

# Wh-questions in V-initial languages

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Submitted to the Department of Linguistics  
in partial fulfillment of the requirements for the degree of  
Master of Arts

UNIVERSITY OF TORONTO

September 2002

## Acknowledgements

I still cannot believe that it's been two years since I moved to Toronto, and that I have finished my forum paper. I have never written a paper of this size, even in Japanese, in my life. I have learned so many things in the last year through this work. The most valuable thing that I learned is the importance of my friends and my teachers. Without them, I would not have been able to finish this paper. And I feel hesitant to put only my name on the cover page of this paper and not theirs as well. I feel very lucky that I was able to study with good people at U of T, and I'd like to thank everyone I met at the Department of Linguistics over the last two years.

Elizabeth Cowper, my forum advisor, is certainly the person who I would like to thank first and most. Without Elizabeth's supervision, I could not handle writing this paper. I remember so well the time I was [bɪfʃɪ] about the recent development of Minimalism. Elizabeth was kind enough to acknowledge my take on syntax, leaving aside the question of whether I was wrong, and let me go with the way that I felt comfortable. She was also very patient, and good at sorting my scattered pieces of thought. She was very patient with my [dʒapani:zu iŋɡu.liʃu]. Elizabeth is certainly a great linguist with broad understanding of linguistics and precise direction.

Diane Massam, the "1.5th" reader of this paper, is another great linguist (and one of my fellow detectives) whom I would like to thank a lot. There are so many reasons I don't want to call her the *second* reader. As the readers will see, I relied in this paper so much on Diane's work. Also, Diane was the one who encouraged me so much and gave me hope when I was about to desert from CLA presentation in May 2002. Yes, the trip to Cornell for AFLA with Diane and Raph in April was an unforgettable experience.

I also owe the forum/graduate coordinator, Alana Johns, quite a bit. It must have been quite a task to deal with seven MA students every Tuesday morning. The forum class of 2002-2003 led by Alana was a major success. Speaking of the forum class, it was certainly an exceptional class, as all of us — me, Jonathon Herd, Raph Mercado, Keir Moulton, Christine Pittman, Mark Slonim, and Rebecca Smollett — dealt with syntax/semantics. I would particularly like to thank Raph, a great Tagalog syntactician, for his help when I desperately needed someone who could edit my CLA handout (i.e., precursor of chapter 5) even though he was feeling nervous about his own presentation. Also I would like to point out here that the correct title of Jonathon's forum paper is "There's Something about Maori," for those who wish to cite his work correctly.

There are three other great teachers who deserve credit; Máirín Nic Dhiarmada, Gabriela Alboiu, and Keren Rice. Máirín, my Irish teacher, is a patient teacher

who taught me the real Irish. Gabriela is one of the most knowledgeable and reliable syntacticians. Finally, Keren is a wonderful teacher, who helped me in many ways.

I would like to thank so much to Chiara Frigeni and her husband Robert Schmaus, and Manami Hirayama. It was impossible to survive my first year in Toronto without them. I owe them so much. Chiara and Manami are linguists with eyes to see real things. I still remember the days I left the department together with Chiara and Manami around midnight. By the way, Chiara's broccoli pasta is amazingly simple and delicious (the adverb should modify two adjectives).

I am also lucky to have stimulating people, like Susana Bejar, Alex D'Arcy, Nila Friedberg, Daniel Currie Hall, Do-Hee Jung, Arsalan Kahnemuyipour, Sara MacKenzie, Milan Řezáč, and Bettina Spreng, around all the time. By the way, Susana is brilliant and her knowledge and intuition of syntax are far better than mine, but I believe that her theory of chocolate cookies is not quite correct. Also, I would like to thank Bettina so much for her kindness of letting me eat a German meal which I couldn't pronounce. I'd also like to thank Daniel for helping me write these acknowledgements.

Mohammad Haji-Abdolhosseini, my  $\text{\LaTeX}$ -sensei, deserves lots of thanks. He is the one who helped me to type in  $\text{\LaTeX}$ . Considering the fact that I didn't know anything about  $\text{\LaTeX}$ -ing until May, the readers should notice the efficiency and the effectiveness of his teaching.

Dutch people — I don't know why but I had a great opportunity to meet many good Dutch linguists in last two years. Wenckje Jongstra, Caro Struijke, and Erik Jan van der Torre are all great Dutch phonologists. Wenckje is one of those who stayed in the department until midnight working very hard. Also, I cannot forget the Sinterklaas party Wenckje organized during the year of 2001. Erik Jan is a great man who can appreciate the beauty of going to the ballpark, and the taste of a hot dog at the ballpark. I had many occasions to see Caro after she left Toronto. I really appreciate Caro's help when I visited Santa Cruz in March.

