrá e ir a Nueva York  
           with whom will be able go to New York
- b. no me acuerdo a quién prestó e el diccionario  
           not I know to whom lent the dictionary

This is impossible if the EC in (12a-b) is treated as PRO, because if we have PRO in this position, it will be governed in violation of the binding theory. On the other hand, pro is permitted in that position, because it can be governed and Case-marked.

We can now proceed to consider how the 'content' of pro is determined. Chomsky assumes that pro must be 'locally identified' - i.e. (normally) governed by AGR. For Chomsky (1982:85), AGR is a component of INFL at all levels - so that it can act as a governor of the empty subject position. Following Rizzi (1982), Chomsky stresses the point that if INFL is not attached to the matrix verb in the syntax, then the subject position will be governed and consequently the content

of pro can be determined by it. This, of course, will prevent PRO appearing in governed positions.

With respect to the Null Subject Parameter, Chomsky goes along with the line of inquiry adopted by Taraldsen (1978b) in taking a pure pronominal EC subject to be associated with inflectional specifications, as noted above. To put it another way, the inflection on the verb spells out the grammatical properties of the empty subject. He handles the richness of the morphological system of a given null subject language in terms of 'Case theory'- i.e. AGR is treated as an element containing a bundle of grammatical characteristics such as, person, number, gender, and Case. That is, the EC subject in NSLs is governed by AGR, providing AGR includes Case. Chomsky suggests that in an NSL, pro, if Case-marked, can occupy the empty subject position governed by AGR. Hence, the determination of the content of the empty subject is maintained via AGR with Case.

The need for '**local determination**' seems crucial, since the content of dummy or expletive pro is determined differently - i.e. by the properties of the postverbal element with which it is associated. This is achieved in NSLs via raising the empty category so that the higher verb "agrees" with the postverbal element, as demonstrated in the following example, taken from Chomsky (1982:87):

- (13)    pro    sembro [ t   essere   io ]  
         'it seems to be me'

sembro in (13) is first person singular. pro is identified with the pronoun io, but we still need agreement. Chomsky observes that such nonlocal identification is not sufficient to sanction pro subjects, or else we would expect null expletive subjects in non-null-subject languages.

Furthermore, for Chomsky (1981:241), "a language might have a mixed system, permitting subject drop in some constructions but not in others". Among the languages cited in the relevant literature are Irish and Hebrew.<sup>4</sup> McCloskey & Hale (1984:489) show the situation that exists in Irish by giving the paradigm in (13), representing the conditional of the verb cuir 'put' in Ulster dialect:

(14)	S1	chuirfinn		P1	chuirfimis	
	S2	chuirfea		P2	chuirfeadh	sibh
						you(PL)
	MS3	chuirfeadh	se			
			he			
	FS3	chuirfeadh	si	P3	chuirfeadh	siad
			he			they

For them, the synthetic forms - ones with agreement morphology- in this paradigm include the S1 'I would put', S2 'you would put', and P1 forms 'we would put'. The analytic forms - ones lacking agreement morphology, however, are the S3, P2 and P3 involving independent pronominal subjects.

The paradigm given in (14) is unusually rich in the sense that it has, according to McCloskey & Hale (ibid:492), "an unusually large number of synthetic forms". Much more typical

is the sort of data illustrated in (15), where the paradigm has just one synthetic form and the rest are analytic with independent pronoun subjects:

(15) S1 cuirim	P1 cuireann sinn
	we
S2 cuireann tu	P2 cuireann sibh
	you
	you(PL)
MS3 cuireann se	P3 cuireann siad
	he
	they
FS3 cuireann si	
	she

The point is that where we have AGR on a verb we have a null subject, and where we have not we have an overt subject. Thus, the Irish data supports the idea of local government in the sense of Chomsky's (1982) Concepts & Consequences-approach.<sup>5</sup>

Having looked at the way the Concepts & Consequences-approach handles the empty subject position in NSLs, it seems quite plausible to conclude that the Lectures-approach is incorrect in taking the empty category in subject position of NSLs to be PRO. Thus, if the EC is a [+pro,-ana] element as adopted in the Concepts & Consequences-analysis, it will fill a gap in the typology of ECs - i.e. it makes the theory neater. Following Chomsky's (1982) Concepts & Consequences-approach, we will argue in the next section that the EC in Syrian subjectless finite clauses is pro.

### 3.3. Syrian as an NSL

After this brief sketch of the relevant theoretical ideas, let's turn now to consider what exactly the empty subject in Syrian is, looking at both its distribution - i.e. the variety of sentence positions which it can and cannot occupy; and its interpretation -i.e. specification as to when it is thought of as 'arbitrary', 'expletive', or 'definite' (the latter will be our main concern as the discussion progresses).

Syrian Arabic is an NSL with respect to all the criteria listed in (2). It allows empty subjects in tensed finite clauses. Consider the following examples:

- (16) a. katbu                      l-wazēefeh  
         wrote3plpast      the-homework  
         'They did the homework'
- b. kanna              b              l-beit  
         belplpast      in              the-house  
         'We were at home'
- c. raḥet              9a              l-baḥar  
         go3SGfpast      on              the-sea  
         'She went to the sea'
- d. kasar                      š-šabbak  
         break3SGmpast      the-window  
         'He broke the window'

The reason subject pronouns can be left empty in the presence of a verb in the examples above is, everyone believes, the obligatory subject-verb agreement, which in Syrian Arabic requires agreement in person, number, and gender. As a result,

the verb morphology recovers the information provided by the subject pronoun concerned. In other words, the verb is inflectionally marked for person, number, and gender features of its subject. In essence, the pronoun is allowed to be empty in a given sentence only if some features of its reference can be retrieved from other parts of the sentence. In a language like Syrian, the subject of a finite clause may be null, because the agreement marking on a finite verb is sufficiently rich to determine the reference of a null subject.<sup>6</sup>

Syrian also permits the subject to appear after the verb and its complements freely, as illustrated by the following:

- (17) a. Fayṣal      ḥaka              ma9      Reem  
           Faysal    speak3SGmpast with    Reem  
           'Faysal spoke to Reem'
- b. ḥaka                      ma9      Reem    Fayṣal  
           speak3SGmpast    with    Reem    Faysal

A last, equally important feature of the language, involves the \*[that-trace] phenomenon, where an overt complementizer does not prevent subject extraction. The following illustrates:

- (18) meen<sub>i</sub>    bitṣan              (lli)    e<sub>i</sub>    saraq              s-səyyarah  
           who    think2SGmpres    that    steal3SGmpast    the-car  
           'Who do you think (that) stole the car?'

let's now look at how the person/number properties on a finite verb in Syrian allow the occurrence of pro as the subject of finite clauses. Consider the following set of examples in which a past tense finite verb in Syrian copies the person/number inflections:

- (19) a. ?ana wʃəl-ət mbareḥ ('I arrived yesterday')
- b.(i) ?ənti wʃəl-ti mbareḥ ('You [sg.f.] arrived yesterday')
- (ii) ?ənta wʃəl-t mbareḥ ('You [sg.m.] arrived yesterday')
- c.(i) huwweh wəʃəl mbareḥ ('He arrived yesterday')
- (ii) ḥəyyeh wəʃl-et mbareḥ ('She arrived yesterday')
- d. nəhna wʃəl-na mbareḥ ('We arrived yesterday')
- e. ?əntu wʃəl-tu mbareḥ ('You [pl.] arrived yesterday')
- f. ḥənnəh wəʃl-u mbareḥ ('They arrived yesterday')

The underlined subject in each of the examples above is a definite pronoun used emphatically; and the verbs involved conform in number and person to their corresponding subject pronouns. That is, the number and person of the subject triggers the type of inflection a given verb allows.

pro can freely appear as the subject of finite clauses in Syrian. Consider the following examples corresponding to (19) above:

- (20) a. pro wʃəl-ət mbareḥ ('I arrived yesterday')
- b.(i) pro wʃəl-ti mbareḥ ('You [sg.f.] arrived yesterday')
- (ii) pro wʃəl-t mbareḥ ('You [sg.m.] arrived yesterday')
- c.(i) pro wəʃəl mbareḥ ('He arrived yesterday')
- (ii) pro wəʃl-et mbareḥ ('She arrived yesterday')
- d. pro wʃəl-na mbareḥ ('We arrived yesterday')





c. 1-bənt    lli    pro                    ʃaf-a  
          the-girl    that                    see3SGmpast-3SGf  
          'The girl who (he) saw'

Furthermore, Null Subjects in Syrian are also allowed in a variety of constructions where person/number marking is not involved, thus requiring identification in some other way. For example, expletive subjects can often be phonologically unrealized without the requirement for the presence of agreement inflections on the verb (22a) or adjective in the subjectless verbless clause (22b):

- (22) a. pro    yəʒhar            ənnu            Kamal            mərɗan  
              seem3SGpres    that            Kamal            ill  
              '(It) seems    that Kamal (is) ill'
- b. pro    ?aḥsan    la-k            xalles            bakkeer  
              better    to-2SGm    finish2SGmpres    early  
              '(It) is better for you to finish early'

The examples in (22) suggest that agreement is not necessary.

The data we have considered so far highlights the richness of the person/number morphology of the licenser of pro - i.e. the licenser is a fundamental factor in deciding whether or not pro can be treated as a definite pronoun. In other words, like Italian and many other NSLs, wherever pro is an argument, not an expletive, we need associated agreement in Syrian. On the whole, pro is grammatically identified via the relevant agreement inflections on the licenser concerned. The assumption that agreement marking in Syrian allows us to have a pro subject within a finite clause arises from the fact that we

cannot have an argument pro in verbless clauses because it requires agreement. The following demonstrate:

- (23) a. huwweh      tə9ban  
           he            tired  
           'He (is) tired'
- b. \*pro        tə9ban  
                       tired
- c. huwweh    kan        tə9ban  
           he        be-past    tired  
           'He was tired'
- d. pro        kan        tə9ban  
                       be-past    tired  
           '(He) was tired'

But, we can have an expletive pro (22b) because it does not require local identification by AGR. The exception arises when it seems that we have an extraposed clause. In this case, the EC is an expletive pro associated with a postverbal clause.

Given GB assumptions, unlike PRO, pro occupies positions where it can be both governed and Case-marked. In other words, pro cannot occur in Caseless and ungoverned positions. Consider the following example:

- (24) 9ali        baddu        [CP e [IP pro    tmat̤ter]]  
           Ali        want3SGmpres                    rain3SGpres  
           Lit. 'Ali wants it to rain'

Since the subordinate verb is finite, pro is governed by AGR. Thus, pro here is in a governed and Case-marked position. Rizzi (1986:546), quoted by Radford (1988c:32), assumes pro to be

formally licensed via Case-marking by a 'designated head'. Or as Radford put it:

- (25) pro is licensed only if Case-marked by an appropriate head

Following Rizzi (ibid), Radford (ibid) further suggests that languages vary with respect to the types of head category by means of which pro can be licensed. For example, in Syrian, pro is governed and Case-marked by a finite I containing AGR, a transitive verb hosting a clitic, a noun hosting a clitic, or a preposition hosting a clitic (in Chapter Four, we will discuss other positions associated with clitics), as illustrated below:

- (26) a. pro darboo-na pro

hit3plpast-1pl

'They hit us'

- b. pro šaf-a pro

see3SGmpast-3SGf

'He saw her'

pro in Syrian can also be licensed by clitics attached to Nouns:

- (27) xəuf-a pro m l-9atəm

fear-3SGf from the-dark

'Her fear of the dark'

What is more, pro in Syrian can be licensed by a 'Case-assigning' preposition. Consider the following example:

- (28) mu saħəl təħki ma9-u pro

not easy talk2SGpres with-3SGm

'It is not easy to talk with him'

What this implies is that the licensors for pro in Syrian are I, the clitic attached to V, the clitic attached to N, and the clitic attached to P. In other words, the combination of Head+Clitic acts as a licenser for pro in Syrian. That is, certain head categories license the presence of pro in certain positions of a given language.

### 3.4. Summary

In this chapter, we looked at Subjectless Finite Clauses. We began by introducing some of the basic characteristics of NSLs. Then we reviewed two positions - Chomsky's (1981) Lectures-position and Chomsky's (1982) Concepts & Consequences-position - on the nature of the element occupying subject position in NSLs, noting that it is PRO in the former, whereas pro in the latter. In 3.3., we focused on Syrian as an NSL, arguing that the EC in subjectless finite clauses is pro, and showing the role agreement plays in the appearance of the EC concerned.

## NOTES TO CHAPTER THREE

1. Radford (1988c:37, fn. 11) criticizes the term 'pro-drop language' for being confusing. He observes that its replacement by 'null subject language' is not viable either, since a variety of languages permit pro to appear both in subject and object positions. Radford also notes that the term 'null argument language' (argument being a covert term for subject and complement) does not hold either because it does not draw the line between pro and PRO.

2. Chomsky (1981:65) proposes this principle to account for the contrast between (i) and (ii):

(i) John<sub>i</sub> prefers [PRO<sub>i</sub> going to the movies alone]

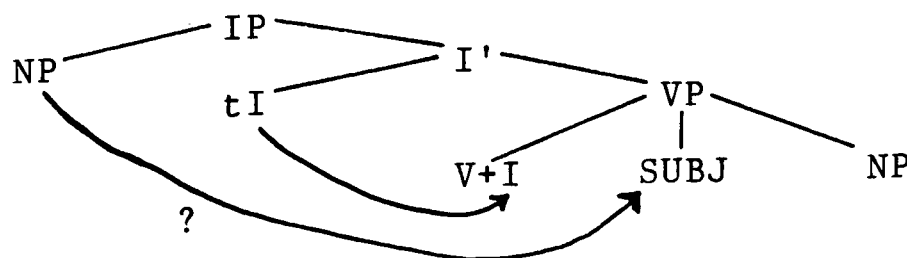
(ii)\*John<sub>i</sub> prefers [his<sub>i</sub> going to the movies alone]

Bouchard (1985:474-475) contests this principle by employing what he labels '**the Elsewhere Principle**', according to which a pronoun should not be used in a position where an anaphor is possible in that position. For him, this principle accounts for the state of affairs in the examples given below, and in the examples above if PRO is an anaphor:

(iii) [PRO<sub>i</sub>/his<sub>i</sub> going to the movies] always relaxes John<sub>i</sub>

(iv) [John<sub>i</sub> thinks that [PRO<sub>i</sub>/his<sub>i</sub> going to the movies every week] would be fun

3. Shlonsky (1989:105) argues that INFL LOWERING to V is not appropriate for VS0 sentences. For him, in order for the subject to appear between the verb and its complements, it would have to be moved down into a position inside VP. Given the PrPr and Case assignment, this would leave an array of problems in its way - hence the undesirability of the structure given below:



4. Borer (1986,1989) highlights an important observation in Hebrew to the effect that thematic null subjects are not allowed in the **present** tense clauses. For her (1989:95), present tense AGR in Hebrew is identical to tensed AGR in English: **"it is not sufficiently rich, and hence it cannot I-identify pro"**. However, in the **past** or **future** tenses, it is assumed that agreement is rich enough to trigger identification -i.e. it allows thematic subjects to be null, as illustrated in the following examples:

(i) ?ani ?axalti/?oxal ?et ha-banana  
 I ate / will-eat-SG ACC the-banana  
 'I ate/will eat the banana'

(ii)\*?ani ?oxelet ?et ha-banana  
 I eat ACC the-banana

Jaeggli & Safir (1989:37) explains the ungrammaticality of examples like (ii) on the basis that the present tense is **'defective in person marking'**.

5. Languages like Japanese, Chinese, and Korean call the notion of 'richness' into question. These show no person-number inflection. Yet, they allow null thematic subjects as well as null expletive ones. However, Raposo (1989:288) observes that despite the availability of the unique inflectional paradigm, null subjects are prohibited in Portuguese inflected infinitive constructions. In other words, rich agreement seems to be neither necessary nor sufficient:

(i)\*Eu vi [pro a roubar(em) o automovel]  
 I saw pro stealing the car  
 (ii) Eu vi [pro a roubarem o automovel]  
 I saw pro to-steal-Agr the car

6. As noted in the text, null subject languages have rich verb morphology which makes the missing subject recoverable. For discussion of a wide range of languages, see Jaeggli & Safir (1989).

## CHAPTER FOUR

### CLITIC CONSTRUCTIONS

#### 4.0. Introduction

The main focus of this chapter is to highlight the important role clitics play in Syrian, their behaviour in NPs, PPs, and clauses, and their relevance to a discussion of empty categories.

The chapter is organized as follows. In section 4.1., we present the basic data. In 4.1.1., we highlight two analyses, namely (i) **A movement process**, and (ii) **An agreement analysis**. In 4.1.2., we give objections to the movement analysis. We present in 4.1.3. some further data involving what we will call '**prepositional clitic doubling**'. Our next step will involve a consideration of the theoretical implications of clitic structures. We will be arguing that '**Kayne's Generalization**' (KG) is untenable, and hence that Borer's (1984) '**Case absorption**' analysis (BA), which assumes the correctness of KG, is also untenable. In other words, the former is a theoretical proposal and the latter a description of the (alleged) facts. Then, we will be considering Lyons' approach (1990) as an alternative analysis.

#### 4.1. The basic data

We can summarize the basic data fairly briefly. We can begin by noting that there are situations in which we cannot replace a non-pronominal NP by a pronoun. We can first illustrate this with verbs:

- (1) a. Kamal bas Layla mbareh  
           Kamal kiss3SGmpast Layla yesterday  
           'Kamal kissed Layla yesterday'
- b.\*Kamal bas hayyeh mbareh  
           Kamal kiss3SGmpast she yesterday
- c. Kamal bas-a mbareh  
           kamal kiss3SGmpast-3SGf yesterday  
           'Kamal kissed her yesterday'

As is evident from the data above, with verbs a clitic appears instead of a pronoun as an object.

We can now demonstrate with nouns (2) and prepositions (3):

- (2) a. lə9bet Rami  
           toy Rami  
           'Rami's toy'
- b.\*lə9bet huwweh  
           toy he
- c. lə9əbt-u  
           toy-3SGm  
           'His toy'
- (3) a. mən l-wlad  
           from the-boys  
           'from the boys'
- b.\*mən h nneh  
           from they
- c. menn-on  
           from-3pl  
           'From them'



The point to note here is that with nouns a clitic appears instead of a pronoun as a possessor and that with prepositions a clitic appears instead of a pronoun as an object.

We can summarize the data above as follows:

- (4) i. X NP [-PRO]  
 ii.\*X NP [+PRO]  
 iii. X CL

Given the pattern in (4), (i) clitics appear instead of a pronominal object in subject-initial clauses. (ii) clitics appear instead of a pronominal object of a preposition. And (iii) clitics appear instead of a pronominal 'possessor' in NPs.

Clitics in Syrian have the following basic forms conforming to the personal pronouns involved in the chart below:

(5)	<u>PERSONAL PRONOUNS</u>	<u>V+CL</u>	<u>N+CL</u>	<u>P+CL</u>
	?ana (1SG) 'I'	-ni	-i	-ni
	nəḥna (1pl) 'we'	-na	-na	-na
	?ənta (2SGm) 'you'	-k	-k	-k/ak
	?ənti (2SGf) 'you'	-ki/ek	-ek	-ek
	?əntu (2pl) 'you'	-kon	-kon	-kon
	ḥanneh (3pl) 'they'	-on	-on	-on
	huwweh (3SGm) 'he'	-u	-u	-u
	ḥəyyeh (3SGf) 'she'	-a	-a	-a

#### 4.1.1. Movement and Agreement analyses

From this data alone, two analyses are plausible:

(i) A **movement** analysis: one in which the clitic is the result of a process which turns a pronoun into a suffix (comparable to the process that turns an auxiliary into a suffix in English, which is obligatory). The following illustrate:

(6) a. He is a genius

b. He's a genius

This suggests that English contracted auxiliaries start out as independent auxiliaries in the syntax, and are turned into suffixes in the phonological component of the grammar.

A similar analysis was developed for French by Kayne (1975) and for Serbo-Croat by Browne (1974). Spencer (1991:384) presents the distribution of clitics in these languages by claiming that they function as objects. In other words, they start out as objects in the D-structure, and then are moved by a movement operation to the position which they occupy superficially. We can illustrate the point by offering the following examples from French and Syrian, assuming that the (b) examples results from the (a) ones:

(7) a. Jean voit le

b. Jean [le<sub>i</sub> voit] e<sub>i</sub>

John him see

'John sees him'

(8) a. Kamal šaf huwweh

b. Kamal [šaf-u<sub>i</sub>] e<sub>i</sub>

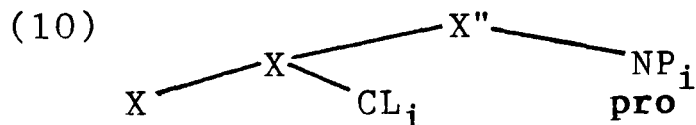
Kamal see3SGmpast-3SGm

'Kamal saw him'

(ii) An **agreement** analysis: one in which the clitic is a kind of agreement marker associated with an empty pronoun -i.e. the clitic agrees with an empty argument NP. This is an assumption which Borer (1984) and Jaeggli (1986) explicitly adopt.

- (9) a. Kamal            štarah-on            mbareḥ  
           Kamal    buy3SGmpast-3pl            yesterday  
           'Kamal bought them yesterday'
- b. mfateeh-u    kanu            b            s-səyyarah  
           keys-3SGm be3plpast    in    the-car  
           'His keys were in the car'
- c. mən-ni                    ?axdu                    l-maṣari  
           from-1SG            take3plpast                    the-money  
           '(It) (was) from me that they took the money'

The clitics on the verb, noun, and preposition in (9) reflect agreement in person, number, and gender. We will have the same sort of structure as on the movement analysis, but it will not be transformationally derived.



#### 4.1.2. Objections to the Movement Analysis

Examples which show a wh-phrase with a clitic appear to be a problem for the first analysis.

- (11) a. meen    lli                    ḥəbbeit-a?  
           who    that    like2SGmpast-3SGf  
           'Who did you like?'
- b. meen    lli            ?ax-u                    ḥəreb                    m    s-səžən?  
           who    that brother-3SGm flee3SGmpast    from    prison  
           'Whose brother fled from prison?'
- c. meen (lli)            raḥ                    ma9-u            9a    l-mubarah?  
           who    that    go3SGmpast    with-3SGm            on    the-match  
           'Who did he go to the match with?'

The clitics involved in the examples above are obligatory - hence the ungrammaticality of the following:

- (12) a.\*meen lli həbbeit?  
           who that like2SGmpast  
       b.\*meen lli ?ax həreb m s-səžən?  
           who that brother flee3SGmpast from prison  
       c.\*meen (lli) rah ma9 9a l-mubarah?  
           who that go3SGmpast with on the-match

The Wh-phrase has apparently originated in the complement position from which the pronoun has started out, and thus has two elements which occupy the same position simultaneously. Lyons (1990:53, fn.2) notes that the rejection of the movement analysis of cliticization is triggered by the facts of doubling, since it seems implausible for a clitic to have moved from an already occupied position. But, examples like (11a-c) are not a problem if one assumes that wh-movement can leave behind a pronoun (which can then be turned into a suffix), e.g. Engdahl (1985).

More important than examples where a wh-phrase is associated with a clitic are examples of the following form (which might be called cases of '**simple clitic doubling**')

- (13) X CL NP [+PRO]

A pattern like (13) poses a real objection to the movement analysis in the sense that clitics in Syrian cannot start out as independent pronouns. The clitics cannot be suffixed pronouns if they can occur with pronouns.