I would like to thank great people at the University of Victoria where I finished my undergraduate; especially, Tom Hess, Tom Hukari, and Leslie Saxon. They taught me linguistics, but more importantly they also taught the joy of linguistics. I still miss Victoria, after living for more than two years in Toronto. The core idea that I present in this paper originates the classes that they taught.

Finally, I would like to thank my family. I guess no one initially thought about *me* going to a graduate school. My initial plan was to study English in Canada, but the plan was somehow extended at some point. The change of plan would have been impossible without my father Kunio Oda, my mother Teruko Oda, my brother Shigeki Oda, and my sister Toshie Oda. Without their continuous support and their ungrudging trust, I couldn't have done this work.

All errors are due to Blanche de Chambly, Belle-Vue Gueuze, Chimay, Creemore, Duvel, Hoegaarden, Grolsch, Guinness, Jupiler, Kilkenny, La fin du monde, Leffe, Löwenbräu, Orval, Pilsner Urquell, Rochefort, Smithwick's, St.-Ambroise, Stella Artois, Upper Canada Lager, Westmalle, and Delirium Tremens.

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# Chapter 1

## Introduction

### 1.1 Introduction: The Question

This paper investigates a typological correlation between word order and the way in which wh-questions are formulated.

This research is based on the very intuitive observation that wh-questions in VSO languages strikingly resemble cleft sentences.<sup>1</sup> This motivates an analysis which somehow treats VSO languages as a unified class. This is an interesting attempt, since most analyses of VSO languages pay little or no attention to a broader/typological analysis of VSO languages as a larger class. Also, the Minimalist Program Chomsky (1995) seems to put less emphasis

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<sup>1</sup>Here, I restrict the range of research to VSO languages, but it is observed that there are other V-initial languages which use a clefting strategy to construct wh-questions.

on typological facts of syntax.<sup>2</sup>

Of course, I do not mean that all VSO languages have the same syntax. McCloskey (1996b), after his argument on the notion of subject in Irish, mentions “the trend of recent work on VSO languages, which has shed great doubt on the idea that they might form a unitary class.” It is not my intention to disagree with him on this point in a broad sense. Nonetheless, there are many characteristics shared among VSO languages.

One of these instance is the way *wh*-questions are formed: Many VSO languages use a “cleft-like” pattern to form *wh*-questions (McCloskey, 1979; Seiter, 1980; Hess, 1995). Below is an example from Lushootseed (Hess, 1995, 1998) which illustrates this point:

(1) Clefts in Lushootseed (Hess, 1995:98-100)

- a. ʔu-čala-t-əb                      ʔə tiʔiɬ wiw'su tiʔəʔ sqʷəbayʔ  
 PERF-chase-TRANS-OBL OBL DET children DET dog  
 ‘The children chased the dog.’                      (Base sentence)
- b. (tiʔəʔ) sqʷəbayʔ ti ʔu-čala-t-əb                      ʔə tiʔiɬ  
 (DET) dog                      DET PERF-chase-TRANS-OBL OBL DET  
 wiw'su  
 children  
 ‘A dog is what the children chased.’

---

<sup>2</sup>On this point, the readers may compare with Lexical Functional Grammar (Bresnan, 2001), which is designed to fit typological aspects of grammar.

- c. wiw'su tiʔəʔ ʔu-čala-d tiʔəʔ sq<sup>w</sup>əbayʔ  
 children DET PERF-chase-PATIENT DET dog  
 'The children are the ones who chased the dog.'

(2) Wh-questions in Lushootseed (Hess, 1995:98-100)

- a. g<sup>w</sup>at k<sup>w</sup>i ʔu-ʔəy'-du-b ʔə ti  
 whom DET.HYPOTHETICAL PERF-find-CONTROL-OBL OBL DET  
 sq<sup>w</sup>əbayʔ  
 dog  
 'Whom did the dog find?'
- b. stab k<sup>w</sup>i ʔu-ʔəy'-d<sup>w</sup>x ti sq<sup>w</sup>əbayʔ  
 what DET.HYPOTHETICAL PERF-find-CONTROL DET dog  
 'What did the dog find?'
- c. stab k<sup>w</sup>i  
 what DET.HYPOTHETICAL  
 ʔu-šəc-du-b-icid  
 PERF-find-CONTROL-PATIENT-2SG.PATIENT  
 'What scared you?'

On the other hand, there are VSO languages, such as Catalan (Hualde, 1992), and Romanian (Alboiu, p.c.), which do not show this similarity between clefts and wh-questions. Below is an illustration of this point in Catalan:

(3) Clefts in Catalan (Hualde, 1992:221)

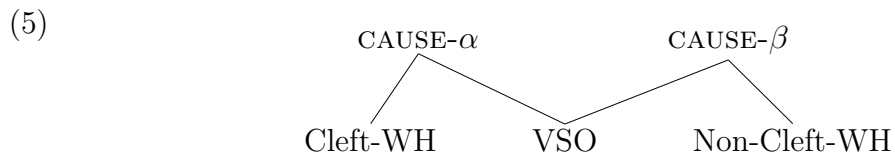
- a. és en Joan qui ha vingut  
 is ART Joan who have.3S come.PP  
 'It is Joan that came.'

- b. *sóc jo qui parlo anglés*  
 be.1S I who speak.1S English  
 ‘It is I who speak English.’

(4) Wh-questions in Catalan (Hualde, 1992:7-8)

- a. *qué vol en Joan?*  
 what want.3S ART Joan  
 ‘What does Joan want?’
- b. *on vas posar les albergínies?*  
 where PR.2S put.textscinf the eggplants  
 ‘Where did you put the eggplants?’

From this, we may hypothesize that VSO order can be achieved by two (or more) distinct causes (or groups of causes), and one of them also causes “cleft-like” wh-formation and the other one does not. This is illustrated below:



This is the general claim that I will defend in this paper. More precisely, I claim that VSO order results from two different syntactic mechanisms, VP-movement (Massam, 2000, 2001), and V-movement with self-contained agreement (Alexiadou and Anagnostopoulou, 1998, 1999), and it is VP-movement that induces the cleft-like construction for wh-questions.

## 1.2 Outline

The structure of this paper is as follows: In chapter 2, I will argue that there are two kinds of VSO languages; the V-movement type and the VP-movement type. By reviewing Alexiadou and Anagnostopoulou (1998, 1999), and Massam (2000, 2001), I explain what exactly I mean by V-movement languages and VP-movement languages, and what kinds of syntactic properties are found in each type.

In chapter 3, I consider the issue of *wh*-questions by reviewing Cheng (1997). I review the Clause Typing Hypothesis, and the problems that optional fronting languages create for the hypothesis. Furthermore, I suggest that the optional fronting languages are in fact a subset of VP-movement languages. I follow Cheng's proposal of *wh*-cleft and adapt it to fit in to the context of the VP-movement languages by claiming that it is *wh*-pseudo-cleft.

Chapter 4 discusses what is meant by "cleft." As I follow Cheng (1997) in assuming that *wh*-fronting in the optional fronting languages is a kind of cleft construction, it is necessary to make explicit what (pseudo-)clefts entail, and what difference are observed between the *wh*-in-situ structure and the *wh*-pseudo-cleft constructions. First, I review Rooth (1996) and É. Kiss (1998) regarding the common assumption that a cleft is associated with the notion of "focus," and conclude that it may not necessarily be the case. Then, I discuss Paul's (2001) analysis of pseudo-cleft construction in Malagasy, and adopt her account of the interpretational effects without additional functional projections.

The analysis given thus far is applied to Irish in chapter 5. Using the observations made in chapter 2 as diagnostics, I show that Irish is a VP-movement language, and discuss how to account for an apparent problem presented by Irish for Cheng's (1997) hypothesis.

Let us begin the journey

# Chapter 2

## Typology of VSO Syntax

### 2.1 Introduction

This chapter concerns what derives VSO surface order. It has been observed that VSO languages do not form a unitary typological class in syntax. For example, Borsley (1995), using Head-driven phrase structure grammar (HPSG), concludes that Welsh and Syrian Arabic are quite distinct from one another in terms of the way specifiers and complements are taken into phrase structures, although both of them have VSO order. What I claim in this section is, in a sense, a development of this idea for the set of V-initial languages—I will argue that VSO order results from one of two distinct types of elements placed at the left edge of a clause, bringing together the ideas put forward by Massam (2000, 2001), Massam and Smallwood (1997), and Alexiadou and Anagnostopoulou (1998, 1999) among others. More specifically, I will argue that surface VSO order comes from either V-to-I movement without an Ex-