Clitics in Syrian are attached to a preceding word with the

possibility of an independent pronoun being present, as the following examples demonstrate:

- (14) a.            za9až<sup>ŷ</sup>-ni        ?ana  
                  annoy3SGmpast-1SG        I  
                  '(He) annoyed me'
- b.   mfateeh<sub>h</sub>-ak        ?anta  
                  keys-2SGm            you  
                  'Your keys'
- c.   mōnn-a            həyyeh  
                  from-3SGf            she  
                  'From her'

As we have shown earlier, such examples can appear with no independent pronouns - i.e. when there is no emphasis on the object - and will consequently involve an empty category on GB assumptions. The situation contrasts with the situation with clitic auxiliaries - hence (15) is ruled out.

- (15) \*He's is a genius

To illustrate the pattern in (13), here is some further data:

- (16)    Kamal            šaf-a        həyyeh        mbareh<sub>h</sub>  
           Kamal see3SGmpast-3SGf    she        yesterday  
           'kamal saw her yesterday'

As we have already seen, in subject-initial clauses we cannot replace a non-pronominal object NP by a pronoun. The point to stress here is that we can have an independent pronoun with a clitic, and the pronoun can be in an ordinary NP position - i.e. it cannot be a case of right dislocation.

Still highlighting the sequence in (13), we can now consider further examples involving clitics in **noun+'possessor'** NPs. We have already seen some of this data in (2):

- (17) xəuf-u      huwweh   m      s-sbaḥa  
           fear-3SGm    he    from the-swimming  
                       'His fear of swimming'

As we said earlier, with nouns a clitic appears instead of a pronoun as a possessor.

Let's finally look at further examples which involve clitics associated with prepositions:

- (18) mən-n-u      huwweh      9rəfna      l-qəṣṣaḥ  
           from-3SGm    he      knowlpast    the-story  
                       '((It) (was) from him (that) we knew the story'

Again, with prepositions a clitic appears instead of a pronoun as an object.

The examples we have considered so far provide a strong argument against the movement analysis and in favour of the agreement analysis. In other words, they show the untenability of the movement analysis for handling the behaviour of clitics in the combinations concerned, and suggest that the agreement analysis is a more satisfactory alternative.

This gives rise to the following question: **what is the nature of the empty category?** It cannot be a trace if there is a lack of a movement process. It must be either PRO or pro. But, it cannot be PRO because it is a position which is governed. The only available option is that it is a base-generated empty category -i.e. pro.

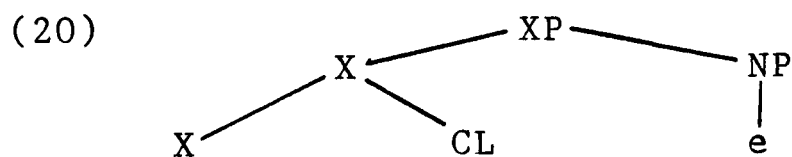
It is in fact easy to demonstrate that the clitic-e combination behaves as a non-anaphoric pronominal in Binding Theory terms:<sup>1</sup>

- (19) a. \*Raneem<sub>i</sub>                      šafət-a                      e<sub>i</sub>                      mbareḥ  
                  Raneem                      see3SGfpast-3SGf                      yesterday  
                  'Raneem saw her yesterday'
- b. Raneem<sub>i</sub>                      bitṣən                      (ənnu)                      šafuww-a                      e<sub>i</sub>                      mbareḥ  
                  Raneem think3SGfpres that see3plpast-3SGf yesterday  
                  'Raneem thinks they saw her yesterday'
- c. r-rəžžal lli                      laqa                      s-sa9a<sub>i</sub>                      xabbah-a  
                  the-man that find3SGmpast watch                      hide3SGmpast-3SGf  
                  e<sub>i</sub>                      fawran  
                  at once  
                  'The man who found the watch hid it immediately'
- d. ba9ət-on                      e  
                  sell3SGf-3pl  
                  '(She) sold them'

In (19a), the empty object e is bound by Raneem - and hence is ruled out as ungrammatical, as it violates condition B of the binding theory - showing that it does not behave as an anaphor. In (19b), e is bound by an argument occupying a position outside its governing category (which is the immediate clause), satisfying condition B by being free in its governing category. And in (19c), it is coindexed with a non-c-commanding argument - hence not bound - indicating that it is not an anaphor. In (19d), e does not have an antecedent in the sentence, again showing that it is not an anaphor - thus supporting our

assumption that the EC involved is pro.

Assuming now that the agreement analysis is the right one, we have, as shown earlier, various combinations of a lexical category and clitic followed by a pronoun, which is often but not always empty. An important question here is: **What is the relation between the host-clitic and the EC?** One might suppose that the pronoun is always a sister of the combination of lexical category and clitic, as represented in the structure below:



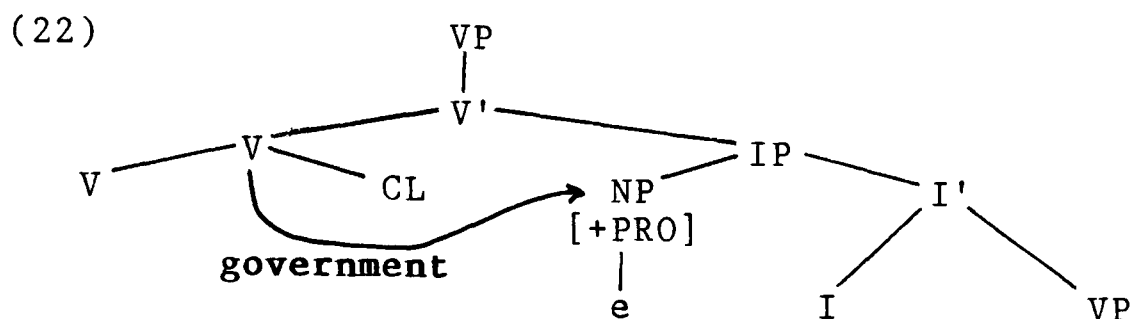
where X stands for V, N, or P. However, examples in which the clitic is associated with the subject of a verbless clause suggest that this is not the case. Consider the following examples:

- (21) a. mnə9təber            Kamal    ġabi  
          consider1plpres   Kamal    fool  
          '(We) consider Kamal a fool'
- b.        mnə9təbr-u        (huwweh)    ġabi  
          consider1plpres-3SGm    he            fool  
          '(We) consider him a fool'
- c.\*mnə9təber            huwweh    ġabi  
          consider1plpres        he            fool

In this situation, the obvious suggestion is that the pronoun, though optionally null, must be governed by the combination of a lexical category and clitic. This is essentially Borer's



(1984) position, as noted in Chapter Two. The following representation illustrates this:



Thus, clitics in Syrian appear when there is a lexical category governing an immediately following pronoun, which may be empty and will be if there is no emphasis. Hence, the relation between a pronoun and the combination of a lexical category and clitic is one of government rather than sisterhood.

#### 4.1.3. Prepositional Clitic Doubling

Having dealt with all this, we can go on to consider the following pattern of data (We might label the grammatical examples as instances of 'prepositional clitic doubling'):<sup>2</sup>

- (23) i.\* X CL NP [-PRO]  
 ii. X CL la NP [-PRO]

We can illustrate the pattern in (23) first with verbs:

- (24) a.\*Kamal dayya9-on l-mfateeh mbareh  
 Kamal lose3SGmpast-3pl the-keys yesterday  
 b. Kamal dayya9-on la l-mfateeh mbareh  
 kamal lose3SGmpast-3pl to the-keys yesterday  
 'Kamal lost the keys yesterday'

(24a) is ruled out because we cannot have the combination of a lexical category and clitic, which is followed by a non-pronominal NP. The grammatical example in (24b) suggests that

we can only have the combination concerned to be followed by a non-pronominal NP if the preposition la is present.

The pattern listed in (23) can also apply to examples involving clitics in **noun+'possessor'** NPs:

- (25) a.\*beit-u      l-muḥami      biṭṭəl      9a      l-wadi  
          house-his the-lawyer look3SGpres on the-valley  
       b. beit-u      la      l-muḥami      biṭṭəl      9a      l-wadi  
          house-3SGm to the-lawyer look3SGpres on the-valley  
          'The lawyer's house overlooks the valley'

(23i) rules out (25a) for the same reason stated above. (25b) is grammatical on the basis that the preposition sanctions the [lexical category+clitic] combination to co-occur with a non-pronominal NP.

What we need to point out here is that we can have prepositional clitic doubling where the noun has a **complement**.

- (26) a.\*ktab-u      Kamal      9an      l-ḥarəb  
          book-3SGm Kamal about the-war  
       b. ktab-u      la      Kamal      9an      l-ḥarəb  
          book-3SGm to Kamal about the-war  
          'Kamal's book about war'

Again, (26a) is ruled out because we cannot have [lexical category+clitic] combinations followed by non-pronominal NPs. It is the presence of the preposition that makes (26b) grammatical. We will see the implications of such data later in this chapter.

Moreover, the sequence in (23) extends to examples which involve clitics associated with prepositions:

- (27) a. \*safaɾət      ma9-u      Kamil 9a    š-šam      mbareh  
           travellSGpast with-3SGm Kamil on Damascus yesterday  
       b.   safaɾət      ma9-u      la Kamil 9a    š-šam      mbareh  
           travellSGpast with-3SGm to Kamil on Damascus yesterday  
           '(I) travelled with Kamil to Damascus yesterday'

Likewise, (27a) is ruled out. Instead, we have in (27b) a clitic which is associated with a preposition and the combination is followed by the preposition la together with an immediately following non-pronominal NP.

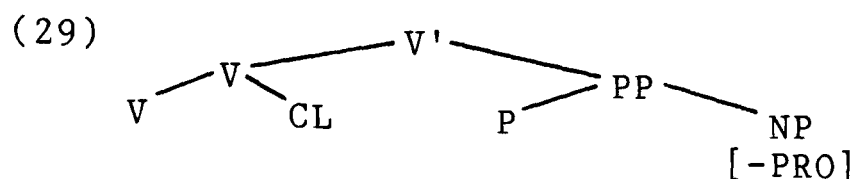
It should be noted here that examples involving a 'bare' preposition followed by an independent pronoun are impossible:

- (28) a.\*saʔluww-a      la    həyyeh      9an      balad-a  
           ask3plpast-3SGf    to    she      about    country-3SGf  
           'They asked her about her country'  
       b.\*9amm-u      la    huwweh      t̤tasal      mbareh  
           uncle-3SGm to      he      telephone3SGmpast yesterday  
           'His uncle telephoned yesterday'  
       c.\*rəhna      ma9-on      la    hənneh      9a    n-nadi    mbareh  
           golplpast with-3pl to    they      on the-club yesterday  
           'We went with them to the club yesterday'

Thus, in prepositional clitic doubling, clitics appear in addition to a non-pronominal NP providing the preposition la is inserted. As we will see later in this Chapter, this looks very much like the pattern that Borer (1984) and Jaeggli (1986) focus on.

We can argue that the host+clitic does not govern the non-pronominal NP in the cases of prepositional clitic doubling.

Consider the following structure:



Here, the combination of a lexical category and clitic cannot govern an NP[-PRO], given that PP is a barrier, and hence blocks government. In other words, it can only govern an NP if it is [+PRO].

Drawing on Shlonsky (1989:62), Egyptian Arabic - like Modern Standard Arabic - differs slightly from Syrian because of it not having the preposition la - hence there is the impossibility of clitic doubling, as illustrated in the following example:

- (30) \*Mona      šaafit-hu<sub>i</sub>      il-walad  
           Mona          saw-him      the-boy

We can now consider some of the implications for Kayne's generalization and Borer's Case absorption analysis, and Lyons' approach of the Syrian data we have looked at so far.

## 4.2. Theoretical Implications

### 4.2.1. Kayne's Generalization & Borer's Analysis

Kayne's observational generalization states that doubling is only possible if an NP is preceded by a preposition. This is often referred to in the GB literature as Kayne's Generalization because it was first made by Kayne:

- (31) **A lexical NP may be doubled by a clitic only  
       if it is preceded by a preposition**

Here is an example of the sort of data standardly cited in support of the generalization, taken from Spencer (1991:386):

- (32) Lo vimos a Juan  
 cl we-saw to Juan  
 'We saw Juan'

The clitic lo and the complement a Juan are coreferential - and hence must be coindexed. To illustrate (31), here are some further Syrian examples:

- (33) a. ?axadnah-on la l-wlad 9a l-masrah mbareh  
 take1plpast-3pl to the-boys on the-theatre yesterday  
 'We took the boys to the theatre yesterday'  
 b. sarqu sayyart-u la Malek mbareh l-masa  
 steal3plpast car-3SGm to Malek yesterday evening  
 'They stole Malek's car yesterday evening'  
 c. raḥet ma9-u la Kamil 9a l-masbah ṣ-ṣabəḥ  
 go3SGfpast with-3SGm to Kamil on the-pool morning  
 'She went with Kamil to the swimming pool this morning'

In the constructions above, the clitic doubles the direct object, taking into account that the nonpronominal object NP is always associated with a preposition - i.e. la. The absence of the preposition concerned would lead to generating ungrammatical examples such as the ones given below:

- (34) a. \*?axadnah-on l-wlad 9a l-masrah mbareh  
 take1plpast-3pl the-boys on the-theatre yesterday  
 b. \*sarqu sayyart-u Malek mbareh  
 steal3plpast car-3SGm Malek yesterday  
 'they stole Malek's car yesterday'  
 c. \*raḥet ma9-u Kamil 9a l-masbah ṣ-ṣabəḥ  
 go3SGfpast with-3SGm Kamil on the-pool morning

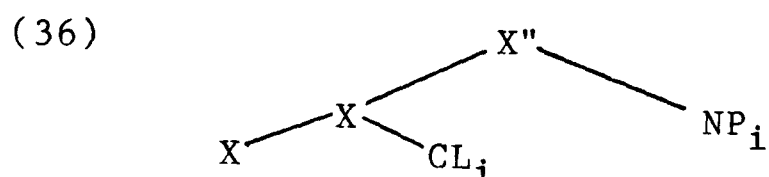
The Syrian data suggests that KG is too strong. One way to criticize it is to provide some counterexamples, where we have clitic doubling without the need for a preposition to immediately precede the doubled NP. To clarify this, consider the following examples:

- (35) a.       šəft-u      huwweh   sayeq   səyyara   mbareḥ  
               seelSGpast-3SGm   he   driving   car   yesterday  
               'I saw him driving a car yesterday'
- b. dammru            beit-na    nəḥna   1-ʔəsboo9   1-maḍi  
               destroy3plpast house-1pl   we   the-week   the-past  
               'They destroyed our house last week'
- c. ʔaxdu            1-ma9loomat    mənn-u   huwweh mbareḥ  
               take3plpast the-information from-3SGm he   yesterday  
               'they took the information from him yesterday'

There are problems with Kayne's approach in the sense that it fails to predict the grammaticality of the sentences in (35). Again, the examples in (35) suggest that Kayne's generalization is false on the basis that, as we have seen, we have doubling without a preposition - providing the doubled NP is [+pronominal].

Borer (1984:35), inspired by doubling phenomena in the Romance languages (River Plate Spanish, Romanian) and in Modern Hebrew which conform to KG, and attempting to explain the (alleged) facts of KG, proposes an analysis of clitics in which the clitic governs a coindexed category. She further assumes that the clitic is a morphological realization of the Case-assigning features of the verb or noun - hence Case is

spelled out as a clitic, making the point that clitics 'absorb' Case -i.e. strip the doubled NP of its Case. For her, clitics are base-generated in clitic position and coindexed with the empty argument position:



where X stands for V, N, or P. The clitic can either precede or follow the head it is associated with. The NP in (36) need not be a daughter of X'' if the requirement is government. What is important for Borer is that the NP can be either empty or lexical. Consider Borer's (ibid:33-4) own examples:<sup>3</sup>

- (37) a. *beit-o 'omed 'al ha-giv'a*  
house-his stands on the-hill  
'his house stands on the hill'
- b. *beit-o<sub>i</sub> šel ha-more<sub>i</sub> 'omed 'al ha-giv'a*  
house-his of the-teacher stands on the-hill  
'the teacher's house stands on the hill'

She points out that in (37a), the possessor is expressed once, by the possessive clitic attached to the head noun. However, in a construction like (37b), a possessor is expressed twice, by the possessive clitic o attached to the head noun of the NP beit, and by the NP ha-more. Thus, we have a clitic and a following non-pronominal NP.

Regarding (37b), moreover, the presence of the preposition šel<sup>4</sup> before the doubled NP is necessary so that Case can be assigned to the coindexed NP<sub>i</sub>. The absence of šel would lead to

the ungrammaticality of the following example, taken from Borer (ibid:49):

- (38) \* *beit-a<sub>i</sub>      ha-mora<sub>i</sub>*  
          house-her   the-teacher

Since the Case filter requires that all NPs with phonetic content have Case of some sort, Borer accounts for the impossibility of having any lexical element in the NP<sub>i</sub> position in (36). This is why the absence of this 'dummy' Case-marker makes (38) ungrammatical. For her, a schematic representation like (39) is ruled out by the Case filter.

- (39) \* **X + CL    NP[+pronominal]**

But, the Syrian data suggests that Borer's approach is untenable since we have clitic doubling in all the [X+CL] combinations we have considered. Here are some further examples, where the doubled NP is an independent pronoun - i.e. [+pronominal]:

- (40) a. *leiš      saʔloo-k      ʔənta 9an    sabab    l-ḥades*  
          why   ask3plpast-2SGm   you about cause the-accident  
          'why did they ask you about the cause of the accident'
- b. *səyyart-a      həyyeh      t9aṭṭlet      mbareḥ*  
          car-3SGf      she    breakdown3SGfpast yesterday  
          'her car broke down yesterday'
- c. *rəḥna      9a    d-ḍei9a ma9-on    hənneh ššahər    l-maḍi*  
          golplpast   on village with-3pl they    month the-past  
          'we went with them to the village last month'

The striking point about the data in (40) is that, as in the earlier data, the complement pronominal NPs are not preceded by



any preposition, nor does there seem to be any Case-assigning device other than the verb in (40a), the noun in the possessive construction (40b), and the preposition in (40c). Hence, we seem to have direct evidence against the Case absorption account of clitic doubling. On the whole, simple clitic doubling suggests that the generalization is not true of Syrian, and the analysis, therefore, is not a viable one.

We can now consider whether Borer's analysis is really untenable -i.e. whether there is any way of reconciling the Syrian data with it. One possibility that one might consider is that pronouns (for some reason), unlike non-pronominal NPs, do not need to be Case-marked - i.e. they appear in various positions where ordinary NPs do not.

**What predictions will this make?** One false prediction is that pronouns, unlike ordinary NPs, should be able to appear in controlled subject positions:

- (41) \*Kamal      ḥawal      huwweh/Talal    yḥəb      Layla  
          Kamal try3SGmpast    he / Talal like3SGmpres Layla  
          \*'Kamal tried he/Talal to like Layla'

Under this prediction, pronominal NPs should be possible in a controlled subject position - hence the falsity.

It is generally assumed that Case-assignment requires adjacency. It is because of this that the proposal makes the prediction that pronouns, unlike ordinary NPs, need not be adjacent to the associated head. Consider the following examples:

(42) a.\*Hasan šaf mbareḥ Talal

Hasan see3SGmpast yesterday Talal

\*'Hasan saw yesterday Talal'

b.\*Hasan šaf mbareḥ huwweh

Hasan see3SGmpast yesterday he

\*'Hasan saw yesterday him'

(42a-b) are ruled out in the sense that neither Talal nor huwweh is adjacent to the head which assigns Case to them. That is, (42a-b) are ruled out because we need adjacency for Case-assignment. We can conclude that the proposal is not viable.

Another possible analysis that one might consider is that apparent independent pronouns are really another type of clitic - i.e. we would expect them not to require Case.

Coordination, however, argues against calling independent pronouns associated with clitics as additional clitics. The following illustrate the point:

(43) a. šəfət Fayṣal w Naṣer

see1SGpast Faysal and Naser

'I saw Faysal and Naser'

b. huwweh w Naṣer šafoo-ni

he and Naser see3plpast-1SG

'He and Naser saw me'

c. šəft-u huwweh w Naṣer

see1SGpast-3SGm he and Naser

d.\* šəft-u pro w Naṣer

see1SGpast-3SGm and Naser

'I saw him and Naser'

e.           šəft-u           ma9   Naṣer  
               seelSGpast-3SGm   with   Naser

'I saw him with Naser'

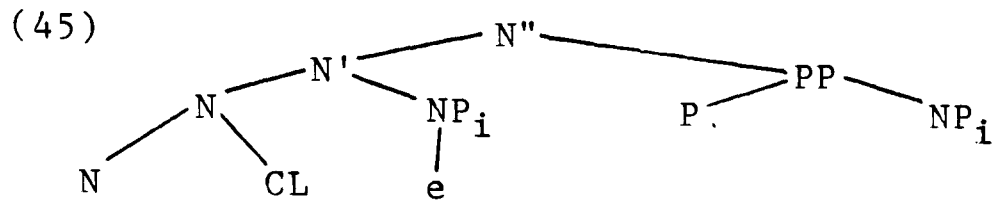
The presence of the independent pronoun in (43c) shows that the pronoun cannot be a clitic because it is conjoined with an ordinary NP. (43d) makes it clear that we cannot conjoin pro with a non-pronominal NP, thus showing a difference between pro and overt pronouns. We need the Syrian counterpart of English with in order for (43e) to be licit.

#### 4.2.2. Lyons' Analysis

But, perhaps KG and BA really are untenable (as Lyons (1990) argues)). Lyons rejects both KG & BA. For him, clitics do not absorb Case. He claims that clitics are agreement markers, comparable to subject-verb agreement. But, **what about the status of PPs considered in KG and BA?** He proposes that these are **adjuncts**. That is, the doubled phrase is a PP in an adjunct position, duplicating an empty argument pro. Given his account, the PP, then, is not in an argument position associated with the clitic. In support of his approach, he illustrates with Hebrew, among other languages. The example given below is taken from Borer (1984:49):

(44) beit-a    šel   ha-mora  
               house-her of   the-teacher  
               'The teacher's house'

For Lyons, a possessive NP like (44) has the following corresponding structure (ignoring details):



Here, the phrase šel ha-mora is an adjunct PP. The NP within PP is said to reinforce the empty NP.

Borsley (p.c.) has observed that Lyons' analysis of prepositional clitic doubling is not viable either. Consider the following data, with (46a) being repeated for convenience:

- (46) a. ktab-u    la    Kamal    9an    l-ħarəb  
           book-3SGm to    Kamal    about the-war  
           'Kamal's book about war'
- b. \*ktab-u    9an    l-ħarəb    la    Kamal  
           book-3SGm about the-war    to    Kamal

Data like (46) poses a problem for Lyons' analysis. The doubled phrase la Kamal in (46a) is not an adjunct, since it cannot follow a complement, as shown by the ungrammaticality of (46b).

Also relevant to the issue at hand are cases where we can have prepositional doubling with the verb taking a complement:

- (47) a. Rasha            nəṣət-on            la l-maṣari    b s-səyyara  
           Rasha forget3SGfpast-3pl to the-money in the-car  
           'Rasha left the money in the car'
- b. \*Rasha            nəṣət-on            b s-səyyara la l-maṣari  
           Rasha forget3SGfpast-3pl in the-car    to the-money

Again, the data in (47) poses a further problem for Lyons' account. If the doubled phrase la l-maṣari in (47a) is an adjunct, it should not have to precede a complement. Like (46b), the ungrammaticality of (47b) is triggered by the fact

that the doubled phrase must precede the other complement.