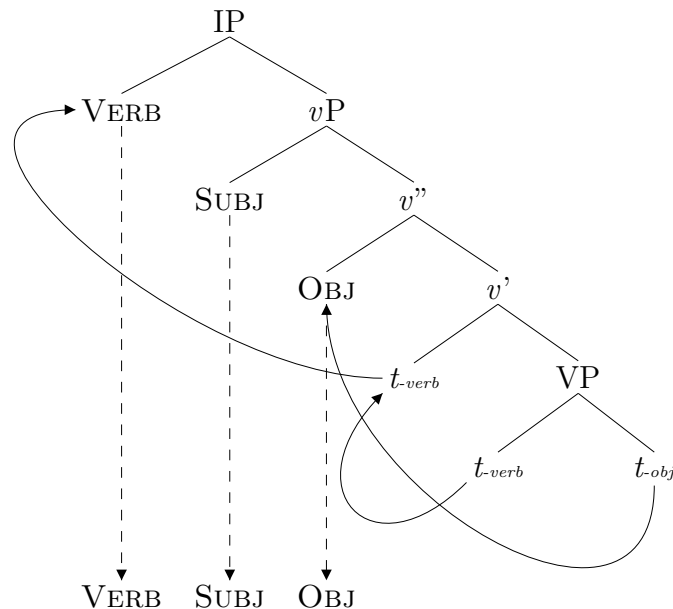
tended Projection Principle (EPP) requirement at Spec-IP (Alexiadou and Anagnostopoulou, 1999), or VP(or Predicate)-movement driven by an EPP feature [PRED] as proposed by Massam (2000, 2001).

In the following sections, I will discuss these two types, mainly by examining the analyses by Alexiadou and Anagnostopoulou (1998, 1999) and Massam (2000, 2001). Then, I will briefly go over the notions of N-prominent languages and V-prominent languages proposed by Davies and Dubinsky (2001), and discuss how these notions interact with the typology of VSO claimed in this chapter.

## 2.2 V-movement type

In V-movement languages, a (finite) verb raises to a higher functional head position, which I call “INFL” or “I” for conventional reasons, just as observed in French or English. What is different, then, is that in these languages the “subject” of a clause does not have to raise to Spec-IP to satisfy the EPP requirement. Thus, these V-initial languages are function-wise more or less equivalent to the majority of SVO languages such as English or French, except for the placement of the subject argument:

(6)



SCHEMATIC EXAMPLE OF V MOVEMENT

### 2.2.1 Alexiadou and Anagnostopoulou (1998, 1999)

Alexiadou and Anagnostopoulou (1998, 1999) (henceforth A&A) discuss Null-subject languages (NSLs), mainly Greek and Catalan, showing that these languages do not have any EPP requirement motivating movement of a subject element to the Spec-IP position.<sup>1</sup> What is crucial in the discussion by A&A is the mismatch between the theory of the EPP feature and the empirical facts. It had been assumed that there are two types of EPP feature available in syntax; weak/no EPP or strong EPP. This two-way distinction

<sup>1</sup>A&A (1998) discuss the issues further and consider the correlation between NSLs and VSO order more extensively. I will return to this issue later in this section.

on the nature of EPP roughly mirrors the availability of a “subject”<sup>2</sup> argument at Spec-IP. If EPP is strong, then a subject in Spec-IP is obligatory. If, on the other hand, EPP is weak or if there is no EPP feature, then the Spec-IP should not be the position of the subject. This extreme thesis of EPP, with the assumption of PROCRASTINATE VIOLATION, predicts that there should be no language with free VS(O)/SV(O) alternation without an expletive element equivalent to English *there* or French *il*:

- (7) a. English
- i. A man arrived.
  - ii. *There* arrived a man.
- b. French
- i. Un homme est arrivé.
  - ii. *Il* est arrivé un homme.

A&A observe that this prediction is not correct, as Greek and Catalan, among many other Null-Subject Languages (NSLs), allow this alternation quite freely:

- (8) (Greek, A&A 1999:95)
- a. O Aleksandros filise ti Roksani (SVO)  
the Alexander:NOM kissed the Roxane:ACC  
‘Alexander kissed Roxane.’

---

<sup>2</sup>Here I mean “subject” in very traditional and general sense.

- b. Filise o Aleksandros ti Roksani (VSO)  
 kissed the Alexander:NOM the Roxane:ACC  
 ‘Alexander kissed Roxane.’

### Rejected Possibilities

At first this free alternation seems to suggest a phonetically empty expletive pronoun, *pro*<sub>EXPL</sub>, as has been claimed for German. However, A&A give several arguments against this approach. Here, I consider two main issues; an intransitivity constraint and the Definiteness Restriction. First, Greek and Catalan VS order is not blocked by the intransitivity constraint exhibited in the English expletive construction:

- (9) a. leyo Juan el libro (Catalan, A&A 1999:95)  
 read Juan the book  
 ‘Juan read the book’  
 b. i. \*There eat children apples.  
 ii. \*There read children books.