Thus far, we have considered the range of possibilities that exist in Syrian clitic constructions. If we say that clitics 'absorb' Case, we will rule out the structure in (23i), but we will also rule out simple clitic doubling unless we say that pronouns do not require Case. But, we have given two reasons for rejecting this. We have shown that this way of reconciling the Syrian data with BA is untenable. Hence, neither KG nor BA is borne out on the Syrian data. We have also shown that Lyons' approach is not viable either. However, we have not managed to suggest an alternative way of handling the data. This is an area that requires further research.

#### **4.3. Summary**

We focused in this Chapter on Clitic Constructions. We began by briefly summarizing the data, highlighting two analyses, giving objections to the movement analysis. Then, we presented some further data involving prepositional clitic doubling. Finally, we considered, in the light of KG and BA and Lyons' approach, some of the theoretical implications of clitic Constructions. We argued against KG and BA and Lyons' approach, but we did not propose any precise account of the data.

## NOTES TO CHAPTER FOUR

1. Borer (1984) calls clitic-*e* a 'discontinuous pronoun', in which the clitic provides person, number, gender and Case features and e marks the argument position. Aoun (1985) labels the EC associated with a clitic a non-A-anaphor -i.e. an anaphor bound from a non-argument position.

2. It is noted in Lyons (1990:50) that Berber does not have a prepositional object marker. Yet, it has doubling in PP. This is achieved via repeating the head preposition before the doubled NP:

- (i) zg-s           zg           teddart  
       from3s    from       house  
       'from the house'
- (ii) in-s          n           Munat  
       of3s        of          Munat  
       'of Munat', 'Munat's'

3. These are traditionally referred to as '**Construct States**'. For an extensive discussion of these constructions, see Borer (1984, Ch.2) and Ritter (1986, 1988), among others.

4. Shlonsky (1989:65) notes that unlike Egyptian Arabic (EA) and Lebanese Arabic, šel, the case saving device in Hebrew, has a limited distribution. It shows up only in NPs, never in PPs or VPs:

- (i) a. kaniti    et    sifr-o<sub>i</sub>   sel Dan<sub>i</sub>  
       I bought ACC book-his   of   Dan  
       b.\*dibarti 'im-o<sub>i</sub>   š<sub>i</sub>el Dan<sub>i</sub>   (cf. dibarti 'im Dan)  
       I spoke with-him of   Dan               I spoke with Dan  
       'I spoke with Dan'
- c.\*ra'aiti   oto<sub>i</sub>   š<sub>i</sub>el Dan           (cf. ra'aiti et Dan)  
       I saw       him   of   Dan               I saw   ACC   Dan  
       'I saw Dan'

## CHAPTER FIVE

### WH-MOVEMENT CONSTRUCTIONS

#### 5.0. Introduction

The main focus of this chapter is ECs in Wh-movement constructions - i.e. constructions which normally involve wh-movement- namely, **Wh-Questions, Relative Clauses, and Topicalization** sentences. Such a study essentially involves identifying the variety of positions ECs can be found in such constructions, and then examining in the light of this the theoretical questions that they raise. An important question is whether the empty categories are always Wh-traces, or sometimes empty resumptive pronouns (ERPs). As has been noted earlier, Wh-traces count as **R-expressions** and hence obey condition C of the binding theory.

This Chapter is organized as follows. Section 5.1. provides a survey of the basic data. Beginning with wh-questions, we firstly consider subject, object, and prepositional object ECs. Then, we look at Possessor ECs. Moving on to relative clauses, we also highlight subject, object, prepositional object ECs both in main and subordinate clauses, and possessor ECs as well. We conclude this survey with a brief look at topicalization sentences, looking again at possessor ECs. Section 5.2. is devoted to some of the issues that arise with respect to the data concerned. Specifically, questions related to the nature of the empty category and the requirement of clitics in such constructions are of particular interest to us.

## 5.1. The basic data

### 5.1.1. Wh-Questions

A notable feature of Wh-questions is that they involve a variety of positions in which empty categories can occur. The following examples involve **Subject** ECs:

- (1) a. meen (lli)        saraq                l-maṣari?  
          who    that    steal3SGmpast    the-money  
          'who stole the money?'
- b. meen (lli)        rəbeḥ                l-mubarah?  
          who    that    win3SGmpast        the-match  
          'who won the match?'

In (1), meen functions as the subject of a main clause. Hence, given GB assumptions, specifically the Subject Principle, we have an EC in subject position. The complementiser lli in these examples is optional.

It is useful to point out here that Syrian, among other languages (Norwegian, Bavarian, Modern Irish), allows overt complementisers to follow wh-elements. Rather than going into detail about this, we shall simply mention that in general, complementisers are optional in wh-questions with subject ECs.

We can now illustrate with examples involving **Object** ECs:

- (2) a. ?ayya    walad        tbannet        Layla?  
          which   boy    adopt3SGfpast    Layla  
          'which boy did Layla adopt?'
- b. ?ayya    walad        tbannet?  
          which   boy    adopt3SGfpast  
          'which boy did (she) adopt?'



c. ?ayya walad lli tbannat-u?  
 which boy that adopt3SGfpast-3SGm  
 'which boy did (she) adopt?'

The wh-phrase in (2) functions as the object of a verb - hence we have an empty category in object position. Examples (2a-b) involve neither complementisers nor clitics. (2c), however, involves both a complementiser and clitic - the complementiser lli being obligatory - hence the ungrammaticality of the following:

- (3) a.\*meen šəftuww-a?  
 who see2plpast-3SGf  
 'who did (you) see?'
- b.\*?ayya bənt šaf-a?  
 which girl see3SGmpast-3SGf  
 'which girl did (he) see?'
- c.\*?ayya ržal šəftuww-on?  
 which men see2plpast-3pl  
 'Which men did (you) see?'

What seems to be important here is that the clitic in (2c), which is realised on the main verb, is triggered by the presence of the complementiser lli - i.e. we can only have a clitic if we have the complementiser lli.

To indicate what is involved in object ECs more fully, let's consider some further ungrammatical combinations:

- (4) a.\*?ayya suwar lli harqet?  
 which pictures that burn3SGfpast  
 'Which pictures did (she) burn?'

b.\*?ayya kətoɓ lli ba9?

which books that sell3SGmpast

'Which books did (he) sell?'

What the data above clearly shows is that we cannot have a complementiser without a clitic.

To summarize the facts we have been discussing, the diagram given below will help facilitate identifying the wide range of combinations involved in object ECs:

(5)

	complementiser	no complementiser
clitic	✓	X
no clitic	X	✓

Let's consider some examples involving **Prepositional Object** ECs:<sup>1</sup>

(6) a. meen lli rkadəɓ ma9-u mbareh?

who that run2SGmpast with-3SGm yesterday

'Who did (you) run with yesterday?'

b. meen lli s?aləɓ 9ann-u mbareh?

who that ask2SGmpast about-3SGm yesterday

'Who did (you) ask about yesterday?'

In (6), meen functions as the object of a preposition - hence we have an empty category in prepositional object position. (6a) is just like (6b). What should be stressed is that the clitics on the prepositions concerned are obligatory - hence the ungrammaticality of the following:

- (7) a.\*meen lli rkadət ma9 mbareh?  
 who that run2SGmpast with yesterday  
 'Who did (you) run with yesterday?'
- b.\*meen lli s?alət 9an mbareh?  
 who that ask2SGmpast about yesterday  
 'Who did (you) ask about yesterday?'

The complementizer is also necessary - hence the ill-formedness of the following:

- (8) a.\*meen rkadət ma9-u mbareh?  
 who run2SGmpast with-3SGm yesterday  
 'Who did (you) run with yesterday?'
- b.\*meen s?alət 9ann-u mbareh?  
 who ask2SGmpast ~~about~~-3SGm yesterday  
 'Who did (you) ask about yesterday?'

As is evident from the data, the basic point to note about the examples considered so far is that they all involve an empty category of some form. In (1), for example, the EC is subject of a matrix clause; in (2) it is the object of a finite verb; and in (6) it is a matrix clause prepositional object. Other points that should be noted involve clitics and complementisers. In (1), we only have an EC with no associated clitic - the complementiser being optional. In (2), we can have both a complementizer and a clitic or neither. In (6), we have an EC associated with a clitic - the complementizer being obligatory. Thus, The situation with prepositional object ECs in (6) is much simpler than it is with object ECs in (2). Moreover, an important difference between the examples in (6)

and those in (2) is that in the former the clitic is obligatory - hence (7a-b) are ruled out.

The fact that a wh-phrase can be both an NP and a PP means that there are often two different wh-questions that are equivalent. (9) illustrates this.

- (9) a. ?ayya rəžžal lli hkeit ma9-u?  
           which man that talk2SGmpast with-3SGm  
           'Which man did (you) talk to?'  
       b. ma9 ?ayya rəžžal hkeit?  
           with which man talk2SGmpast

The following provide a further illustration where we have two options: either the whole wh-PP or the wh-NP only can appear in clause-initial position:

- (10) a. 9a meen dəhek Kamal?  
           on who laugh3SGmpast Kamal  
           'At whom did Kamal laugh?'  
       b. meen lli dəhek Kamal 9layy-on?  
           who that laugh3SGmpast Kamal on-3pl  
           'Who did Kamal laugh at?'

The preposition in (10b) hosts a clitic. Again, the complementizer lli is obligatory.

Still highlighting the notable feature of wh-questions, the subjects of wh-phrases can be a variety of categories. They can easily involve **Possessor** ECs -i.e. postnominal NPs.<sup>2</sup>

- (11) a. meen lli həbbeit ?əxt-u?  
           who that like2SGmpast sister-3SGm  
           'Whose sister did (you) like?'

- b.\*meen lli həbbeit ?əxt?  
 who that like3SGmpast sister
- c. meen lli tʒəwʷazət bənt-a?  
 who that marry2SGmpast girl-3SGf
- 'Whose daughter did (you) marry?'
- d.\*meen lli tʒəwʷazət bənt?  
 who that marry2SGmpast girl

The ungrammaticality of (11b) and (11d) clearly shows the obligatoriness of the clitics involved. In the grammatical examples, the complementiser lli should always be introduced - hence the ungrammaticality of the following:

- (12) a.\*meen həbbeit ?əxt-u?  
 who like2SGmpast sister-3SGm
- b.\*meen tʒəwʷazət bənt-a?  
 who marry2SGmpast girl-3SGf

One point to note here is that in the cases involving a possessor EC, there is always another way of saying the same thing. The following illustrate this point:

- (13) a. meen lli sta9art ktab-u?  
 who that borrow2SGmpast book-3SGm
- 'Whose book did (you) borrow?'
- b. ktab meen sta9art?  
 book who borrow2SGmpast
- 'Whose book did (you) borrow?'

What should be noted is that this is like the situation with examples involving a prepositional object EC.

We can now move on to highlight some further data involving wh-questions with ECs in subordinate clauses - more precisely examples where the EC is in the subordinate clause and the wh-expression in the main clause. We can first illustrate with **Subject** ECs:

- (14) a. meen      bitʒən              bas              Layla?  
           who    think2SGmpres   kiss3SGmpast   Layla  
           'Who do (you) think kissed Layla?'  
       b. meen lli      bitʒən              šəreb              l-ḥaleeb?  
           who    that think2SGmpres drink3SGmpast the-milk  
           'Who do (you) think drank the milk?'

The EC in (14a-b) is subject of a subordinate clause.

We can look next at some data involving **Object** ECs:

- (15) a. meen      bitʒən              kamil              biḥəb?  
           who    think2SGmpres   Kamil    like3SGmpres  
           'Who do (you) think Kamil likes?'  
       b. meen lli      bitʒən              Kamil              biḥəbb-a?  
           who that    think2SGmpres Kamil like3SGmpres-3SGf  
           'Who do (you) think Kamil likes?'

In (15a-b), the EC is object of a subordinate clause, with the (b) example involving a clitic. We have both a complementizer and a clitic or neither (as in main clauses). The clitic in (15b) is obligatory - hence the ungrammaticality of the following:

- (16) \* meen lli      bitʒən              Kamil              biḥəb?  
           who    that think2SGmpres Kamil    like3SGmpres  
           'Who do (you) think Kamil likes?'

Again, the complementizer lli in (15b) is obligatory - hence the following is ruled out:

- (17) a. \*meen      bitzən              Kamil              biħəbb-a?  
           who    think2SGmpres    Kamil    like3SGmpres-3SGf  
           'Who do (you) think Kamil likes?'

Let's now look at some examples involving **Prepositional Object** ECs:

- (18) a. meen lli      bitzən      Layla    ħaket              ma9-u?  
           who that think2SGmpres Layla talk3SGfpast with-3SGm  
           'Who do (you) think Layla talked to?'

- b. \*meen lli      bitzən              Layla    ħaket              ma9?  
           who    that think2SGmpres    Layla talk3SGfpast with

The EC in (18a) is prepositional object of a subordinate clause. The absence of the clitic leads to the ungrammaticality of (18b). Again, the complementizer lli is obligatory, as the ungrammaticality of the following illustrates:

- (19) \*meen      bitzən              Layla    ħaket              ma9-u?  
           who    think2SGmpres    Layla talk3SGfpast with-3SGm  
           'Who do (you) think Layla talked to?'

All in all, the ungrammaticality of both (18b) and (19) shows that a clitic is obligatory if we have a complementiser. That is, the complementiser and the clitic go hand in hand.

We can now consider some further examples involving **Possessor** ECs.

(20) a. meen lli bitzən 9ažbna karam-u?

who that think2SGmpres admire2plpast generosity-3SGm

'Whose generosity do (you) think (we) admired?'

b. \*meen lli bitzən 9ažabna karam?

who that think2SGmpres admire2plpast generosity

The EC in (20a) is possessor of a subordinate clause. Again, the clitic on the possessive NP in (20a) is compulsory - hence the ungrammaticality of (20b). The complementizer lli is obligatory as well, as the ungrammaticality of the following illustrates:

(21) \*meen bitzən 9ažabna karam-u?

who think2SGmpres admire1plpast generosity

We can now summarize the relevant facts about Syrian wh-questions as follows:

- (22)
- i. In subject position, we have an EC with no associated clitic. lli is optional.
  - ii. In object position, we have either an EC with an associated clitic and a complementizer or an EC with no associated clitic and no complementizer.
  - iii. In object of a preposition position, we have an EC associated with a clitic and lli is obligatory.
  - iv. In the possessor position, we have an EC associated with a clitic and lli is obligatory.
  - v. It does not make any difference if the wh-phrase is in the higher clause.

Having considered the range of ECs wh-questions have, and the behaviour of complementisers and clitics in such constructions, we can proceed now to look briefly at Relative Clauses.



### 5.1.2. Relative Clauses

Let us begin by considering some examples:

- (23) a. 1-ʔəstaz lli ba9 səyyart-u  
the-teacher that sell3SGmpast car-3SGm  
'The teacher who sold his car'
- b. š-šəqqa lli štareituww-a  
the-flat that buy2plpast-3SGf  
'The flat that (you) bought'
- c. 1-mara lli hkeina ma9-a  
the-woman that talk1plpast with-3SGf  
'The woman that (we) talked to'

In (23a), the EC is a relative clause subject; in (23b), it is a relative clause object; and in (23c), it a relative clause prepositional object. The clitics in (23b-c) are obligatory - hence the ungrammaticality of the following:

- (24) a. \*š-šəqqa lli štareituww  
the-flat that buy2plpast
- b. \*1-mara lli hkeina ma9  
the-woman that talk1plpast with

(24a-b) are different from Wh-questions in that the clitic here is obligatory. The complementiser lli is obligatory in all such constructions - hence the following are ruled out:

- (25) a. \*š-šəqqa štareituww-a  
the-flat buy2plpast-3SGf
- b. \*1-mara hkeina ma9-a  
the-woman talk1plpast with-3SGf

**What about Possessor ECs in relative clauses? Here are**

some examples:

- (26) a. l-mara lli 9ažabna karam-a matet  
the-woman that admire1plpast generosity-3SGf die3SGf  
'The woman whose generosity (we) admired died'
- b.\*l-mara lli 9ažabna karam matet  
the-woman that admire1plpast generosity die3SGfpast
- c.\*l-mara 9ažabna karam-a matet  
the-woman admire1plpast generosity-3SGf die3SGfpast

In (26a) we have a possessor EC. The clitic involved is obligatory - hence the ungrammaticality of (26b). Likewise, the complementiser is necessary, as the ungrammaticality of (26c) clearly illustrates.

We can look next at some further examples involving subordinate clause ECs:

- (27) a. r-rəžžal lli Našer qal ḥabb Layla  
the-man that Naser say3SGmpast like3SGmpast Layla  
'The man that Naser said liked Layla'
- b. l-mara lli Kamal qal ḥəbbeit-a  
the-woman that Kamal say3SGmpast like2SGmpast-3SGf  
tžawzet  
marry3SGfPASS  
'The woman that Kamal said (you) liked got married'
- c. l-bənt lli Kamal qal nam  
the-girl that Kamal say3SGmpast sleep3SGmpast  
ma9-a nxatbet  
with-3SGf engage3SGfPASS  
'The girl that Kamal said he slept with (her) got engaged'

The EC in (27a) is a subordinate clause subject; in (27b), it is object of a subordinate clause; and in (27c), it is prepositional object of a subordinate clause. As in main clause relative clauses, the clitics in the examples above are obligatory - hence the ill-formedness of the following:

- (28) a.\*1-mara lli Kamal qal həbbeit  
           the-woman that Kamal say3SGmpast like2SGmpast  
           tʒawzet  
           marry3SGfPASS
- b.\*1-bənt lli Kamal qal nam ma9  
           the-girl that Kamal say3SGmpast sleep3SGmpast with  
           nxatbet  
           engage3SGfPASS

What the examples in (28) together with those in (25) do suggest is that in relative clauses a clitic associated with an object or prepositional object EC is obligatory. Again, the complementiser lli in (27) is necessary - hence the ungrammaticality of the following:

- (29) a.\*1-mara Kamal qal həbbeit-a  
           the-woman Kamal say3SGmpast like2SGmpast-3SGf  
           tʒawzet  
           marry3SGfPASS
- b.\*1-bənt Kamal qal nam ma9-a  
           the-girl Kamal say3SGmpast sleep3SGmpast with-3SGf  
           nxatbet  
           engage3SGfPASS

We might say that relative clauses look like Wh-questions

with lli minus the Wh-phrase.

In the following section, we will consider further data involving Topicalization sentences.

### 5.1.3. Topicalization

As noted at the outset, topicalization sentences are just another type of what can be called wh-movement constructions. We can now look at some examples:

(30) a. Kamal, (lli) Layla ḥabbat-u  
Kamal that Layla like3SGfpast-3SGm  
'Kamal, Layla liked'

b. l-maṣari, (lli) Reem bitẓan Kamal  
the-money that Reem think3SGfpres Kamal  
?axad-on  
take3SGmpast-3pl  
'The money, Reem thinks Kamal took'

The EC in (30a) is object of the main clause; in (30b), it is object of a subordinate clause. Again, as is the case with relative clauses, the clitics in the examples above are obligatory - hence the absence of clitics leads to the ill-formedness of the following:

(31) a.\*Kamal, (lli) Layla ḥabbat  
Kamal that Layla like3SGfpast  
b.\*l-maṣari, (lli) Reem bitẓan Kamal ?axad  
the-money that Reem think3SGfpres Kamal take3SGmpast

Unlike the case with object ECs in wh-questions, the complementizer in (30a-b) is optional.

Let's consider examples involving **Prepositional Object** ECs:

- (32) a. Kamal, (lli) Layla raḥet ma9-u  
           Kamal that Layla go3SGfpast with-3SGm
- b. Kamal, (lli) Reem bitzən Layla raḥet  
           Kamal that Reem think3SGfpres Layla go3SGfpast  
           ma9-u  
           with-3SGm

In (32a), the EC is prepositional object of a main clause; it is prepositional object of a subordinate clause in (32b). Again, the clitics involved are necessary - hence the following are ruled out:

- (33) a.\*Kamal, (lli) Layla raḥet ma9  
           Kamal that Layla go3SGfpast with
- b.\*Kamal, (lli) Reem bitzən Layla raḥet  
           Kamal that Reem think3SGfpres Layla go3SGfpast  
           ma9  
           with

We can now consider some further examples involving **Possessor ECs**:

- (34) a. Kamal, sta9arna ktab-u  
           Kamal borrow1plpast book-3SGm  
           'Kamal, we borrowed his book'
- b.\*Kamal, sta9arna ktab  
           Kamal borrow1plpast book

The clitic on the possessive NP in (34a) is obligatory - hence the ungrammaticality of (34b).

For the sake of completeness, let's consider some further data:

(35) Deema, šu 9teitūww-a?

Deema what give2plpast-3SGf

'Deema, what did you give to her?'

The fact that such examples are possible suggests that topics are in pre-CP position and not in the CP-specifier position.

Having devoted the previous sections to showing the wide range of ECs Syrian wh-movement constructions allow and to highlighting what the presence or absence of clitics or complementisers entails in such constructions, the following section is devoted to elaborating on how these constructions might be analyzed, and to developing an ECP-based analysis.

## 5.2. Towards an Analysis

The fact that clitics are involved in the wh-movement constructions we have considered so far is an important matter. This compels us to question the nature of the empty categories in wh-movement constructions associated with clitics.

One possible analysis is that wh-movement constructions ECs associated with clitics are ERPs. One might then ask if there are any reasons for thinking that these are ERPs. The idea is attractive because it offers an explanation for the appearance of clitics. We know that pronouns in certain positions have to be associated with clitics. Analyzing the ECs that co-occur with clitics as ERPs would provide an explanation for the occurrence of the clitics, since pronouns in these positions are accompanied by clitics (and normally are null).

An essential question we should ask here is: **What other predictions does the proposal that these ECs are ERPs make?** The

standard assumption is that ERPs do not involve movement. The assumption that these ECs are ERPs leads to the prediction that there should be no **Subjacency** effects with ERPs. A Subjacency effect is an ungrammaticality resulting from a violation the Subjacency condition. It is generally assumed that movement is subject to Subjacency - hence it obeys various island constraints which are a consequence of Subjacency.

Before seeing whether or not the above prediction is confirmed, we need to explain what is meant by **Subjacency**, and consequently the sorts of example ruled out by it.

Subjacency is not a condition on ECs, but it restricts the relation between the traces and their antecedents because it restricts **Move  $\alpha$** . On the face of it, the **Subjacency Condition** is quite simple. Following Borsley (1991:184), We can formulate it as follows:

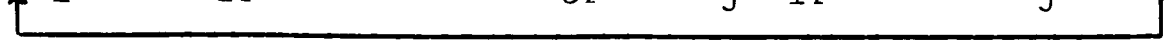
- (36) **A movement operation cannot cross the boundary of more than one bounding node/barrier**

Rather than enter into the details of the definition of **Barrier**, we will have some rough idea about this approach if we define a barrier as follows (Borsley (ibid:184)):

- (37) **A maximal projection other than VP is a barrier<sub>3</sub> unless it is the complement of a verb or adjective<sup>3</sup>**

The Subjacency Condition provides an account of various island constraints, but for our purpose, we will refer to only one of them - namely, the wh-Island Condition - the condition that a wh-element cannot move across the boundary of a subordinate wh-question. Consider the following structure:

(38) Who<sub>i</sub> did [<sub>IP</sub> you wonder [<sub>CP</sub> what<sub>j</sub> [<sub>IP</sub> he did e<sub>j</sub> to e<sub>i</sub>]]]



The diagram shows a horizontal line starting from the 'i' subscript of 'Who' and ending at the 'i' subscript of 'e<sub>i</sub>' in the subordinate clause, indicating movement across two IP boundaries.

who is moved in one swoop because the clause-initial position in the subordinate clause is occupied by what. This movement crosses two IPs, both of which are barriers because they are not complements of a verb or adjective - hence we have a violation of Subjacency.

We can now consider whether the Subjacency condition is operative with respect to other sorts of Syrian examples. We can consider whether or not examples with an EC associated with a clitic are sensitive to the Wh-Island Constraint. We will consider three constructions: Wh-questions with a complementiser, relative clauses, and topicalization sentences.

Consider first examples involving Wh-questions:

(39) a.\*meen<sub>i</sub> lli [<sub>IP</sub> t9əžžabət [<sub>CP</sub> meen [<sub>IP</sub> šaf-u e<sub>i</sub>]]]?

who that wonder2SGmpast who see3SGmpast-3SGm

\*'who did (you) wonder who saw?'

b.\*meen<sub>i</sub> lli [<sub>IP</sub> t9əžžabət [<sub>CP</sub> meen [<sub>IP</sub> ḥaka

who that wonder2SGmpast who talk3SGmpast

ma9-u e<sub>i</sub>]]]?

with-3SGm

\*'who did (you) wonder who talked to?'

The data given in (39) shows that the proposal that the ECs involved are instances of ERPs is untenable. That is, (39a-b) should be grammatical if the ECs associated with clitics are ERPs.<sup>4</sup>

Let's look at further data involving Relative Clauses:



- (40) \*l-bənt<sub>i</sub> lli [IP t9ažžab [CP šu [IP 9amall-a e<sub>i</sub>]]]  
 the-girl that wonder3SGmpast what do3SGmpast-3SGf  
 \*'The girl that wondered what he did to'

What is important here is that (40) is the kind of example which should be grammatical if the EC associated with the clitic is an ERP.

Finally, we can consider some further examples involving Topicalization sentences:

- (41) \*Nada<sub>i</sub>, [CP [IP t9əžžabət [CP šu [IP 9amall-a e<sub>i</sub>]]]  
 Nada wonder1SGpast what do3SGmpast-3SGf  
 \*'Nada, (I) wondered what he did to'

Again, all that is really important is that (41) is the sort of example that should be grammatical if the EC associated with the clitic is an ERP.<sup>5</sup>

Having illustrated the fact that all three constructions show Subjacency effects -i.e. obey island constraints, the view that the ECs involved are ERPs seems untenable. It predicts that certain examples should be acceptable, but they are not - hence it is not a tenable proposal.

Having rejected the idea that the ECs are ERPs, another possible analysis is that they must be Wh-traces. We may well ask if there is any way of explaining the obligatoriness of the clitic without assuming that the ECs are ERPs. Given GB, one possibility is that clitics are required for proper government.

As we have seen, verbs, nouns and prepositions in Syrian can have a wh-trace as their complement, but whereas a noun or preposition must always have a clitic, this is only sometimes

necessary for a verb. Ignoring for the moment the situation with verbs, we might suggest that clitics are required when the antecedent is too far away from the trace. It seems plausible to suggest that this is a result of the ECP.

As we have seen in Chapter One, the ECP requires that traces be properly governed.

To understand this, we need to know what is meant by proper government (cf. 1.2.3.1.). We can repeat the Lectures (1981) formulation for convenience:

- (42)  $\alpha$  is properly governed if and only if  $\alpha$  is governed by an  $X^0$  other than AGR or a coindexed category

As noted in Chapter One, in (42), we have two types of government: (i) lexical government by an associated head, and (ii) antecedent government by a coindexed category. **How exactly does the ECP work?** Given GB assumptions, a head always governs its complements - hence traces in complement position are properly governed by an associated head, but traces in subject position are only properly governed if governed by a coindexed category.

In English, a preposition alone may act as a proper governor. In Syrian, we can suggest that only a combination of P+CL can act as a proper governor. We can also suggest that only a combination of N+CL can act as a proper governor. This is what we are suggesting as a basis for an analysis of Syrian.

A similar position is developed by Hendrick (1988:217) in connection with Welsh and Breton, as illustrated below:

(43) **Welsh**

- a. y dyn<sub>i</sub> a ddisgwyliwn [pp amdano [e]<sub>i</sub>]  
the man PRT wait-PAST-1SNG for-3SNG  
'The man that I was waiting for'
- b.\*y dyn<sub>i</sub> a ddisgwyliwn [pp am [e]<sub>i</sub>]  
the man PRT wait-PAST-1SNG for  
'The man that I was waiting for'

(44) **Breton**

- a. ar baotred<sub>i</sub> a c'houlenn ar merc'hed [pp ganto  
the boys PRT ask-PRES the women with-3PL  
[e]<sub>i</sub>] deskin brezhoneg  
study Breton  
'The boys that the women ask to study Breton'
- b.\*ar baotred<sub>i</sub> a c'houlenn ar merc'hed [pp gant  
the boys PRT ask-PRES the women with  
[e]<sub>i</sub>] deskin brezhoneg  
study Breton  
'The boys that the women ask to study Breton'

Hendrick (1988:216) suggests that a preposition on its own is not a proper governor and that agreement on the preposition is necessary for proper government. He, in fact, proposes that it is not the combination of P+AGR that properly governs the trace, but just AGR; and he suggests that this is a case of antecedent government. He assumes a version of the ECP which involves antecedent government alone, but we do not need to follow him in this.

Stump (1989) takes a different position in connection with Breton. The difference between Stump and Hendrick is that for Hendrick agreement alone is an antecedent governor, whereas for Stump P+AGR is a lexical governor.

Following Stump (ibid), we assume that P+AGR counts as a lexical governor, but not P alone. We also assume that N+AGR is a proper governor, but not N alone. The same assumption seems necessary in Welsh. Borsley (p.c.) has provided me with the following Welsh example involving a possessor EC to support the assumption that a noun on its own does not act as a proper governor - hence the need for a clitic to ensure proper government:

- (45) a. Pwy<sub>i</sub> y gwelaist ei frawd t<sub>i</sub>  
           who Comp saw-2SG 3SGM brother  
           'Whose brother did you see?'  
       b.\*Pwy<sub>i</sub> y gwelaist frawd t<sub>i</sub>  
           who Comp saw-2SG brother

We can now proceed to consider traces in Verbal Object position. We will look first at topicalization examples. We can repeat the following example for convenience:

- (46) a. Kamal, Layla ḥabbət-u  
           Kamal Layla like3SGfpast-3SGm  
           'Kamal, Layla liked'  
       b.\*Kamal, Layla ḥabbət  
           Kamal Layla like3SGfpast

As noted earlier, the topicalized NP is adjoined to CP. The following structure illustrates the point:



Following Borsley (p.c.), we might use this to explain the difference between questioning and topicalizing an object. We might say that the Topic is further away from the object EC than the Wh-phrase. More precisely, we might suggest that the CP prevents the topic from antecedent governing its trace.

As for relative clauses, we can propose that lli blocks antecedent government. This assumption will account for the following data, repeated here for convenience:

- (48) a. š-šəqqa lli štareituww-a  
           the-flat that buy2plpast-3SGf  
           'The flat that (you) bought'
- b. \*š-šəqqa lli štareituww  
           the-flat that buy2plpast

It will also account for the obligatoriness of a clitic in Wh-questions involving lli.

Two further questions arise here: (i) **Why is a clitic not possible without lli?** (ii) **How is a subject trace following lli properly governed?** Consider the following examples, repeated here for convenience:

- (49) \*š-šəqqa štareituww-a  
           the-flat buy2plpast-3SGf
- (50) 1-?əstaz lli ba9 səyyart-u  
           the-teacher that sell3SGmpast car-3SGm  
           'The teacher who sold his car'

(49) gives rise to (i). We do not have any satisfactory

explanation for this. As for (ii), we suggest that in examples like (50), subject traces are governed by (AGR)eement features on INFL. This is not a new idea, since it has been assumed in Picallo (1984) that AGR in Catalan properly governs subject traces.

We have now proposed what seems to be a broadly satisfactory analysis which accounts for most of the data. It involves the following assumptions:

- (51)
- i. PP and NP boundaries block antecedent government
  - ii. CP blocks antecedent government in Topicalization Sentences, given that the Topic is outside CP
  - iii. A category in the CP-specifier position can antecedent-govern a trace in subject or object position
  - iv. lli blocks antecedent government
  - v. Subject traces are governed by (AGR)eement features on INFL

(51i-ii) seem reasonable assumptions and any analysis of these phenomena is likely to incorporate them. (51iii) may be a problematic assumption because there are two maximal projections -i.e. IP and VP - between the CP-specifier position and the object position. (51iv) is similar to the assumption made in the Barriers-framework that that blocks antecedent government. The analysis proposed, then, seems a firm basis for future research.

### 5.3. Summary

This Chapter has been concerned with what can be called Wh-movement constructions. We began by looking at Wh-questions, considering the variety of positions in which ECs occur. Then, we looked briefly at other Wh-movement constructions -i.e.

Relative clauses and Topicalization sentences. In 5.2., we developed an ECP-based analysis which seems to provide a largely satisfactory account of the data.

## NOTES TO CHAPTER FIVE

1. Unlike Syrian and other dialects of Arabic, Shlonsky (1989:65-66) notes that it is a peculiarity of Hebrew that Wh-questions do not allow clitics altogether:

(i) a.\*ma<sub>i</sub> xasavti 'al-av<sub>i</sub> t<sub>i</sub>?  
what I thought about-it  
'What did I think about it?'

b.\*mi<sub>i</sub> ra'iti et im-o<sub>i</sub> t<sub>i</sub>?  
who I saw ACC mother-his

2. See note 1, above.

3. For Chomsky (1986b), VP is a barrier, but adjunction makes it possible to avoid certain barriers. Given the adjunction process to VP, (i) is derived as (iii), not as (ii).

(i) We wondered [where John went]

(ii) Where<sub>i</sub> [<sub>S</sub> John [<sub>VP</sub> went e<sub>i</sub>]]

(iii) Where<sub>i</sub> [<sub>S</sub> John [<sub>VP</sub> e<sub>i</sub> [<sub>VP</sub> went e<sub>i</sub>]]]

4. Hasan (1990) claims that there are no island constraint effects in Standard Arabic Wh-movement constructions with a clitic (which he calls a resumptive pronoun or an intrusive pronoun).

5. Citing Modern Standard Arabic (MSA) and Egyptian Arabic (EA) data, Shlonsky (1989) claims that relative clauses and topicalization sentences employ the resumptive pronoun strategy. He assumes that the EC in the 'doubled' position in the constructions concerned is pro, or that the clitic itself is the resumptive pronoun. However, Wh-questions, for him, are always triggered via movement - hence the EC associated with a moved Wh-phrase is a trace.



## CHAPTER SIX

### APPARENT RAISING CONSTRUCTIONS

#### 6.0. Introduction

Our primary concern in this chapter and the next will be to look at possible NP-Movement sentences in Syrian. Possible NP-Movement principally means raising sentences and passives. It may also refer to ergative and middle structures (Cf. Radford 1988a:446). We will be mainly concerned throughout the chapter with sentences which look rather like Raising Constructions - i.e. sentences which involve movement from a subordinate clause subject position to a matrix clause subject position. Syrian examples like those in (1) will frequently be cited:

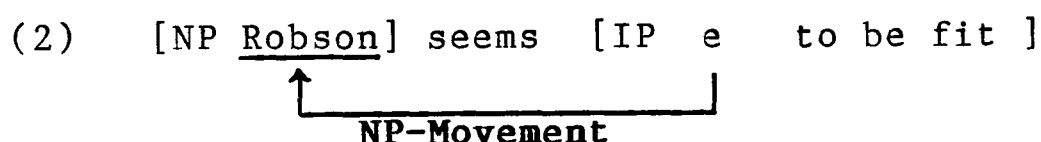
- (1) a. Kamil yəzhar ənnu byəkrah l-ğəš  
Kamil seempres that hate3SGmpres the-cheating  
'Kamil seems to hate cheating'
- b. Kamil yəzhar byəkrah l-ğəš  
Kamil seempres hate3SGmpres the-cheating

Our goals in this chapter are fourfold. We begin with an explanation of a raising sentence in grammatical theory, and focus on the difference between Raising and Control sentences. In 6.2.1., we consider some basic Syrian data, and give a number of typical examples, with an indication of their significant features. We build on these examples in 6.2.2. by focussing on three constituents: (i) 'pleonastic' pronouns -i.e. pronouns lacking semantic content; (ii) 'idiom-chunks' -i.e.

parts of idioms; and (iii) **clausal subjects**, and show that it seems that in such constructions anything can be in the subject position if it matches the complement of the sentence. The concluding remark, in 6.3., concerns the implications of these examples and the problem they cause for GB. The argument will show that the crucial sentences are not raising sentences, but cases of topicalization with an empty pleonastic subject. Word order and agreement facts provide evidence against a raising analysis and in favour of a topicalization analysis.

### 6.1. What is a Raising Sentence?

The term '**raising sentence**' is used in connection with a variety of languages, but we will illustrate it with English. It simply refers to those constructions whose subjects originate as the subject of a subordinate clause and are subsequently raised into the main clause subject position via NP-Movement. Consider the derivation in (2):



The idea here is that Robson originates as the subject of the bracketed subordinate IP complement - i.e. is its original position, and it is subsequently moved to the main clause subject position - i.e. **the landing-site** - the position to which it is moved.

The question we might ask here is why we should assume that S-structures like the one given in (2) should be analyzed accordingly. What gives rise to this question is the fact that

we get similar English constructions - i.e. sentences involving the following elements: [subject+verb+infinitive] - which are analyzed differently. Consider the following examples:

- (3) a. Bill seems to win  
b. Bill tries to win

First, we should refer to the derivational difference - the fact that there is movement in (3a), but not in (3b). Turning now to the thematic difference, a wide range of contrasts, would seem to indicate that the matrix subject position in (3a) is not an argument of the matrix verb. By an argument, as we have seen, we mean an NP in an A-position which is  $\theta$ -marked. As noted in Chapter One, we should bear in mind here that movement is always from a  $\theta$ -position (argument) to a  $\theta'$ -position (non-argument), so that the  **$\theta$ -Criterion** is respected. This requires each syntactic argument to be assigned one and only one  $\theta$  (thematic)-role, and each  $\theta$ -role to be assigned to one and only one syntactic argument. In contrast, in (3b) the subject of the upper clause is an argument of the matrix predicate. Expletive or dummy elements may occupy the subject position of seem, but not that of try. This supports the claim that the subject of seem is non-thematic. The following examples corresponding to those in (3) illustrate:

- (4) a. There seems to be no solution to this problem  
b.\*There tries to be no solution to this problem  
c. It seems to be clear that there will be a strike  
d.\*It tries to be clear that there will be a strike

Moreover, expletive elements are thought to come into play from one of two possibilities: they may be compatible with the complement with which they are associated (as in (4)), or they may be compatible with the matrix verb itself (as in (5)):

(5) a. It seems that Bill will win

b.\*It tries that Bill will win

We should stress that in (4) we have a raising verb, and consequently a raising sentence involving a non-finite subordinate clause, whereas in (5) we only have a raising predicate involving a finite subordinate clause. The former is the more important.

Let's consider further examples involving no raising predicates:

(6) a. It is raining

b. It is clear that he did it

The examples in (6) have corresponding sentences with seem, but not with try, as shown earlier.

McCloskey (1984:445) suggests that the crucial test which would determine whether or not a given verb assigns a  $\theta$ -role to its subject would be to see whether or not it permits dummy elements to occupy the subject position in question. The standard view assumes that any position which allows such elements is not a  $\theta$ -position. Consider McCloskey's own examples to see the possibility of it and that of raising to subject position:

(7) a. Pascal appears to be playing well

b. It appears that Pascal is playing well

What should be noted with respect to the test given above is that there are raising verbs, e.g. tend, that do not allow the combination of dummy subject and finite clause complement, although we have similar things with seem (Borsley p.c.). The point is that a raising sentence can have any type of subject as long as it is compatible with the infinitive. This includes dummies, idiom chunks, and clauses:

- (8) a. John tends to annoy Mary  
b. It tends to rain on Mondays  
c.\*It tends that John annoys Mary

(8b) allows a dummy subject on the basis of it being compatible with the infinitive, whereas (8c) does not since we have a dummy subject with a following finite clause - hence the incompatibility.

Moreover, Radford (1988a:441) provides another piece of evidence to show that the matrix subject of a raising construction originates in the subordinate clause. He offers what is referred to in the GB literature as "subject idiom chunks" - i.e. constituents bound to occupying the subject position of a given raising predicate, as the following parallels illustrate:

- (9) a. The cat is out of the bag  
b. The cat has got his tongue
- (10) a. The cat seems to be out of the bag  
b.\*The cat tries to be out of the bag  
c. The cat seems to have got his tongue  
d.\*The cat tries to have got his tongue

The parallels ensure that the idioms in (9) have corresponding

sentences with a raising verb like seem, but not corresponding sentences with a control verb like try. Like the examples which show dummies, these again illustrate the point that any subject is possible in a raising sentence as long as it is compatible with the complement.

Another property of raising sentences is that if the infinitive allows a **clausal subject**, the raising verb or be will permit a clausal subject:

(11) a. That he is generous seems to be obvious

b. That he is generous is likely to be obvious

Again, this shows that any subject is possible as long as it is compatible with the infinitive. These, of course, have no related sentences with control verbs and adjectives:

(12) a. \*That he is generous tries to be obvious

b. \*That he is generous is eager to be obvious

For a fuller picture of the data, it is worth mentioning that in English there are raising constructions which have a non-verbal complement, as in (13b). This is not true of control constructions - hence the ungrammaticality of (13c), (cf. Borsley (1991, 10.5, 11.5)):

(13) a. John seems to be clever

b. John seems clever

c.\*John tries clever

It seems clear that the cluster of contrasts we have considered indicates that the main clause subject of a raising verb functions as the subject of the complement clause.

Having defined the variety of contrasts that characterize the raising relation and as a consequence of this the differences between Raising and Control sentences, we will now attempt to look at the form adopted by the apparent raising relationship in Syrian, via a sizable set of examples.

## 6.2. Apparent Raising Sentences in Syrian

### 6.2.1. The basic data

There are a number of sentence-types in Syrian that look rather like raising constructions. However, they are unlike English raising sentences because they do not involve non-finite complements, but have finite complements, as illustrated in (1). Consider the following typical examples:

(14) a. ?aḥmad yəzḥar ənnu byəkrah l-kəzəb

Ahmad seempres that hate3SGmpres the-lying

'Ahmad seems to hate lying'

b. ?aḥmad yəzḥar byəkrah l-kəzəb

Ahmad seempres hate3SGmpres the-lying

The examples in (14) clearly indicate that in Syrian the apparent raising sentence has a constituent of some kind containing a finite verb in the complement position. Note that it is possible to find related sentences which have a full subordinate clause compatible to It seems that ... sentences, as illustrated by the following:

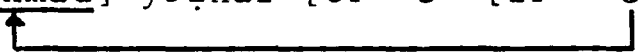
(15) yəzḥar ənnu ?aḥmad byəkrah l-kəzəb

seempres that Ahmad hate3SGmpres the-lying

'(It) seems that Ahmad hates lying'

(14a-b) also suggest that an NP starts out as the complement

clause subject, and then is raised into the matrix clause subject position. The point to note here is that this is an analysis which looks plausible, although we are eventually going to argue against it. The following D-structure corresponding to (14a) summarizes this analysis:

- (16) [NP ?ahmad] yəzhar [CP e [IP e byəkrah l-kəzəb]  
  
 NP-Movement

(16) illustrates that yəzhar takes a CP complement whose D-structure subject is ?ahmad. We will be analyzing this way as further evidence is given in the discussion.

We can now consider some further data:

- (17) a. Rami    yəzhar    ənnu    biḥəb    Reem  
          Rami seempres    that   like3SGmpres   Reem  
          'Rami seems to like Reem'
- b. Rami    yəzhar    biḥəb    Reem  
          Rami seempres   like3SGmpres   Reem
- c. Marwan   kan    waseq    ənnu    biḥəb    Maha  
          Marwan be-past certain that   like3SGmpres   Maha  
          'Marwan was certain to like Maha'
- d. Marwan   kan    waseq    biḥəb    Maha  
          Marwan   be-past   certain   like3SGmpres   Maha

(17a-d) will make it clear that the examples are alike since they involve only one complement with both yəzhar and waseq - the only difference being that (17a) and (17c) contain complementizers.



To complete this discussion, we can note that in Syrian we have apparent raising sentences with a non-verbal complement, as the following examples illustrate:

- (18) a. Sameer yəzhar ənnu mağšooš b ɣalu  
 Sameer seempres that deceiver in himself  
 'Sameer seems to be a traitor to himself'
- b. Sameer yəzhar mağšooš b ɣalu  
 Sameer seempres deceiver in himself
- c.\*Sameer ɣawal mağšooš b ɣalu  
 Sameer try3SGpast deceiver in himself  
 \*'Sameer tried to be a traitor to himself'

What is characteristic of (18a-b) above is the presence of only one verb. They differ from (1) since there is an NP in (18b). The ill-formedness of (18c), however, shows that we cannot have control predicates with non-verbal complements.

### 6.2.2. Tests for Raising Sentences

Having introduced the sentence types that we need to consider here, we can proceed by providing some further evidence to support the claim made at the outset that we can have anything at all in the subject position of apparent raising sentence in Syrian as long as it is compatible with the complement with which it is associated. To substantiate this, let's first consider some examples containing the Syrian counterparts of some dummy elements such as it in the main clause subject position.

As already noted in Chapter Three, Syrian allows phonologically-null elements in the subject position of tensed clauses.

The important point here is that the Syrian counterpart of dummy it is always phonologically null. This is clearly exhibited in (19a-b) below:

(19) a. 9amtmaṭṭer

rain3SGprog

'(It) (is) raining'

b. yaḏhar (ənnu) 9amtmaṭṭer

seempres that rain3SGprog

'(It) seems to be raining'

c. \*ṭhawel tmaṭṭer

try3SGpres rain3SGpres

\*'(It) tries to be raining'

(19a-b) do not allow overt subjects. From the characteristics observed, one might be led to assume that in the Syrian counterparts of English dummy it sentences there is no way of knowing whether they involve a raised dummy or two base-generated dummies -i.e. of knowing whether they are comparable to It seems to be raining, where movement has taken place; or It seems that it is raining, with no movement being involved. Thus, there is no obvious way to decide because we do not know whether we have the former with movement or the latter with no movement. We can conclude that it is not a control sentence because of the ungrammaticality of (19c).

Having looked at the Syrian counterparts of dummy it, and seen that it does not provide evidence that the crucial examples are raising sentences, we can turn now to consider some cases which seem to provide evidence for a raising

analysis, namely **idiom-chunks** and **clausal subjects**.

As we have seen, a characteristic of raising sentences, unlike control sentences, is that they allow idiom-chunks in subject position. We have Syrian examples which seem to have idiom chunks, where part of the idiom is in subject position. Consider first the following idiomatic examples which do not contain what looks like a raising verb:

(20) a. l-qəṭ                      bala9-lu                      lsan-u  
         the-cat   swallow3SGpast-3SGm           tongue-3SGm

Lit. 'The cat swallowed his tongue'

**= unable to speak freely**

b. l-far              lə9eb              b-9əbb-u  
         the-mouse   play3SGpast in-heart-3SGm

Lit. 'The mouse played in his heart'

**= to guess that something wrong is happening**

c.    seert-u              9a              kəl              lsan  
         story-3SGm    on              every    tongue

Lit. 'His story (is) on every tongue'

**= He is very famous**

d. l-kalb    ma              bidoos              deil-u  
         the-dog   not   tread3SGpres              tail-3SGm


Lit. 'A dog does not tread on its tail'

**= kinship is a strong tie**

To complete the picture, let's turn now to consider how the above idioms will look with what look like raising verbs:

- (21) a. l-qəṭ yəzhar (ənnu) bala9-lu lsan-u  
the-cat seempres that swallow3SGpast-3SGm tongue-3SGm  
Lit. 'The cat seems to have swallowed his tongue'  
= he seems to be unable to speak freely"
- b. \*l-qəṭ yhawel bala9-lu lsan-u  
the-cat try3SGmpres swallow3SGpast-3SGm tongue-3SGm
- c. l-far yəzhar lə9eb b-9əbb-u  
the-mouse seempres play3SGpast in-heart-3SGm  
Lit. 'The mouse seems to have played in his heart'  
= he seems to be dubious about something
- d. seert-u yəzhar 9a kəl lsan  
story-3SGm seempres on every tongue  
Lit. 'His story seems to be on every tongue'  
= he seems to be very famous
- e. l-kalb yəzhar ma bidoos deil-u  
the-dog seempres not tread3SGpres tail-3SGm  
Lit. 'The dog does not seem to tread on its tail'  
= kinship seems to be a strong tie

As noted in Chapter Two, idioms form a unit at D-structure. Thus, it seems reasonable to assume that l-qəṭ starts out as the subordinate clause subject of bala9-lu lsan-u, and then is moved into the superficial subject position, as demonstrated in (22) below:

- (22) [NP l-qəṭ] yəzhar [CP e [IP e bala9-lu lsan-u]  
  
NP-Movement

(21b) shows that idioms with what look like raising verbs have no corresponding sentences which have control predicates.

As noted earlier, another feature of raising sentences is that they, unlike control sentences, allow a clausal subject. We have Syrian examples which seem to involve clausal subjects:

(23) a. ʕnnu Kamal kan l-qatel yaḏhar maḏboot

that Kamal be-past the-killer seempres right

'That Kamal was the killer appeared to be true'

b. ʕnnu Kamal kan l-qatel mumken ykoon maḏboot

that Kamal be-past the-killer possible be-pres right

'That Kamal was the killer was likely to be true'

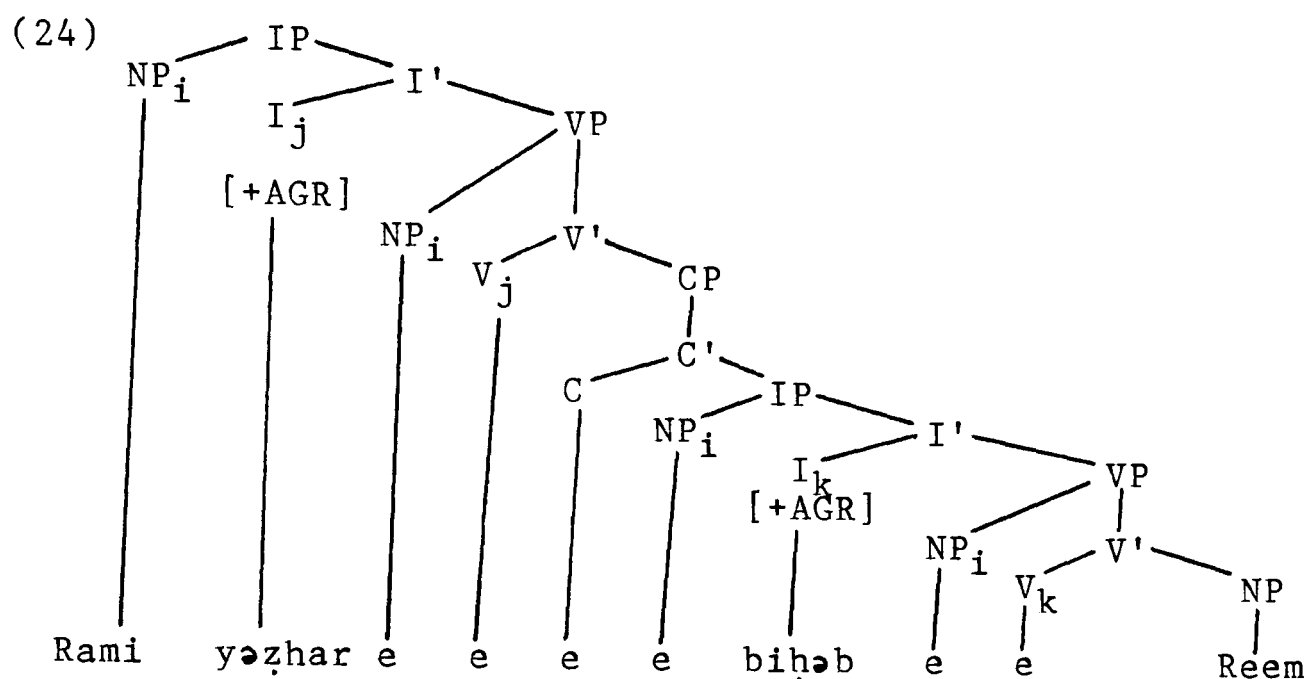
These have no related control sentences.

### 6.3. Implications

#### 6.3.1. An Apparent Problem for GB

So far, we have looked at the basic data, utilizing three tests to support our claim that we can have anything at all in the subject position of what looks like a raising sentence. An obvious question to ask at this point, however, is what the implications of these examples are, and consequently how they pose a problem for GB.

From the set of examples we have considered, it follows that Syrian has what look like Raising Sentences with a complement comprising a finite verb instead of the infinitive. Take the following structure corresponding to (17a):



Since this is a surface structure, V has been moved to I in both clauses for tense and agreement purposes, as the indices indicate - [j,j] in the case of the upper clause, and [k,k] in the case of the lower one. In addition, since we accept Fassi Fehri's analysis, in which subjects begin as VP-specifiers, ECs appear in both VP-specifier positions. In other words, the NP has been moved three times, whereas each verb has been moved once.

As noted in Chapter One, NP-traces count as anaphors, and anaphors obey condition A of the binding theory - which requires that they are bound in their governing category. If this stipulation is correct, then the apparent Syrian raising sentences pose a problem for GB - since the governing category for the NP-trace will be the subordinate clause and consequently it will not be bound in its governing category.

Returning now to the point made earlier, the trouble with a structure like (24) is that the NP-trace is governed in the subordinate clause, and the governing category is the lower IP

- the governor of the NP-trace being [+AGR]. If the trace in (24) is governed by [+AGR] in the subordinate clause, then, the subordinate IP will be its governing category and it will not be bound in its governing category. Therefore, we have a violation of condition A of the binding theory.

Having demonstrated what the problem is, and consequently diagnosed what the symptoms are, our next step will essentially involve looking for a cure for this problem. We will use two arguments - namely, **Word Order** and **Agreement** facts - to argue that the crucial sentences are not in fact raising sentences.

### 6.3.2. A Solution to the Problem

#### 6.3.2.1. Word Order Facts

We intend to argue here that, in the apparent Syrian raising sentences, the apparent subjects are really **topics** and that there is a null expletive subject.

We will first introduce topics with some straightforward sentences -i.e. sentences that have an overt subject and do not involve anything resembling a raising verb. The following illustrate this:

- (25) a. Kamal, Salwa ḥabbat-u  
           Kamal Salwa like3SGfpast-3SGm  
           'Kamal, Salwa liked'
- b. Kamal, Salwa ḥaket ma9-u  
           Kamal Salwa talk3SGfpast with-3SGm  
           'Kamal, Salwa talked to'
- c. Kamal, Salwa fakkart-u some9 l-qəṣṣa  
           Kamal Salwa think3SGfpast-3SGm hear3SGmpast story

'Kamal, Salwa thought heard the story'

We can now consider related examples with **null subjects**, since a topic will sometimes look like a subject in such examples. The following, for example, demonstrate:

(26) a. Kamal,            ḥabbət-u

Kamal    like3SGfpast-3SGm

'Kamal, (she) liked'

b. Kamal,    ḥaket            ma9-u

Kamal    talk3SGfpast with-3SGm

'Kamal, (she) talked to'

c. Kamal,            fakkərt-u            səme9            l-qəṣṣa

Kamal    think3SGfpast-3SGm hear3SGmpast the-story

'Kamal, (she) thought heard the story'

In these cases, the interpretation makes it clear that the clause-initial NP is not a subject. We should ask, however, whether anything else shows that these NPs are not subjects. The answer is that the fact that they cannot appear after the verb shows this - hence the ungrammaticality of the following:

(27) a. \*            ḥabbət-u            Kamal

like3SGfpast-3SGm Kamal

b. \* ḥaket            Kamal    ma9-u

talk3SGfpast Kamal with-3SGm

c. \*            fakkərt-u            Kamal    səme9            l-qəṣṣa

think3SGfpast-3SGm Kamal hear3SGmpast the-story

We can now show that the same is true of the clause-initial NP in an apparent raising sentence. Consider the following examples which involve both an apparent subject and



what looks like a raising verb:

- (28) a. Salwa yəzhar ənnu bəthəb Kamal  
Salwa seempres that like3SGfpres Kamal  
'Salwa seems to like Kamal'
- b. Salwa yəzhar ənnu həket ma9 Kamal  
Salwa seempres that talk3SGfpast with Kamal  
'Salwa seems to have talked to Kamal'
- c. Salwa yəzhar ənnu fakkret Kamal səme9  
Salwa seempres that think3SGfpast Kamal hear3SGm  
l-qəşşə  
the-story

'Salwa seems to have thought Kamal heard the story'

Again, what look like subjects in (28a-c) cannot follow the main clause verb and precede a complementizer - hence the ungrammaticality of the following:

- (29) a.\*yəzhar Salwa ənnu bəthəb Kamal  
seempres Salwa that like3SGfpres Kamal
- b.\*yəzhar Salwa ənnu həket ma9 Kamal  
seempres Salwa that talk3SGfpast with Kamal
- c.\*yəzhar Salwa ənnu fakkret Kamal səme9  
seempres Salwa that think3SGfpast Kamal hear3SGm  
l-qəşşə  
the-story

The data in (29) clearly shows that the apparent subjects are not really subjects. They are topics and there is a null expletive subject. It should be noted that in these examples where an NP precedes what might be a raising verb, the NP must

be a topic because it is not associated with a subject position.

There are related sentences where there clearly is a null expletive. The following illustrate:

- (30) a. *yəzhar ənnu Salwa bəthəb Kamal*  
           seempres that Salwa like3SGfpres Kamal  
       b. *yəzhar ənnu Salwa həket ma9 Kamal*  
           seempres that Salwa talk3SGfpast with Kamal  
       c. *yəzhar ənnu Salwa fakkret Kamal səme9*  
           seempres that Salwa think3SGfpast Kamal hear3SGm  
           *l-qəşşə*  
           the-story

These have corresponding sentences where it is possible to topicalize an object out of the complement of such a clause, as illustrated by the following:

- (31) a. *Kamal, yəzhar ənnu bəthəbb-u*  
           Kamal seempres that like3SGfpres-3SGm  
           'Kamal, (it) seems that (she) likes'  
       b. *Kamal, yəzhar ənnu həket ma9-u*  
           Kamal seempres that talk3SGfpast with-3SGm  
           'Kamal, (it) seems that (she) talked to'  
       c. *Kamal, yəzhar ənnu fakkert-u səme9*  
           Kamal seempres that think3SGfpast-3SGm hear3SGm  
           *l-qəşşə*  
           the-story  
       'Kamal, (it) seems that (she) thought heard the story'

For the sake of completeness, we need to consider some examples which look like raising sentences with a non-verbal complement. Examples like the following demonstrate:

- (32) a. Kamal    yəzhar    ənnu    mərđan  
           Kamal seempres    that    ill  
           'Kamal, (it) seems that he (is) ill'
- b. Kamal    yəzhar    mərđan  
           Kamal seempres    ill  
           'Kamal, (it) seems he (is) ill'

These could, as we have seen, be analyzed in the same way as raising sentences, but they could also be analyzed as involving topicalization out of a verbless clause. The fact that we do not get things like (33) argues against the raising analysis:

- (33) \* yəzhar    Kamal    ənnu    mərđan  
           seempres    Kamal    that    ill

This is like the data in (29) in that the apparent subjects cannot follow a main clause verb and precede a complementiser.

From the data we have looked at, it follows that clause-initial NPs in apparent raising sentences are not subjects, but **topics**, bearing in mind that topics can only occur in clause-initial positions. We have illustrated the facts with straightforward examples involving overt and null subjects with no raising verbs. The same facts have been illustrated with examples involving apparent subjects with what might be raising verbs. We have also considered examples which resemble raising sentences, but with a non-verbal complement. All these conspire to substantiate our proposal that a clause-initial NP in an

apparent raising sentence in Syrian is not a subject.

The fact that the apparent raised subjects we are concerned with cannot follow the verb suggests that they are topics in just the same way as the fact that the apparent that clause subjects in English cannot follow a preposed auxiliary suggests that they are really topics.<sup>1</sup> Koster (1978:53) offers the following examples to illustrate this point:

(34) **That the doctor came** surprised me

(35) \*Did **that John showed up** please you?

In line with our assumption for apparent Syrian raising sentences, the example in (35) undermines the claim that the element occupying the sentence-initial position in (34) is a subject. Assuming it is, then we would normally expect sentence-initial Ss to be able to follow verbs. But, (35) shows this is not the case. In other words, the subject's inability to follow the verb clearly implies that what looks like a subject in (34) is really a **Topic**, as is the case with the apparent raising sentences of Syrian.

So far, we have looked at word order facts to support our assumption that what seems to be a subject in apparent Syrian raising sentences is really a **TOPIC**. We will now consider another argument to do with agreement facts.

#### **6.3.2.2. Agreement Facts**

As we said in Chapter Three, Syrian, among other languages, has subject-verb agreement in person, number and gender. Consider the following examples:

(36) a. Naṣer        biḥəb                    s-sbaḥa  
           Naser    like3SGmpres    the-swimming  
           'Naser likes swimming'

b.\*Naṣer        biḥəbbu                    s-sbaḥa  
           Naser    like3plpres    the-swimming

c. 1-wlad        ḥaku                    ma9        Reem  
           the-boys    speak3plpast    with        Reem  
           'The boys talked to Reem'

d.\*1-wlad        ḥaka                    ma9        Reem  
           the-boys    speak3SGmpast    with        Reem

(36a) is grammatical because the predicate biḥəb s-sbaḥa is compatible with the subject Naser. (36b) is ruled out on the basis that the predicate biḥəbbu s-sbaḥa does not have the right corresponding subject. Likewise, (36c) is well-formed because the head verb ḥaku contains the right sort of subject - i.e. 1-wlad. But, (36d) is ungrammatical because the head verb concerned fails to pick out a corresponding subject.

Let's see how this proposition fits into our earlier assumption that what seems to be a subject in apparent Syrian raising sentences is just a **Topic**. We can first illustrate with examples involving overt subjects, but with no apparent raising verbs being used:

(37) a. Nawal    Kamal                    šaf-a  
           Nawal    Kamal        see3SGmpast-3SGf  
           'Nawal, Kamal saw'

b. Nawal        1-wlad        ḥaku                    ma9-a  
           Nawal    the-boys    speak3plpast    with-3SGf

'Nawal, the boys talked to'

As seen from the glosses, the clause-initial NP in the examples above is not a subject. In (37a), the form šaf-a appears with a third person singular masculine subject -i.e. Kamal. In (37b) the form haku shows up with a third person plural subject -i.e. l-wlad. The point is that the verb agrees with the subject, not with the topic. Note that Nawal is feminine - hence we get a third person singular clitic on the verb in (37a) and on the preposition in (37b). The point is that when both topic and subject are overt, the verb agrees with the subject.

We can now consider some related examples involving topicalized objects with simple transitive verbs.

(38) a. Nawal                      šaf-a

Nawal    see3SGmpast-3SGf

'Nawal, (he) saw'

b. Nawal              haku                      ma9-a

Nawal    speak3plpast              with-3SGf

'Nawal, (they) talked to'

Again, the examples in (38) resemble those in (37) in that the verbs concerned do not agree with the clause-initial NP - i.e. Nawal. They are just like their overt subject counterparts in that they provide further evidence to show that the element occupying the sentence-initial position is not a subject. The data in (38) suggests that when only the topic is overt, the verb still agrees with the subject.

Let's consider some related examples involving topicalized objects out of the complement of what resembles a raising verb:

(39) a. Nawal yəzhar ənnu šaf-a  
 Nawal seempres that see3SGmpast-3SGf  
 'Nawal, (it) seems that (he) saw her'

b. l-wlad yəzhar ənnu ḥaku ma9-a  
 the-boys seemprs that talk3plpast with-3SGf  
 'The boys, (it) seems that (they) talked to her'

We can now consider some relevant examples to test whether or not the same holds true of clause-initial NPs in what look like raising sentences. We illustrate with cases involving topicalization with what looks like a raising verb.

(40) a. Kamal yəzhar ənnu šaf Nawal  
 Kamal seempres that see3SGmpast Nawal  
 'Kamal, (it) seems that he saw Nawal'

b. l-wlad yəzhar ənnu ḥaku ma9 Nawal  
 the-boys seempres that speak3plpast with Nawal  
 'The boys, (it) seems that they talked to Nawal'

As the glosses indicate, the verb yəzhar does not agree with the clause-initial NP. All this tells us is that the apparent raising verbs in the above examples do not change in form, despite the type of subject concerned - hence helping our earlier assumption gain further ground -i.e. **what looks like a subject in apparent Syrian raising sentences is not a subject, but rather a TOPIC.**

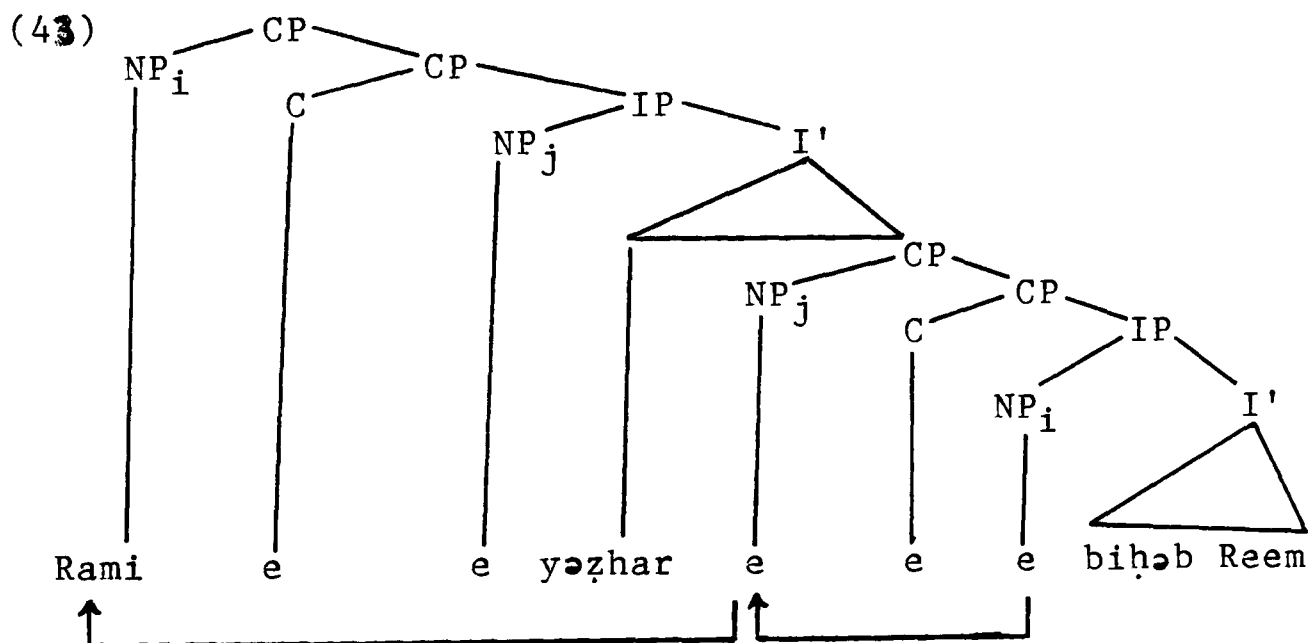
To support our argument even further, we can show that idiom chunks and clauses can appear in the form of topics. Consider the following examples:

(41) 1-kalb bʒən ma bidoos deil-u  
 the-dog think1SGmpres not tread3SGmpres tail-3SGm  
 Lit. 'The dog, (I) think, does not tread on its tail'  
 = Kinship is a strong tie

(42) annu Kamal biḥəb Layla, kəllna mna9ref  
 that Kamal like3SGmpres Layla all1pl know1plpres  
 'That Kamal likes Layla, (we) all know'

The topicalization of an idiom chunk in (41) and that of a clause in (42) suggests that the apparent raising sentences with idiom chunks in (21) and clauses in (23) as the apparent subjects can be analyzed as instances of **topicalization**.

Given all the arguments for analyzing apparent Syrian raising sentences as cases of topicalization, we can now provide a somewhat modified structure corresponding to (24):



Details aside, the structure above clearly shows that Rami is in topic position adjoined to CP with an empty subject. In other words, we have topicalization out of a subordinate clause, as the solid arrows indicate.



#### 6.4. Summary

In this Chapter, we looked at Apparent Syrian Raising sentences. We began by explaining what is meant by a raising sentence in grammatical theory. Then, we presented the basic Syrian data, offering tests for raising sentences - mainly, dummy elements, idiom-chunks and clausal subjects. In 6.3, we considered the implications of the Syrian data, illustrating how it posed an apparent problem for GB, offering a good solution to the problem, showing that we were not dealing with raising sentences, but rather with instances of topicalization.

## NOTES TO CHAPTER SIX

1. Borsley (1991:86, fn.3) contests this claim by giving examples with a whether clause:

- (i) Is whether (or not) Ben did it of any importance.
- (ii) I think that whether (or not) Ben did it is of no importance.

These show that at least some clause-types can show up in subject position.

## CHAPTER SEVEN

### PASSIVE CONSTRUCTIONS

#### 7.0. Introduction

Passives, like raising sentences, are a type of sentence which normally involves NP-movement -i.e. movement of an NP into an empty subject position, as has already been noted in various places. Such movement, as all movements in GB, crucially involves leaving a trace behind to keep track of the position from which an element will have been moved. These, as noted in earlier chapters, are referred to as NP-traces - and count as **anaphors** within GB and obey condition A of the binding theory.

We begin this chapter by examining the fundamental properties of the passive construction and how they are handled within standard GB assumptions, paying close attention to the distinction between **Lexical** and **Transformational** passives. Then, we consider Syrian Passives including Impersonal Passives. Finally, we consider whether there are Transformational Passives in Syrian. What look like Pseudo-passives are important here. We argue, utilizing four arguments, two of which have already been advanced in connection with apparent Syrian raising sentences -i.e. Word Order and Agreement facts, that **Apparent Syrian Pseudo-Passives** are instances of topicalization, and hence that there is no NP-movement.

### 7.1. The Nature of Passive Sentences

In a typical passive sentence, a postverbal NP is missing and the subject is interpreted like the postverbal NP of the related active. The following illustrate the point:

- (1) a. John murdered Bill  
b. Bill was murdered
- (2) a. John believes Bill to be mad  
b. Bill is believed to be mad
- (3) a. John impressed Bill  
b. Bill was unimpressed

Each of the passives has the character that we have just described. Thus, if we describe passive in this way, we are not committed to any analysis.

We can look next at how Passives are analyzed in standard GB. A crucial property of this approach is that Passives involve movement. Two questions arise here: (i) **Why is movement possible?** and (ii) **Why is movement necessary?**

With respect to (i), it is the fact that the subject position is not assigned a  $\theta$ -role that makes movement into it possible. The important point is that no NP can have more than one  $\theta$ -role - hence movement, as we have seen, is only possible to a position to which no  $\theta$ -role is assigned. Consider the following example:

- (4) The carrot was eaten by the rabbit

In the S-structure in (4), the  $\theta$ -role is assigned to trace and inherited by the moved NP. In other words, what we have here is a surface subject of a passive construction corresponding to

the object of a verb. What is important, of course, is that there is no  $\theta$ -role assigned to the subject position.

Moving to (ii), the passive participle in English does not assign Case to an NP which it governs. This need not be a complement, as we shall see. In the D-structure representation (5), underlying John was kissed, the object is not assigned Case:

(5) [NP e] was kissed John

John must undergo movement so that the Case Filter - which, as we have seen, requires that phonologically realized NPs have Case - is satisfied. Thus, NP-movement is forced by the Case theory, which ensures that movement obligatorily takes place in constructions where a violation of the Case Filter arises - hence the following are ruled out because of their ungrammaticality:

(6) a.\*It was impressed Bill

b.\*It was unimpressed Bill

(6a-b) are ungrammatical versions of the examples in (3). Given GB assumptions, these NPs will not be assigned Case by the passive participle - hence they violate the Case Filter.

However, the Case theory also ensures that clausal complements in English do not require Case - hence correctly predicts that movement is not required in sentences such as (7), as is given in Chomsky (1981:125):

(7) It was believed (held, reasoned, ...) that the  
conclusion was false

Given GB assumptions that categories other than NPs do not require Case, (7) is unaffected by Case theory.

Summing up, the passive participle in GB has two basic properties. **Firstly**, it does not assign a  $\theta$ -role to the subject - i.e. it does not have an external  $\theta$ -role. **Secondly**, it lacks the ability to assign Case.

The following subsection shows that passives can be **lexical**.

### **7.1.1. Lexical VS Transformational Passives**

#### **7.1.1.1. Lexical Passives**

The basic idea underlying lexical passives would be that in situations where the subject of the passive corresponds to the object of the active, a lexical analysis is a potential alternative to a transformational one. A lexical rule could modify the subcategorization frame and change the  $\theta$ -role assignment - i.e. the  $\theta$ -role that would have been assigned to the object is now assigned to the subject.

Wasow (1977:338-41) was the first to systematically distinguish between the two types of passive; one which has lexical properties, and another that exhibits transformational properties. More precisely, he argues that English has adjectival passives which are purely lexical, as well as verbal passives which are transformational. First, we can show that English has adjectival passives. Then, we can show that the restrictions on adjectival passives can be explained if they are purely lexical.

There are various kinds of evidence that English has adjectival passives - i.e. passives where the passive participle is an adjective. One argument involves degree modifiers like very (cf. Borsley (1991:131, fn. 15)). Consider the following examples:

- (8) a.\*He **very** impressed me  
b. I was **very** impressed by him  
c. He was **very** impressive

(8a) shows that the verb impress cannot be preceded by very. However, in (8b), the passive participle is preceded by very. (8c) shows that very combines easily with adjectives. Thus, the data in (8) suggests that the passive participle in (8b) is an adjective.

Another argument that some passive participles are adjectives involves the negative prefix un-. This is discussed at length in Wasow (1977). Consider the following data:

- (9) a.\*He **unimpressed** me  
b. I was **unimpressed** by him  
c. He was **unimpressive**

Here, the negative prefix un- in (9a) does not combine with the verb impress. However, it does combine with the passive participle in (9b). It also combines easily with adjectives, giving us (9c). Hence, the data in (9) suggests that the passive participle in (9b) is an adjective.

Having shown that adjectival passives exist, we can now consider the restrictions to which they are subject.

Some restrictions on adjectival passives are a direct consequence of their **adjectival** nature - i.e. they appear in positions where adjectives would normally appear - hence the contrast below:

(10) a. John was told the truth

b.\*John was untold the truth

The contrast between (10a) and (10b) can be seen as a result of the fact that untold, unlike told, is an adjective. (10b) is ungrammatical in the same way as \*John is afraid spiders and \*John is fond Mary, which show that adjectives do not take NP complements.

Other restrictions on adjectival passives are a consequence of their purely **lexical** nature. Consider the following:

(11) a. The answer is unknown

b.\*Yeltsin is unknown to be a maverick

(12) a. He was unconsidered

b.\*He was unconsidered to be a spy

We know that unknown and unconsidered are adjectival passives. The ungrammaticality of the (b) examples show that we do not have adjectival passives where the subject corresponds to the subject of a subordinate clause in the active. The subject of an adjectival passive always corresponds to an active complement. This is explained if adjectival passives are purely lexical.

From contrasts like those, it is plausible to conclude that English adjectival passives are purely lexical - i.e. they can



never allow NP-movement. Put in the simplest terms, in an adjectival passive such as,

(13) John was unimpressed

the sentence subject NP [John] is base-generated - i.e. does not start out in postverbal object position. Hence, (13) is not any different from a sentence containing a genuine adjectival phrase (14), where no movement has taken place, except that the adjective in (13) is derived from a verb:

(14) John was unintelligent

What we have done in this subsection has been to look at the environments in which adjectival passives occur in English. We have shown that certain restrictions on the distribution of English adjectival passives can be explained if they are purely lexical and not transformational. The natural question to ask here is: **Are there only lexical passives?** The answer, as already assumed, is no, as there are equally important reasons for believing that verbal passives are transformational, to which we turn in the following subsection.

#### **7.1.1.2. More on Transformational Passives**

Unlike lexical passives, by transformational passives we mean constructions that would normally involve the application of NP-movement. But, the question is how to decide if we have a transformational passive. Given GB, a passive must be transformational where its subject does not correspond to an active complement. Examples like (15b), (16b) and pseudo-passives are two examples of this.

Let's first consider some cases where the subject in the passive would correspond to the subordinate subject in the active. Consider the following examples:

- (15) a. They believed Mary to be a beauty  
      b. Mary<sub>i</sub> was believed e<sub>i</sub> to be a beauty
- (16) a. They considered Mary a beauty  
      b. Mary<sub>i</sub> was considered e<sub>i</sub> a beauty

(15a-b) are instances of exceptional clauses. (16a-b) are, as we have seen in chapter Two, examples which involve Small Clauses, and thus provide an argument against analyzing all passive participles as lexical.

Turning now to pseudo-passive, we expect syntactic passives to exhibit the direct object becoming the subject. But this is surely not a crucial characteristic of passives, as has already been illustrated in (15) and (16), or in the following:

- (17) a. John slept in the bed  
      b. The bed<sub>i</sub> was slept in e<sub>i</sub>

In (17b), the passivized subject has been extracted out of its underlying position marked e into subject position. The position of the trace bears a  $\theta$ -role in the same way as its corresponding active does. Such constructions as (17b) are often referred to as pseudo-passives or prepositional passives. The importance of pseudo-passives follows from the fact that they differ from ordinary passives in that the missing element is superficially a complement of a preposition instead of the verb.<sup>1</sup>

Thus far, the two constructions we have looked at provide sufficient evidence that verbal passives are not lexical. Our next move involves looking at Syrian Passives and seeing what they look like.

## 7.2. Syrian Passives

The passive of simple verbs in Syrian is generally formed by the prefixation of n-. Here are some examples to illustrate this point:

(18)	<u>ACTIVE</u>	<u>PASSIVE</u>
a.	Kamil    ḡarab            səyyart-u Kamil smash3SGmpast car-3SGm 'Kamil smashed his car'	səyyart-u    nḡarabet car-3SGm smash3SGfPASS 'His car was smashed'
b.	Reem    haret            qameeṣ-a Reem wear3SGfpast shirt-3SGf 'Reem wore out her shirt'	qameeṣ-a    nhara shirt-3SGf wear3SGmPASS 'Her shirt was worn out'
c.	Huwweh    ḡasal            tyab-u he wash3SGmpast clothes-3SGm 'He washed his clothes'	tyab-u            nḡasalu clothes-3SGm wash3plPASS 'His clothes were washed'

Passives in Syrian are of two types: (i) **Personal** passives; and (ii) **Impersonal** passives.

In Personal passives, the subject of a verb in the passive corresponds to the object of the active verb. The following illustrate the point with non-pronominal subjects being used:

- (19) a. ?ahmad            bas            Layla    mbareḡ  
Ahmad kiss3SGmpast Layla yesterday  
'Ahmad kissed Layla yesterday'

- b. Layla        nbaset        mbareḥ  
       Layla kiss3SGfPASS yesterday  
       'Layla was kissed yesterday'
- c. nbaset        Layla        mbareḥ  
       kiss3SGfPASS Layla yesterday

(19a) is a Syrian active sentence; (19b) is the passive counterpart of (19a); and (19c) shows that we can have the subject following the verb. This is what we would expect, given that Syrian allows a VSO order.

Now, we can illustrate the same set of data with pronominal subjects:

- (20) a. ?aḥmad                    bas-a        (ḥəyyeh) mbareḥ  
       Ahmad    kiss3SGmpast-3SGf    she        yesterday  
       'Ahmad kissed her yesterday'
- b. ḥəyyeh    nbaset        mbareḥ  
       she        kiss3SGfPASS yesterday  
       'She was kissed yesterday'
- c. nbaset        ḥəyyeh        mbareḥ  
       kiss3SGfPASS    she        yesterday

Apart from the presence of pronominal subjects, the data in (20) is just like (19). Again, (20c) allows for a pronominal subject to follow the verb.

It is clear that the pronoun in (20c) is a subject. As we have seen in chapter Four, a pronominal object is always associated with a clitic. The absence of the clitic shows this - hence the ungrammaticality of (21) where a feminine clitic is attached to the verb.

- (21) \* nbaset-a həyyeh mbareh  
 kiss3SGfPASS-3SGf she yesterday

We can now turn to Impersonal Passives. Consider the following examples:

- (22) a. ma hada šəreb b ha l-kaseh  
 not somebody drink3SGmpast in this the-glass  
 'Nobody has drunk out of this glass'  
 b. ma nšarab b ha l-kaseh  
 not drink3SGPASS in this the-glass

This data suggests that we have impersonal passives only with verbs that take a PP complement. Hence, an example of an impersonal passive with an NP complement is ruled out as ungrammatical. The asterisked example illustrates this point:

- (23) a. r-ržal nqatlu  
 the-men kill3plPASS  
 'The men were murdered'  
 b. nqatlu r-ržal  
 kill3plPASS the-men  
 c. \*nqatal r-ržal  
 kill3SGPASS the-men

(23a) has the personal passive in (23b), but not the impersonal passive in (23c).

We have looked at some basic examples involving personal and impersonal passives. In the following section, we will consider whether or not Syrian has any subjects in the passive which do not correspond to the objects in the active. We are doing this to decide whether Syrian has syntactic passives.

### 7.3. Does Syrian have Transformational Passives?

To answer this question, we need to consider the two constructions that are widely assumed to provide support for a movement analysis of passives, as shown earlier - namely, (i) passive constructions where the subject corresponds to the subject of a subordinate clause in the active; and (ii) pseudo-passives, where the subject corresponds to a prepositional object.

Now, to consider the first type of construction, we need to look at further examples where a verb takes a verbless clause as its complement.

(24) a. kamal byə9təber                      Layla 9abqarəyyeh

Kamal consider3SGmpres Layla genius

'Kamal considers Layla a genius'

b.\*Layla n9tabret                      9abqarəyyeh

Layla consider3SGfPASS genius

'Layla was considered a genius'

c.\*n9tabar                      ənnu Layla 9abqarəyyeh

consider3SGPASS that Layla genius

(24a) involves a verb taking a VC as a complement; (24b) is its personal passive counterpart; and (24c) is its impersonal passive counterpart. The ungrammaticality of (24b) suggests that Syrian has no transformational passives. But, then, the ungrammaticality of (24c) suggests that verbs that take a clausal complement do not have passive forms.

We can give some examples of the paradigm in (24) with other verbs to show that the Syrian counterpart of consider is

not an isolated case. Consider the following examples:

(25) a. Kamal      bizən              Layla      9abqarəyyeh

Kamal   think3SGmpres   Layla              genius

'Kamal thinks Layla is a genius'

b.\*Layla              nzanet              9abqarəyyeh

Layla   think3SGfPASS              genius

'Layla was thought to be a genius'

c.\*nzan              ənnu      Layla      9abqarəyyeh

think3SGPASS      that      Layla              genius

The data in (25) is like that in (24). Again, the ungrammaticality of (25b) suggests the nonexistence of transformational passives in Syrian. (25c) suggests that verbs that take a clausal complement do not have passive forms - hence the ungrammaticality.

We can now consider some further data:

(26) a. Kamal      qal              Layla      9abqarəyyeh

Kamal   say3SGmpast   Layla              genius

'Kamal said Layla was a genius'

b.\*Layla      nqalet              9abqarəyyeh

Layla   say3SGfPASS              genius

'Layla was said to be a genius'

c.\*nqal              ənnu      Layla      9abqarəyyeh

say3SGPASS      that      Layla              genius

Yet again, the ungrammaticality of (26b) suggests that Syrian has no transformational passives. The ill-formedness of (26c) suggests that verbs that take a clausal complement do not have a passive form.





ent Syrian pseudo-passives are impersonal passives involving base-generated empty subjects -i.e. null expletive subjects. This view is supported by four pieces of evidence, two of which have already been advanced in connection with Apparent Syrian Raising Sentences - i.e. Word order and Agreement facts.

### 7.3.1. Word Order Facts

Starting first with the Word Order, we will present some topics with straightforward sentences - i.e. as we have seen with apparent raising sentences, sentences which contain an overt subject and do not involve what looks like a passive verb, as illustrated by (30):

- (30) a. 9ali, Layla basəṭ-u  
 Ali Layla kiss3SGfpast-3SGm  
 'Ali, Layla kissed'
- b. 9ali, Layla ḥaket ma9-u  
 Ali Layla speak3SGmpast with-3SGm  
 'Ali, Layla spoke to'

These may have corresponding examples with **empty** subjects, since, as noted in Chapter Six, a topic will sometimes look like a subject in such instances. The following illustrate:

- (31) a. 9ali, basəṭ-u  
 Ali kiss3SGfpast-3SGm  
 'Ali, (she) kissed'
- b. 9ali, ḥaket ma9-u  
 Ali speak3SGfpast with-3SGm  
 'Ali, (she) spoke to'

As is evident from the interpretation, the clause-initial NP is

not a subject. Again, the question that we should ask is: **is there any other evidence that shows that these NPs are not subjects?** The fact that they cannot follow the verb shows this. Hence the following can be ruled out, since, as noted earlier, passive subjects can follow the passive verb.

- (32) a.\*            basə-t-u            9ali  
                      kiss3SGfpast-3SGm    Ali  
       b.\*    həket                    9ali            ma9-u  
                      speak3SGfpast    Ali            with-3SGm

The same can be shown to hold true of the clause-initial NP in an Apparent Pseudo-passive construction. Consider the following example which contains both an overt subject and what looks like a passive verb, repeated here as (31):

- (33) 9ali        nəhaka                    ma9-u  
                   Ali    speak3SGPASS    with-3SGm  
                   'Ali was spoken to'

We can show that the concerned clause-initial NP is not a subject, but rather a topic. If 9ali in (33) is a subject, then, as shown earlier, passive subjects can follow their verbs. But, the example in (34) clearly shows that 9ali lacks the ability to follow the verb - hence the ungrammaticality of the following:

- (34) \*nəhaka                    9ali            ma9-u  
                      speak3SGPASS    Ali            with-3SGm

This suggests that the apparent subject is not really a subject, but rather a **topic**.

### 7.3.2. Agreement Facts

Moving next to Agreement facts, the passive verb does not agree with the apparent subject either - i.e. the verb concerned is invariant in form, as the following will illustrate:

- (35) a. Layla            nhaka            ma9-a  
         Layla        speak3SGPASS    with-3SGf  
         'Layla was spoken to'
- b. 1-wlad        nhaka            ma9-on  
         the-boys    speak3SGPASS    with-3pl  
         'The boys were spoken to'
- c. nəhna        nhaka            ma9-na  
         we            speak3SGPASS    with-1pl  
         'We were spoken to'

Hence, related examples with 3SGf, 3pl, and 1pl inflections on the passive verb would result in ungrammaticality:

- (36) a.\*Layla        nhaket            ma9-a  
         Layla        speak3SGfPASS    with-3SGf
- b.\*1-wlad        nhaku            ma9-on  
         the-boys    speak3plPASS    with-3pl
- c.\*nəhna        nhakeina        ma9-na  
         we            speak1plPASS    with-1pl

From these observations, it follows that apparent pseudo-passives in Syrian are really impersonal passives with topicalization out of a prepositional object.

### 7.3.3. Two Further Arguments

A further argument dealing with topicalization bears on some examples which involve a topicalized PP. As observed in chapter Five, sentences with a fronted prepositional object have counterparts with a fronted PP. Consider first the following examples:

- (37) a. Salwa,    ḥkeina                    ma9-a  
             Salwa speaklplpast    with-3SGf  
             'Salwa, we spoke to'
- b. ma9    Salwa,    ḥkeina  
             with Salwa    speaklplpast  
             'to Salwa, we spoke'

In (37a), we have an NP topicalized, whereas in (37b) a PP. Both these sentences are active.

We can now look at their passive counterparts:

- (38) a. Salwa,    ṇhaka                    ma9-a  
             Salwa    speak3SGPASS with-3SGf
- b. ma9    Salwa,    ṇhaka  
             with Salwa    speak3SGPASS

Just like its active counterpart, (38a) contains a topicalized NP. Again, (38b) involves a PP in topic position. We do not expect such behaviour if we are dealing with Pseudo-Passives. Note that in English we do not get \*in the bed was slept corresponding to The bed was slept in.

Yet another piece of evidence in support of the assumption that what we are dealing with here is just a case of topicalization stems from instances of verbs which take two PP

complements. The following illustrate:

- (39) a. Salwa      ḥaket                      ma9   Kamal   mənšān   Məštapha  
              Salwa   speak3SGfpast   with Kamal   for   Mustapha  
              'Salwa talked to Kamal about Mustapha'
- b. Kamal<sub>i</sub>      nḥaka                      ma9-u   e<sub>i</sub>   mənšān   Məštapha  
              Kamal   speak3SGPASS with-3SGf                      for   Mustapha  
              'Kamal was talked to about Mustapha'
- c. Məštapha<sub>i</sub>   nḥaka                      ma9   Kamal   mənšān-u   e<sub>i</sub>  
              Mustapha   speak3SGPASS   with   Kamal   for-3SGm  
              lit. 'Mustapha was talked to Kamal about'

(39a) is an active sentence which involves two PP complements - i.e. ma9 Kamal and mənšān Məštapha; (39b) looks like a pseudo-passive sentence with a preposition intervening between the passive participle and the EC. Unlike (39b), what we have in (39c) is what resembles a pseudo-passive sentence, but with a PP separating the passive participle from the preposition that precedes the EC. Again, we do not expect such cases to occur if we are dealing with pseudo-passives - hence in English instances like the following are ruled out:

- (40) \*John was talked to Mary about

Note that we have in English (just about) Mary was talked to about John where the first prepositional object is fronted. Thus, (38) and (39) give further support to the assumption made earlier that apparent pseudo-passives in Syrian are really cases of topicalization.

To sum up, we have considered a number of facts in order to be able to determine whether Syrian has transformational passives. We need to stress that Syrian has neither passives where the subject corresponds to the subject of a subordinate clause nor pseudo-passives. Hence, there is no evidence that Syrian has transformational passives. That is, there are no NP-traces in Syrian passives.

#### **7.4. Summary**

In this chapter, we looked at Passives, another type of sentences normally involving NP-movement. We began by taking a closer look at the nature of passives in English. Then, we highlighted the distinction between lexical and transformational passives. In 7.2., we considered Syrian Passives, and looked at ordinary and impersonal passives. Finally, we dealt with the question of whether or not Syrian has transformational passives, looking at what look like pseudo-passives in Syrian. We referred here to two arguments which have already been adopted in connection with apparent Syrian raising sentences. We also considered two further arguments. They all argued against treating Syrian Passives as instances involving NP-movement.

## NOTES TO CHAPTER SEVEN

1. For further discussion on this, see Davison (1980).

## CHAPTER EIGHT

### CONTROL CONSTRUCTIONS

#### 8.0. Introduction

This chapter aims to elucidate the central properties of Syrian Control Constructions (henceforth CCs). These are of interest because they are standardly analyzed as containing a distinctive type of empty category. In English, as in many languages, what is meant by a control sentence is a sentence containing a superficially subjectless infinitive and an NP which is understood as the subject of the infinitive. We will frequently present Syrian control sentences involving a superficially subjectless finite complement:

(1) Kamal      ḥawal      ʔnnu      yšoof      Layla

Kamal    try3SGmpast    that    see3SGmpres    Layla

'Kamal tried to see Layla'

(2) Kamal    kan      məštaq      yxalleṣ      faḥs-u

Kamal    be-past    eager    finish3SGmpres    exam-3SGm

'Kamal was eager to finish his exam'

This chapter is organised as follows. In section 8.1., we look at CCs in English. We present their crucial features, and discuss how such constructions are analysed in GB. In 8.2., we consider how the Syrian data might be accommodated within the GB framework, looking at examples that compare and contrast with raising sentences. In 8.3., we consider the implications of the Syrian data, particularly how it challenges the standard GB model. In the light of the problem posed, we argue



for alternative GB accounts - namely Bouchard's (1984) and Koster's (1984).

## 8.1. Control Sentences in English

### 8.1.1. The basic data

As noted in Chapter Six, raising sentences in English involve either:

- (i) a subject, a verb, and an infinitive with no overt subject, or
- (ii) a subject, a form of be, an adjective, and an infinitive with an empty subject, as illustrated in (3) and (4), respectively:

(3) John seems to be happy

(4) John is likely to win

However, not all sentences of this form are raising sentences. For example, consider the following:

(5) a. John tried to rob the bank

b. John is eager to go abroad

These are widely referred to as control sentences, where the subject (e.g. John), which is also the understood subject of the infinitive, is generally known as the controller.

We begin by looking at the central properties of control sentences. We then consider how they are analyzed within GB.

The first question to consider is how sentences like (5a-b) differ from raising sentences. The point to stress is that control sentences only allow an ordinary argument NP as subject. It follows that the subject cannot be a dummy, an idiom chunk, or a clause. As we have seen, in a raising

sentence, any element can appear in subject position as long as it is compatible with the infinitive. As a result, if the infinitive requires a dummy subject, the raising verb will have a dummy subject, as the following examples illustrate:

- (6) a. There seems to be a solution
- b. There is likely to be a solution
- c. It seems to be snowing
- d. It is likely to snow

Again, if the infinitive allows an idiom chunk subject, then the raising verb will permit an idiom chunk in subject position. Consider the following:

- (7) a. The cat seems to have got his tongue
- b. The cat is likely to be out of the bag

What is more, if the infinitive permits a clausal subject, the raising verb or be will allow a clausal subject. Hence, we have examples like the following:

- (8) a. That he is innocent seems to be obvious
- b. That he is innocent is likely to be obvious

There are no corresponding sentences with try and eager:

- (9) a.\*There tried to be a solution
- b.\*There is eager to be a solution
- c.\*It tried to be snowing
- d.\*It is eager to snow
- (10) a.\*The cat tries to have got his tongue
- b.\*The cat is eager to be out of the bag
- (11) a.\*That he is innocent tries to be obvious
- b.\*That he is innocent is eager to be obvious

(9a-d) are ruled out because control sentences do not allow dummy subjects. (10a-b) are ill-formed because control sentences prohibit the appearance of idiom chunks in subject position. The fact that control sentences do not permit clausal subjects rules out (11a-b). A look at this data, then, makes it clear that we have a different kind of sentence here - i.e. we have here some ways of distinguishing between control and raising sentences.

Although some Control Constructions superficially resemble raising sentences, not all do, especially those with a non-subject controller. Consider the following examples:

(12) John persuaded Bill to get fit

(13) John appealed to Bill to help his parents

In (12), the object is chosen as the controller, and in (13) it is the the object of a preposition that functions as a controller. These examples are not similar to raising sentences, but (12) superficially looks like an exceptional clause of the form [NP I VP], such as (14)

(14) John believed Bill to be fit

Such sentences are analyzed within GB as consisting of a single clausal complement. Whereas, sentences like (12) are rather different. More specifically, with a verb like believe, we can have any sort of NP postverbally as long as it is compatible with the infinitive, as the following illustrate:

(15) a. John believed there to be a technical hitch

b. John believed it to be easy to win the fight

With persuade, on the other hand, only an ordinary argument NP

is allowed postverbally, as the following demonstrate:

(16) a.\*John persuaded there to be a technical hitch

b.\*John persuaded it to be easy to win the fight

This is a clear instance of the fact that we have a different kind of sentence in (12).

An additional distinctive feature of control sentences is that the infinitive can sometimes be preceded by the complementiser whether, or a wh-phrase, as the following demonstrate:

(17) a. John asked whether to go home

b. John asked what to do next

However, the infinitive in a raising sentence is never preceded by whether or a wh-phrase:<sup>1</sup>

(18) a.\*John seemed whether to go home

b.\*John is likely what to do next

### 8.1.2. The GB Analysis of Control Sentences

Let us now consider how control sentences are analyzed in GB. It is worth noting that many CCs have corresponding sentences with an ordinary clause instead of the infinitive, as (19b) illustrates:

(19) a. John asked what **to do next**

b. John asked what **he should do next**

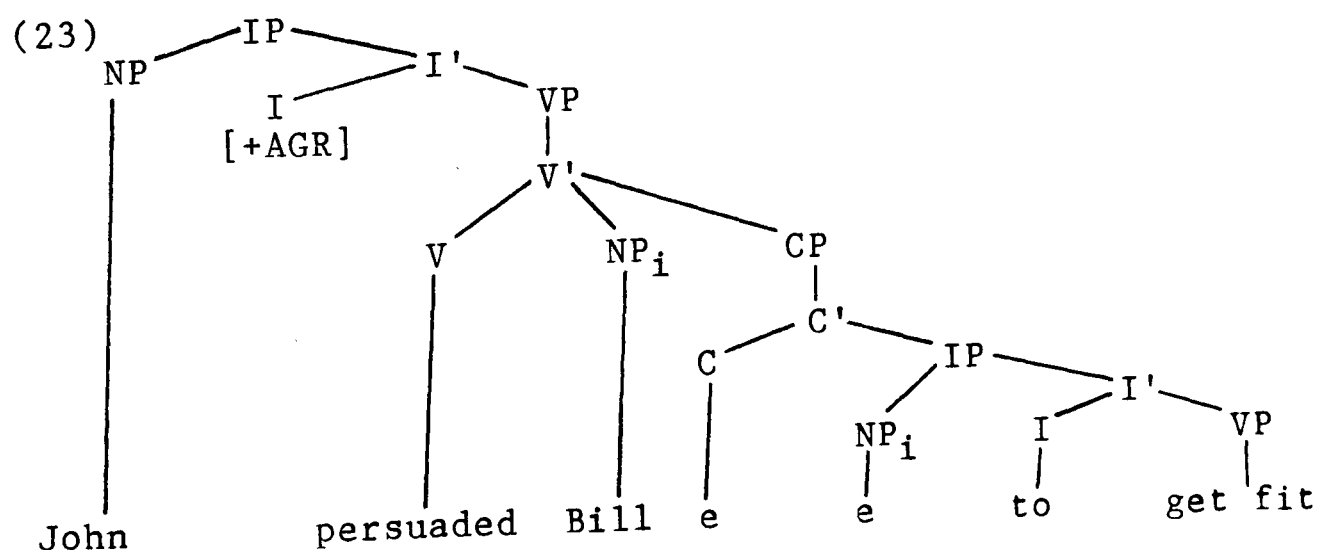
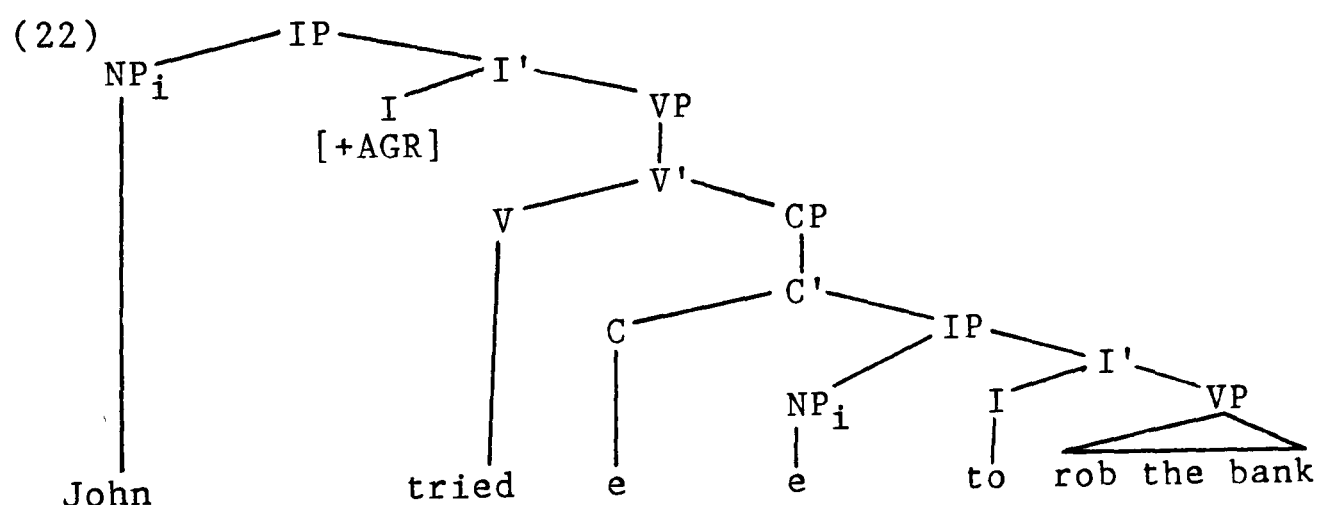
This, in fact, supports the assumption that the infinitive is a clause with a covert subject. Also worth noting is the fact that related sentences with an ordinary clause do not allow dummy elements like it , there to occupy the position of the controller. This clearly indicates that the position of the

controller is a  $\theta$ -position. This suggests, as we have argued, that the controller cannot undergo movement to its surface position - since if movement takes place, then the argument NP will end up with two  $\theta$ -roles. Hence the clause contains a base-generated empty subject.

Since infinitives in CCs can sometimes be preceded by a complementiser, we might argue that they are not just IPs, but also CPs. If this is the case, then we will have the structure in (22) corresponding to (20) and that in (23) corresponding to (21):

(20) John tried to rob the bank

(21) John persuaded Bill to get fit



These structures give rise to the following question: **what is the exact nature of the empty subject in the complement position?** Since there is no movement from this position, it cannot be a trace. Note that it is ungoverned, which presumably means that it cannot be pro. Thus, given the standard assumption in GB, this empty category, as noted in earlier Chapters, must be PRO. As we have seen, PRO is both an anaphor and a pronominal. That is to say that like anaphors, PRO is subject to condition A of the binding theory:

(24) **An anaphor must be A-bound in its governing category** and like pronominals subject to condition B of the binding theory:

(25) **A pronominal must be A-free in its governing category**  
 The only difference between (24) and (25) is that the latter has 'free' instead of 'bound'. What is meant by free, as noted in earlier chapters, is not coindexed with a c-commanding category in an A-position.

As we said in Chapter One, the motivation for (25) is provided by data like the following, where, as the indices clearly demonstrate, John is the antecedent of the pronominals concerned:

- (26) a. \*John<sub>i</sub> likes him<sub>i</sub>  
       b. \*John<sub>i</sub> believes [IP him<sub>i</sub> to be a genius]  
       c. John<sub>i</sub> believes [IP Mary to like him<sub>i</sub>]  
       d. John<sub>i</sub> believes [CP that [IP he<sub>i</sub> is a genius]]

Given that a lexical category governs its complements, then him in (26a) is governed by likes. Its governing category is the

sole IP the sentence contains. Hence, it is not free in its governing category -i.e. it is a violation of (25). (26b-c) are exceptional clauses of the form [NP I VP]. Again, in (26b), him is governed by believes, since a lexical category exceptionally governs the subject of an IP complement. Its governing category is the main IP. Hence, (26b) is a violation of (25), since it is not free in its governing category. By contrast, (26c) meets the requirement of (25) in that him is governed by like - hence its governing category is the subordinate IP, and consequently it is free in its governing category. Similarly, in (26d), he is governed by [+AGR] on I which is combined with V on the surface. Like (26c), its governing category is the subordinate IP, and thus it is free in its governing category.

What still requires explanation is why PRO is both a pronominal and an anaphor. That is, **why should it be treated as having the properties of both a pronoun and an anaphor?** Given standard GB, an obvious assumption would be to say that the distribution of PRO is regulated by both condition A and B of the binding theory. In other words, it must be simultaneously bound and free in its governing category. Since no element can be both bound and free in its governing category, PRO will only be acceptable if it has no governing category. This condition will be met if PRO is not governed. Hence, the outcome of analyzing PRO in this way gives us, as noted in Chapter One, the PRO theorem:

(27) PRO must be ungoverned

This restricts the range of positions in which PRO can appear.

Essentially, this suggests that PRO can only appear in one position -i.e. subject position in a non-finite IP within a CP. Alternatively, if it appears as the complement of a lexical head, it will be governed by it. If it appears in the subject position of a finite IP, it will be governed by the agreement features on INFL. If it appears as the subject of a 'bare' non-finite IP, it will be governed by the lexical head of which IP is a complement. Finally, if it occurs as the subject of a small clause, it will be governed by the immediately preceding verb - hence the ungrammaticality of (28a-d), repeated here for convenience:

- (28) a.\*John loves PRO  
       b.\*John believes [<sub>CP</sub> that [<sub>IP</sub> PRO is a fool]]  
       c.\*John believes [<sub>IP</sub> PRO to be a fool]  
       d.\*John considers [<sub>SC</sub> PRO a fool]

Thus far, analyzing PRO as both a pronominal and an anaphor accounts for the fact that PRO is restricted to occurring only in some subject positions.

## 8.2. Control Constructions in Syrian

### 8.2.1. The data

Two types of clauses in Syrian look rather like control sentences:

- (i) One type involves a subject, one of a small class of verbs, which we translate as control verbs, and a finite verbal complement with no overt subject, and  
 (ii) The other type involves a subject, a past tense form of be, one of a small class of adjectives, which we translate as



control adjectives, and a finite verbal complement with an empty subject.

The first type is illustrated by (29a-b), and the second type by (30a-b):

(29) a. Fadi    ḥawal            ənnu    yəʃtəri            səyyara  
           Fadi try3SGmpast    that buy3SGmpres    car  
           'Fadi tried to buy a car'

b. Fadi    xaṭṭat                    yšoof            Salwa  
           Fadi plan3SGmpast    see3SGmpres    Salwa  
           'Fadi arranged to see Salwa'

(30) a. Fadi (kan)            məštaq    ənnu    yšoof                    ?ahl-u  
           Fadi be-past    eager    that see3SGmpres    parents-his  
           'Fadi was eager to see his parents'

b. Fadi (kan)            məštəhi            yərbah            ž-žaʔizeh  
           Fadi be-past    anxious    win3SGmpres    the-prize  
           'Fadi was anxious to win the prize'

With respect to (29a-b), we can have a subject, a verb, and a constituent containing a finite verb with no overt subject. (30a-b) can also have the following order: a subject, a past tense form of be, what looks like a control adjective, and a verbal complement with an empty subject. As expected, in both types of example the subject can follow the verb, as in (31) and (32):

(31) a. ḥawal            Fadi    ənnu    yəʃtəri            səyyarah  
           try3SGmpast Fadi that    buy3SGmpres    car

b. xattat            Fadi            ysoof            Salwa  
           plan3SGmpast Fadi    see3SGmpres    Salwa

- (32) a. kan Fadi məštaq ənnu yšoof ?ahl-u  
 be-past Fadi eager that see3SGmpres parents-3SGm  
 b. kan Fadi məštəhi yərbah ž-ža?izeh  
 be-past Fadi anxious win3SGmpres the-prize

The question that we must ask here is: **How do we know these are control sentences?** One important point is that such sentences cannot have a dummy NP in subject position, as the following illustrates:

- (33) \*ḥawlet tmaṭṭer  
 try3SGfpast rain3SGpres  
 \*'(It) tried to be raining'

As noted in the preceding chapter, the Syrian counterpart of dummy it is always phonologically unrealised, as in (33).

Further support stems from the fact that the verbal complement does not allow a clausal subject, as illustrated below:

- (34) a.\* ənnu kan gəlṭan ḥawal ykoon mazboot  
 that be-past mistaken try3SGmpast be-pres right  
 'That (he) was mistaken tried to be right'  
 b.\* ənnu kan gəlṭan kan məštaq ykoon mazboot  
 that be-past mistaken be-past eager be-pres right  
 'That (he) was mistaken was eager to be right'

Yet a further significant factor is that such sentences cannot allow idiom chunk subjects:

- (35) a.\*l-far ḥawal yəl9ab b 9əbb-u  
 the-mouse try3SGpast play3SGpres in heart-3SGm  
 Lit. 'The mouse tried to play in his heart'

= he feels dubious about something

b.\*l-qət kan məṭṭammes yəbla9-lu lsaṇ-u  
the-cat be-past anxious swallow3SG-3SGm tongue-3SGm  
Lit. 'The cat is anxious to swallow his tongue'

= he is unable to speak freely

On the surface, some utterances that resemble CCs in Syrian are similar to a sentence containing a single clausal complement. Consider the following examples:

(36) a. Kamal qana9 Layla ənnu trooḥ  
Kamal convince3SGmpast Layla that go13SGfpres  
ma9-u  
with-3SGm

'Kamal persuaded Layla to go with him'

b. Kamal ṭalab mən Layla trooḥ ma9-u  
Kamal plead3SGmpast from Layla travel3SGf with-3SGm  
'Kamal appealed to Layla to go with him'

In (36a) we have an object controller, whereas (36b) comprises an object of a preposition controller. (36a), however, looks superficially like the following example:

(37) Marwan byə9təqed ənnu Kamil biḥəb Reem  
Marwan believe3SGmpres that Kamil like3SGmpres Reem  
'Marwan believes Kamil to like Reem'

The point is that a complementizer follows Layla in (36a), but precedes Kamil in (37).

Another notable feature of CCs in Syrian is that the verbal complement can sometimes be preceded by a complementiser or a wh-phrase. The following illustrate this:

- (38) a. Maher saʔal ʔəza Kamil rah 9a l-beit  
 Maher ask3SGmpast if Kamil go3SGmpast on the-house  
 'Maher asked whether Kamil went home'
- b. Maher saʔal šu Kamil 9amal ba9dein  
 Maher ask3SGmpast what Kamil did3SGmpast later  
 'Maher asked what Kamil did next'

In contrast, the verbal complement in apparent Syrian raising sentences cannot be preceded by ʔəza or šu. The following illustrate this:

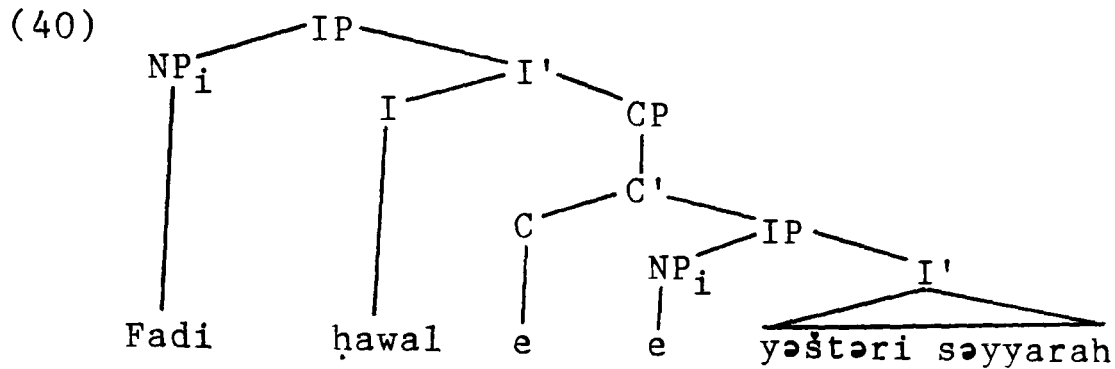
- (39) a.\*Maher yəzhar ʔəza Kamil bihəb Salwa  
 Maher seempres if Kamil like3SGmpres Salwa
- b.\*Maher yəzhar šu Kamil byə9mol ba9dein  
 Maher seempres what Kamil do3SGmpres later

The data we have considered so far gives rise to the following question: **is the control construction always a CP?, or is it sometimes an IP?** The fact that a complementizer is possible shows that the complement is a CP. In addition, because we do not have a clitic on the verb agreeing with the empty subject of the subordinate clause, we have to have a CP.

### 8.3. Implications

#### 8.3.1. Problem for Standard GB

From the body of data we have looked at, it follows that Syrian has what resemble CCs with a finite verbal complement instead of the infinitive. Consider now a somewhat simplified structure representing (29a):



(40) poses a problem for standard GB in the sense that the empty category in the subordinate clause is governed by [+AGR] - hence violating the PRO theorem, which requires, as noted earlier, that the empty category occupying the subject position of a CC be ungoverned.

Within GB, PRO, as we have seen, is analyzed as both an anaphor and a pronominal. As we said earlier, anaphors are required to be bound in their governing category. Pronominals, on the other hand, are required to be free in their governing category. The consequence of this is that PRO cannot have a governing category - hence cannot be governed. If so, what look rather like CCs in Syrian cannot have a PRO subject since PRO must be ungoverned.

### 8.3.2 Alternative GB Accounts

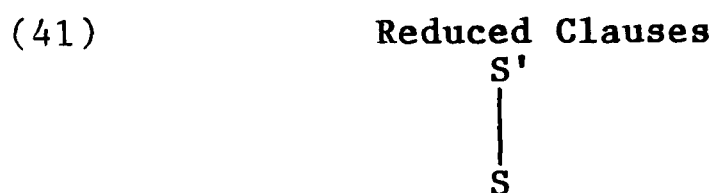
It has been suggested that not just PRO but also pro can be controlled -i.e. be required to be coindexed with some other NP. In other words, the claim that the EC in control constructions is PRO has been contested in recent GB. For example, Bouchard (1984) and Koster (1984) assume that PRO can be a pure anaphor and that it can be governed. But, of course, we are assuming that the EC is always a pure pronominal in Syrian.

### 8.3.2.1. Koster's Position

#### i. PRO as an Anaphor

Koster's proposals build on the ideas of Williams (1980) who distinguishes between obligatory control (control occurring in complements of verbs that do not take for or a gerund) and optional control (control in complements that do select the complementiser for or a gerund). He claims that we have a pure anaphor in cases of obligatory control. He does not consider the status of EC in positions of optional control.<sup>2</sup>

Koster (1984:427) proposes that PRO can occur as the subject of what he terms 'reduced' infinitival clauses -i.e. clauses lacking a complementiser. He offers this representation of the clauses concerned:



He uses obligatory PRO to mean the EC in control sentences which has the four features of anaphor binding (ibid:418): the antecedent has to be obligatory; it has to be unique -i.e. there are no split controllers; it has to be prominent in the sense that it c-commands the element it binds; and it has to be local -i.e. it must occupy the same governing category as the trace. Koster suggests that obligatory PROs are bound in their governing category in the same way traces are. Consider, for example, the following:

- (42) a. Bill tries [<sub>S'</sub> [<sub>S</sub> e to win]]  
      b. \*Bill tries [for Fred to win]

Under this analysis, Koster claims that try selects a reduced clause, as in (42a). Building on the fact that try does not select a for complementiser, he concludes that tries governs the subordinate subject position e in just the same way seem in raising sentences does - hence he rejects the structure in (42b). In other words, a natural consequence of the absence of **COMP** is that PROs in the complements of control verbs are accessible to government by the matrix verb. The same holds true of traces in the complements of raising verbs. Thus, for Koster, when obligatory PRO is governed it behaves like an anaphor -i.e. is bound in its governing category; and when ungoverned, it has an 'arbitrary' interpretation.<sup>3</sup>

#### **8.3.2.2. Bouchard's Position**

This position is of particular interest to us in the sense that, unlike Koster, Bouchard has a view on the nature of the EC in optional control examples - that it is a pure pronominal. For Bouchard, PRO can be either an anaphor or a pronominal, but not both, thus departing from the position adopted in Chomsky (1981) that PRO is a pronominal anaphor.

##### **i. PRO as an Anaphor**

Bouchard (1984:166) has argued that PRO in cases of obligatory control should be treated as an anaphor with an antecedent within a specific local domain as an ordinary anaphor. This can only be achieved if PRO reflects, as we have seen, the four properties anaphors normally have. For him, these properties allow the anaphoric PRO to be governed by its intended antecedent:

(43) Bill tried [<sub>S</sub> PRO to win]

deletion is assumed to have taken place, permitting Bill to govern PRO. The important point is that for Bouchard, unlike most people, an anaphor must be governed by its antecedent and must be bound in its governing category. It is this S' deletion that allows this relation between controller and controllee in such sentences.

In short, as far as the Syrian data is concerned, neither Bouchard's (1984) nor Koster's (1984) treatment of PRO as an anaphor gets us out of our dilemma. If PRO is a pure anaphor in the Syrian examples, it will not be bound in its governing category - since, as we have seen, it is governed in the subordinate clause. That is, its governing category is the embedded clause containing the governor [+AGR], thus violating condition A of the binding theory. Hence, that is not a solution.

#### **i. PRO as a Pronominal**

Bouchard (ibid:195) assumes that PRO in cases of optional control is not governed by its antecedent and it is a pronominal.

With respect to subjectless infinitives in CCs, the empty category in subject position will be free, providing, unlike the case with anaphoric PROs, S' deletion does not take place. As a result, the presence of S' will prevent PRO being governed by an antecedent. S' deletion is blocked if we have a filled COMP, as already noted.<sup>4</sup> The following illustrates this point:



(44) a. They don't know [<sub>S'</sub> what [<sub>S</sub> PRO to buy e ]]

b. They don't know [<sub>S'</sub> how [<sub>S</sub> PRO to shave  
themselves/oneself]]

we can see, in (44a-b), the COMP of S' is filled by a wh-  
-rase - hence the impossibility of S' deletion. PRO in the  
amples above is a pronominal since there is no available  
vernor -i.e. PRO is freely indexed. PRO can be coreferential  
th they in such sentences. It may also have no specific  
tecedent, as is the case with oneself in (44b). On this  
alysis, an anaphor and its antecedent cannot be separated by  
S'. It follows that PRO in (44) cannot be an anaphor (hence  
e non-obligatory control interpretation).<sup>5</sup>

We can summarize the gist of Bouchard's position on PRO as  
ollows: **Firstly**, where the null subject of a control construc-  
ion meets the condition on anaphors (i.e. is governed by its  
ntecedent), it is an anaphor. **Secondly**, where the null subject  
f a controlled construction does not meet the condition on  
anaphors, it can be a pronominal without being able to corefer  
reely. It is always a pronominal when the controlled clause is  
n S', and not just an S.

However, what we have in Syrian CCs is essentially the same  
C - i.e. non-anaphoric pronominal - in both types of control  
onstruction. In other words, the null subject of a controlled  
lause must be a pure pronominal. But, it does not corefer  
reely.

Thus, the subject of the embedded clause in Syrian CCs must  
be governed pro. We might simply say that the embedded EC can

e a realization of pro, and not of any other of the ECs. It cannot be NP-trace, because it is not bound in its governing category -i.e. the lower IP. And, it cannot be PRO because the subject position of a tensed clause is a governed position (by GR). Hence, it has to be pro.

#### **.5. Summary**

We have been concerned in this chapter with what look like ECs in Syrian. We began by looking at Control Sentences in English, considering the basic data, highlighting the ways in which control sentences differ from raising sentences. Then, we looked at the GB analysis of Control Sentences. In section 3.2., we considered Control Constructions in Syrian. Finally, we showed how the Syrian data posed a problem for standard GB, presenting alternative GB accounts and arguing that there was no problem here.

## NOTES TO CHAPTER EIGHT

1. However, Borsley (1991:246, fn.3) observes that examples with certain seem to counterexemplify the assumption made in the text that a raising sentence is never preceded by whether or a wh-phrase:

(i) Ben isn't certain whether to do it

(ii) Ben isn't certain what to do

But, these are not raising sentences given the impossibility of the following:

(i)\*It isn't certain whether to be easy to please Maja

(ii)\*It isn't certain what to be easy to please

This data shows how difficult it is to decide whether a sentence is a raising or a control sentence.

2. Koster (1984) implicitly suggests that PRO in cases of optional control is permitted in "non-transparent" embedded clauses -i.e. clauses involving complementisers at D-structure.

3. Manzini (1983) and Sportiche (1983) suggest that all instances of PRO are purely "anaphoric".

4. For similar views and other contexts in which PRO is ungoverned, see Hornstein & Lightfoot (1987:23-52).

5. Lebeaux (1984:254) proposes that obligatory as well as optional occurrences of PRO are governed. He assumes that PRO is "necessarily dependent" - hence the anaphoricity. He offers the following contrast to show that the pronoun, not PRO, is coreferential with the embedded antecedent:

(i) \*PRO<sub>i</sub> relieving himself from the night watch shows  
that the commander should have fired John<sub>i</sub>.

(ii) His<sub>i</sub> relieving himself from the night watch shows  
that the commander should have fired John<sub>i</sub>.

This contrast shows that optional PRO does not function as a "true pronominal", in Lebeaux's words.

## CHAPTER NINE

### CONCLUDING REMARKS

#### .0. Introduction

Bringing this work to a close, we will summarize the main conclusions. We will also highlight the questions left open in the thesis, and consequently the areas left for future researchers to explore.

#### 9.1. Conclusions

Starting with the more minor conclusions, we have shown that the subject of a superficially subjectless finite clause is pro. We have also shown that the EC in a number of clitic constructions is pro.

Turning now to the major conclusions, one important finding is that there are no NP-traces in Syrian - hence no NP-movement. We have found evidence (cf. 6.3.2.) based on word order and agreement facts that what looks like a subject in an apparent raising sentence is not a subject, but rather a topic - hence the constructions concerned are instances of topicalization

Additional support for the nonexistence of NP-traces in Syrian is provided by Passives. We have shown, using four arguments, that Syrian has neither passives where the subject corresponds to the subject of a subordinate clause nor pseudo-passives - hence there is no evidence that Syrian has transformational passives. That is, there are no NP-traces in Syrian Passives.

Another important conclusion is that there are no PRO subjects in what resemble control constructions in Syrian. We have shown that the empty subject position is governed by [+AGR] in the subordinate clause, contrary to GB assumptions that PRO must be ungoverned. Thus, it is 'little' pro that we have in what look like Syrian control constructions.

What should be noted is that the two conclusions mean that there are no anaphoric ECs in Syrian.

## 9.2. Questions Left Open

In the discussion of Syrian clitic constructions (cf. 4.2.), we have considered the variety of possibilities that exist. We have made it clear that if we assume following Borer (1984) that clitics 'absorb' Case, we will rule out sequences like \*X CL NP [-PRO], but we will also rule out simple clitic doubling -i.e. sequences like X CL NP [+PRO]- unless we claim that pronouns need not be Case-marked. But, we have shown that we cannot say this. We have also argued against Lyons' analysis. This area requires further consideration.

Another question to do with the analysis of Wh-movement constructions has also been left open (cf. 5.2.). We have highlighted the problem with the Verbal Object position to the effect that a Wh-trace in a verbal object position is sometimes associated with a clitic, but not in other cases. We have suggested a solution in terms of the ECP, making it clear that the analysis proposed seems to be broadly satisfactory. We hope that further research on this will unravel the peculiar features of the Verbal Object position and provide a way out.

### 9.3. Areas for Future Research

Tentatively, we have concluded on the basis of apparent raising sentences and passives that there is no NP-movement in Syrian.

**Ergative or unaccusative Constructions** are one type of sentences we have not considered in the text. The term 'ergative' was first used in the way that it is used in GB by Burzio (1986). In a different sense, it has been around for a long time. Burzio (ibid) defines an ergative clause as an intransitive clause with a transitive counterpart, in which the transitive object corresponds to the ergative subject, as illustrated by the following:

(1) a. The winds capsized **the ferry**

b. **The ferry** capsized

It has been proposed in GB that ergative verbs, like passive participles, do not have external  $\theta$ -roles and do not assign Case. Given these characteristics, ergatives will involve NP-movement, as illustrated in the following S-structure corresponding to the data in (1):

(2) [<sub>NP</sub> The ferry<sub>i</sub>] capsized  $t_i$

There are fairly well-developed arguments for this analysis in various languages. What is not clear is whether good arguments can be developed for such an analysis in connection with Syrian. Hence, it is not clear whether Syrian ergative constructions involve NP-movement.

Another phenomenon requiring further research involves **Verbal Traces**. Presenting Chomsky's (1986b) ideas, Hasan (1990) highlights the characteristics of verbal traces to the effect that they are both  $\theta$ -role and Case assigners. Using Standard Arabic data, he argues against Baker's (1988) position, which suggests that verbal traces cannot function as Case-assigners. Instead, Hasan (ibid) claims that verbal traces should assign Accusative Case to object NPs. Contrary to Torrego's (1984) claims that a verbal trace is not sufficiently strong to properly govern the object position, Hasan goes on to argue that verbal traces in Standard Arabic act as proper governors. This position is supported by data discussed in Koopman (1984) and Sproat (1985), among others.

#### **9.4. Summary**

This final Chapter has highlighted the main conclusions of the thesis. It has also noted the issues left open in the thesis, and the areas that require research in the years to come.

## BIBLIOGRAPHY

- Afkinich, T. (1986) Aspects of Moroccan Arabic Syntax, MA Dissertation, University of Wales, Bangor.
- Aoun, J. (1985) The Grammar of Anaphora, MIT Press, Cambridge, Mass.
- Aoun, J. & Sportiche, D. (1983) 'On the formal theory of government', LR 3, 211-235.
- Aoun, J. et al (1987) 'Two types of locality', LIn 18, 537-577.
- Baker, M. C. (1988) Incorporation: A Theory of Grammatical Function Changing, University of Chicago Press, Chicago.
- Belletti, A. et al, eds. (1981) The Theory of Markedness in Generative Grammar, Normale Superiore, Pisa.
- Berent, G. P. (1980) 'On the Realization of Trace: Macedonian Clitic Pronouns', in C. V. Chvany and R. D. Brecht (eds.), Morphosyntax in Slavic, Columbus, Slavica, 150-186.
- Bilba, E. (1991) 'Null Subjects, Identification, and Proper Government', Linguistics 29, 1, 33-51.
- Borer, H. (1984) Parametric Syntax, Foris, Dordrecht.
- Borer, H. (1986) 'I-Subjects', LIn, 17, 3, 375-416.
- Borer, H. (1989) 'Anaphoric AGR', in Jaeggli & Safir (eds.) The Null Subject Parameter, Kluwer, Dordrecht.
- Borsley, R. D. (1989a) 'NP's and Clauses in Welsh and Syrian Arabic', to appear in the proceedings of the Manchester NP Colloquim.
- Borsley, R. D. (1991) Syntactic Theory: A Unified Approach, Arnold, London.
- Borsley, R. D. and J. Stephens (1989b) 'Agreement and the Position of Subjects in Breton', NLLT 7, 407-427.
- Bouchard, D. (1983b) 'The Avoid Pronoun Principle and the Elsewhere Principle', in P. Sells and C. Jones (eds.), NELS 13, University of Massachusetts, Amherst.



- Bouchard, D. (1984) On the Content of Empty Categories, Foris, Dordrecht.
- Bouchard, D. (1985) 'PRO, Pronominal or Anaphor', LIn 16, 3, 471-477.
- Broadwell, A. G. (1988) 'Multiple  $\theta$ -role Assignment in Choctaw', in W. Wilkins (ed.), SynS 21, Thematic Relations, 113-127.
- Browne, E. W. (1974) 'On the problem of enclitic placement in Serbo-Croatian', in Brecht, R. and Chvany, C. (eds.), Slavic Transformational Syntax, Ann Arbor, Michigan.
- Bryne, F. (1986) 'Evidence against Grammars without Empty Categories', LIn 17, 4, 754-759.
- Burzio, L. (1986) Italian Syntax, Kluwer, Dordrecht.
- Choe, H. S. (1986) "An SVO Analysis of VSO Languages and Parametrization: A Study of Berber", in Proceedings of NELS 16, 75-95.
- Chomsky, N. (1972a) Language and Mind, Harcourt Brace Jovanovich, New York.
- Chomsky, N. (1975) The Logical Structure of Linguistic Theory, New York, Plenum Press.
- Chomsky, N. (1976) Reflections on Language, Maurice Temple Smith, London.
- Chomsky, N. (1977a) Essays on Form and Interpretation, North Holland Publishing Company, Amsterdam.
- Chomsky, N. (1977b) 'On Wh-movement', in P. Culicover et al (eds.), Formal Syntax, Academic Press, New York.
- Chomsky, N. (1980) Rules and Representations, Oxford, Blackwell
- Chomsky, N. (1981) Lectures on Government and Binding, Foris, Dordrecht
- Chomsky, N. (1982) Some Concepts and Consequences of the Theory of Government and Binding, Linguistic Inquiry Monograph Six, MIT Press, Mass.
- Chomsky, N. (1986a) Knowledge of Language: Its Nature, Origin, and Use, Praeger, New York.
- Chomsky, N. (1986b) Barriers, MIT Press, Cambridge, Mass.

- Chomsky, N. (1991) 'Some Notes on Economy of Derivation and Representation', in R. Freidin (ed.) Principles and Parameters in Comparative Grammar, MIT, Cambridge.
- Chomsky, N. & Lasnik, H. (1977) 'Filters and Control', LIn 8, 3, 425-504.
- Chomsky, N. & Lasnik, H. (1991) 'Principles and Parameters Theory', to appear in J. Jacobs et al (eds.), Syntax: An International Handbook of Contemporary Research, Walter de Gruyter, Berlin.
- Cole, P. (1987) 'Null Objects in Universal Grammar', LIn 18, 4, 597-612.
- Contreras, H. (1987) 'Small Clauses in Spanish and English', NLLT 5, 225-243.
- Cook, V. J. (1988) Chomsky's Universal Grammar, Basil Blackwell, U.K.
- Culicover, P. et al (1977) Formal Syntax, Academic Press, New York.
- Davison, A. (1980) 'Peculiar Passives', Lg 56, 1, 42-66.
- Eid, M. (1983) 'The Copula Function of Pronouns', Lingua 59, 179-207.
- El-Yasin, M. K. (1985) 'Basic Word Order in Classical Arabic and Jordanian Arabic', Lingua 65, 107-122.
- Emonds, J. (1980) 'Word Order in Generative Grammar', JLR 1, 33-54.
- Engdahl, E. (1983) 'Parasitic Gaps' Linguistics and Philosophy 6, 5-34.
- Engdahl, E. (1985) 'Parasitic gaps, resumptive pronouns, and subject extractions', Linguistics 23, 3-44.
- Fassi-Fehri, A. (1987) 'Generalised IP Structure, Case, and VS Word Order, ms., Faculty of Letters, Rabat
- Franks, S. (1990) 'On the Status of Null Expletives', Lingua 81, 1, 1-24.
- Freidin, R. (1975) 'The Analysis of Passives', Lg 51, 384-405.
- Greenberg, J. (1963) 'Some universals of Grammar with Particular Reference to Meaningful Elements', in J. Greenberg (ed.), Universals of Language, MIT Press, Cambridge.

- Haegeman, L. (1990) 'Subject Pronouns and Subject Clitics in West-Flemish', LR, 7, 333-363.
- Haegeman, L. (1991) Introduction to Government and Binding Theory, Basil Blackwell, Oxford.
- Hasan, A. (1990) Configurationality and the Syntax of Empty Categories, Ph.D. Thesis, University of Strathclyde, Glasgow.
- Hawkins, J. (1988) Explaining Language Universals, Basil Blackwell, Oxford.
- Hendrick, R. (1988) Anaphora in Celtic and Universal Grammar, Kluwer, Dordrecht.
- Hoekstra, T. (1984) Transitivity: Grammatical Relations in Government-Binding Theory, Foris, Dordrecht.
- Hoekstra, T. (1988a) 'Small Clause Results', Lingua 74, 101-139.
- Hoekstra, T. and Jan G. Kooij (1988b), 'The Innateness Hypothesis', in John A. Hawkins (ed.), Explaining Language Universals, Basil Blackwell, Oxford.
- Hornstein, N. & Lightfoot, D. (1987), 'Predication and PRO', Lg 36, 1, 23-52.
- Horrocks, G. (1987) Generative Grammar, Longman, London.
- Jackendoff, R. (1987) 'The Status of Thematic Relations in Linguistic Theory', LIn 18, 3, 369-411.
- Jadeed, M. M. (1986) zahiratu l-hazfi: The Phenomenon of Deletion, MA Dissertation, University of Tishreen, Department of Arabic, Lattakia, Syria.
- Jaeggli, O. (1980), On Some Phonologically-Null Elements in Syntax, doctoral dissertation, MIT, Mass.
- Jaeggli, O. (1986a) 'Passive', LIn 17, 587-622.
- Jaeggli, O. (1986b) 'Three Issues in the Theory of Clitics: Case, Doubled NPs, and Extraction', in H. Borer (ed.), SynS 19, The Syntax of Pronominal Clitics, 15-42.
- Jaeggli, O. and K. Safir, eds. (1989) The Null Subject Parameter, Kluwer, Dordrecht.

- Jaeggli, O. & K. Safir (1989) 'The Null Subject Parameter and Parametric Theory', in O. Jaeggli & K. Safir (eds.), The Null Subject Parameter, Kluwer, Dordrecht.
- Kayne, R. S. (1975) French Syntax, MIT Press, Cambridge, Mass.
- Kayne, R. S. (1991) 'Romance Clitics, Verb Movement, and PRO', LIn, 22, 4, 647-686.
- Keenan, E. L. (1985) 'Passive in the World's Languages', in T. Shopen (ed.), Language Typology and Syntactic Description, 1, 243-281.
- Kenstowicz, M. (1989) 'The Null Subject Parameter in Modern Arabic Dialects', in O. Jaeggli & K. Safir (eds.), The Null Subject Parameter, Kluwer, Dordrecht.
- Keyser, S. and T. Roeper (1984) 'On the Middle and Ergative Constructions in English', LIn 15, 3, 318-416.
- Kirsner, R. (1976) 'On the Subjectless 'Pseudo-Passive' in Standard Dutch and the semantics of background agents', LIn 385-415.
- Koopman, H. (1984) The Syntax of Verbs, Foris, Dordrecht
- Koster, J. (1978) 'Why Subject Sentences Don't Exist', in Keyser S. J., Recent Transformational Studies in European Languages, MIT Press, Cambridge.
- Koster, J. (1984) 'On Binding and Control', LIn 15,3, 417-459.
- Kuno, S. (1973) 'Constraints on Internal Clauses and Sentential Subjects', LIn 4, 363-385.
- Lakoff, G. (1970c) Irregularity in Syntax, Holt, Rinehart & Winston, New York.
- Lasnik, H. (1991) 'On the necessity of Binding Conditions', in R. Freidin (ed), Principles and Parameters in Comparative Grammar, MIT Press, Cambridge.
- Lasnik, H. & Saito, M. (1984) 'On the Nature of Proper government', LIn 15, 2, 235-289.
- Lasnik, H. & Uriagereka, J. (1988) A Course in GB Syntax: Lectures on Binding and Empty Categories. MIT Press, Cambridge, Mass.
- Lebeaux, D. (1984) 'Anaphoric Binding and the Definition of PRO', NELS, 14, 253-274.

- Levin, B. & Rappaport, M. (1986) 'The Formation of Adjectival Passives', LIn 17, 4, 623-661.
- Li, C. (ed.) (1976) Subject and Topic, New York, Academic Press.
- Li, Y. (1990) 'X-Binding and Verb Incorporation', LIn 21, 3, 399-426.
- Lyons, C. (1990) 'An Agreement Approach to Clitic Doubling', TPhS 88, 1, 1-57.
- Manzini, M. R. (1983) 'On Control and Control Theory', LIn 14, 421-426.
- Marantz, A. (1984) On the Nature of Grammatical Relations, MIT Press, Cambridge, Mass.
- Mascaro, J. & M. Nespor, eds. (1990) Grammar in Progress, Foris, Dordrecht.
- McCloskey, J. (1983) 'A VP in a VSO Language', in G. Gazdar et al (eds.) Order, Concord, and Constituency, Foris, Dordrecht.
- McCloskey, J. (1984) 'Raising, Subcategorization, and Selection in Modern Irish', NLLT 1, 441-485.
- McCloskey, J. & Hale, K. (1984) 'On the syntax of person-number inflection in Modern Irish', NLLT 1, 487-534.
- McCloskey, J. & Chung, S. (1987) 'Government, Barriers, and Small Clauses in Modern Irish', LIn 18, 2, 173-237.
- Modgil, S. & Modgil, C. (1987) Noam Chomsky: Consensus and Controversy, the Falmer Press, UK.
- Pateman, T. (1987) Language in Mind and Language in Society, OUP, Oxford.
- Perlmutter, D. M. (1971) Deep and Surface Structure Constraints in Syntax, Holt, Rinehart & Winston, New York.
- Picallo, M. C. (1984) 'The Infl Node and the Null Subject Parameter', LIn 15, 1, 75-102.
- Pollock, J-Y. (1989) 'Verb-movement, universal grammar, and the structure of IP', LIn 20, 365-424.
- Radford, A. (1981) Transformational Syntax, CUP, Cambridge.
- Radford, A. (1988a) Transformational Grammar: A First Course, CUP, Cambridge.

- Radford, A. (1988b) 'Small Children's Small Clauses', TPhS 86, 1, 1-43.
- Radford, A. (1988c) 'Syntactic Theory and the Acquisition of Syntax', ms., University of Wales, Bangor.
- Radford, A. (1990) Syntactic Theory and the Acquisition of English Syntax, Basil Blackwell, Oxford.
- Raposo, E. (1989) 'Prepositional Infinitival Constructions in European Portuguese', in Jaeggli, O. & Safir, K. (eds.) The Null Subject Parameter, Kluwer, Dordrecht.
- Reinhart, T. (1976) The Syntactic Domain of Anaphora, Ph.D. dissertation, MIT.
- Riemsdijk, H. Van & Williams, E. (1986) Introduction to the Theory of Grammar, MIT Press, Cambridge.
- Ritter, E. (1986) 'NSO Noun Phrases in a VSO Language', in Proceeding of NELS 17, 2, 521-537.
- Ritter, E. (1988) 'A Head-Movement Approach to Construct-State Noun Phrases', Linguistics 26, 909-929.
- Rizzi, L. (1982) Issues in Italian Syntax, Foris, Dordrecht.
- Rizzi, L. (1986) 'Null Objects in Italian and the Theory of pro', LIn 17, 3, 501-557.
- Roberts, I. (1987) The Representation of Implicit and Dethematized Subjects, Foris, Dordrecht.
- Ross, J. (1967) Constraints on Variables in Syntax, Ph.D. dissertation, MIT.
- Rothstein, S. (1983) The Syntactic Forms of Predication, MIT doctoral dissertation, Mass.
- Rudin, C. (1988) 'On Clitic Doubling in some Balkan Languages', Balkan & South Slavic Conference, Chicago.
- Salkie, R. (1990) The Chomsky Update: Linguistics and Politics, Unwin Hyman, London.
- Shlonsky, U. (1989) Null and Displaced Subjects, Indiana University Linguistics Club, Bloomington, Indiana
- Sobin, N. (1987) 'The Variable Status of COMP-Trace Phenomena', NLLT 5, 1, 33-60.

- Souali, El Hassan (1986) A Government and Binding Approach to Clause Structure in Standard Arabic, MA Dissertation, University of Wales, Bangor.
- Spencer, A. (1991) Morphological Theory: An Introduction to Word Structure in Generative Grammar, Blackwell, Oxford.
- Sportiche, D. (1983) Structural Invariance and Symmetry, Ph.D. Thesis.
- Sportiche, D. (1988) 'A theory of floating quantifiers and its corollaries for constituent structure', LIn 19, 425-449.
- Sproat, R. (1985) 'Welsh Syntax and VSO Structure', NLLT 3, 173-216.
- Stowell, T. (1981) Origins of Phrase Structure, Ph.D. thesis, MIT.
- Stowell, T. (1982) 'The Tense of Infinitives', LIn 13, 3, 561-570.
- Stump, G. T. (1989) 'Further Remarks on Breton Agreement', NLLT 7, 429-471.
- Suner, M. (1984) 'Controlled pro', in Baldi, P. (ed.), Papers from the 12th Linguistic Symposium on Romance Languages, John Benjamins, Philadelphia, 26, 252-273.
- Suner, M. (1988) 'The Role of Agreement in Clitic-doubled Constructions', NLLT 6, 391-434.
- Taraldsen, K. T. (1978a) 'On the NIC, Vacuous Application and That-Trace Filter', ms., MIT, Mass.
- Taraldsen, K. T. (1978b) 'The Scope of Wh-movement in Norwegian', LIn 9, 623-640.
- Taraldsen, K. T. (1981) 'The theoretical interpretations of a class of "marked" extractions', in A. Belletti et al, eds., The Theory of Markedness in Generative Grammar, Normale Superiore, Pisa.
- Torrego, E. (1981) 'Spanish as a Pro-Drop Language', ms., University of Massachusetts, Boston.
- Torrego, E. (1984) 'On Inversion in Spanish and Some of Its Effects', LIn 15, 1, 103-129.

- Wahba, W. (1984) Wh-Constructions in Egyptian Arabic, Ph.D. dissertation, MIT.
- Wasow, T. (1977) 'Transformations and the Lexicon', in P. Culicover et al (eds.) Formal Syntax, Academic Press, New York.
- Williams, E. (1980) 'Predication', LIn 11, 203-238.
- Williams, E. (1983) 'Against Small Clauses', LIn 14, 2, 207-308.
- Williams, E. (1987) 'Implicit arguments, the Binding Theory, and Control', NLLT 5, 151-180.
- Woolford, E. (1991) 'VP-Internal Subjects in VSO and Nonconfigurational Languages', LIn 22, 3, 503-540.
- Zubizarretta, M. L. (1987) Levels of Representation in the Lexicon and in the Syntax, Foris, Dordrecht.
- Zwicky, A. and Pullum, G. K. (1983) 'Cliticization vs. Inflection: English n't', Lg 59, 502-513.