Second, in NSLs, VS order is permitted even when the subject is definite. Hence, NSLs lack the Definiteness Restriction (DR) effects:

- (10) a. There is *a cat* on the table.  
 b. \*There is *the cat* on the table.  
 c. \*There is *every cat* on the table.

The English data above indicate clearly that the definiteness of the subject plays a significant role in the expletive construction in general. In contrast, no such restriction is observed in the VS order of NSLs. Consider the

data in (8b) and (9a). The subjects in these sentences, namely *o Aleksandros* ‘the Alexander:NOM’ and *Juan*, are definite, and the appearance of these definite subjects in the postverbal position does not cause ungrammaticality in these languages. Note that this observation also rules out the Transitive Expletive Construction (TEC) analysis of Greek/Catalan VS order.

Another possible analysis for the free SV/VS alternations in NSLs is I-to-C movement, as for the German V2-phenomenon. However, A&A claim that I-to-C movement cannot be maintained since, unlike in German, SV order may appear even when an overt complementizer is present in a clause as shown in (11):

- (11) an (o Paris)          episkiefti (o Paris)          tin Athina  
       if the.Paris:NOM visits      the.Paris:NOM the.Athena:ACC  
       ‘If Paris visits Athena . . .’ (A&A 1999:95)

### SVO as a “derived” variant

A&A crucially point out that the subject in the SVO order of Greek and Catalan has A'-properties. Below is the evidence given by A&A.

First, a series of adverbs can intervene between the subject and the verb in the SVO order. This is illustrated in (12):

- (12) a.    O Janis          *xtes*          *meta apo poles prospathies*  
           the.Janis:NOM yesterday after from many efforts  
           sinandise ti Maria.  
           met          the.Mary:ACC  
           ‘Janis finally met Mary yesterday.’ (A&A 1999:99)
- b. ?? Janis after many efforts met Mary.

The Greek example (12a) has a sequence of adverbs *xtes meta apo poles prospathies* ‘yesterday after from many effort’ separating the clause-initial subject and the verb. This can be compared with the English equivalent (12b) is difficult to parse felicitously unless detailed background information is provided.<sup>3</sup>

Second, a preverbal subject can precede an *if*-clause:

- (13) Epidi o Janis [an erthi i Maria] tha figi.  
 because the.Janis:NOM [if comes the.Mary:NOM] FUT leave  
 ‘Because if Mary comes, John will leave.’ (A&A 1999:100)

Again, an analogous construction is impossible in English, indicating that Greek (and Catalan) pre-verbal subjects are less cohesive to INFL than they are in English.

Third, if an indefinite subject appears pre-verbally, then it has a partitive/specific interpretation (14a). This contrasts with post-verbal position, in which an indefinite subject has an existential interpretation (14b):

- (14) (A&A 1999:100)
- a. **Enas** *heretise* ti Maria  
 one greeted the.Mary:ACC  
 ‘A certain person/one of the people greeted Mary.’
- b. *Heretise* **enas** ti Maria  
 greeted one the.Mary:ACC  
 ‘Someone greeted Mary.’

---

<sup>3</sup>A&A treat (12b) as ungrammatical.

Fourth, there is no scope ambiguity in SVO order, where the subject always has wide scope while ambiguity is exhibited in VSO order:

- (15) a. Kapjos fititis arhiothetise kathe arthro ( $S_{(\exists)} > O_{(V)}$ )  
           some student:NOM filed every article  
           ‘Some student filed every article.’
- b. Arhiothetise kapjos fititis kathe arthro (AMBIGUOUS)

A&A propose that the movement of the subject to preverbal position is an instance of clitic-left dislocation (CLLD). They show several similarities between preverbal subjects and clitic-left dislocated objects.

The most crucial fact for now is that the pre-verbal subject is in an A'-position. This indicates that SVO is derived, for some reason related to focus, and VSO order is the one we should consider as the basic order of a clause in Greek and Catalan. This, in turn, requires a theory of EPP that permits the subject to remain below INFL.

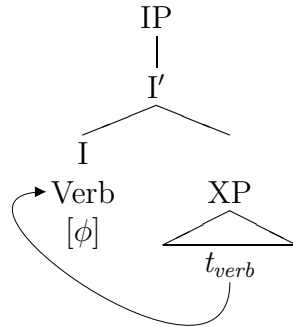
### Self-contained EPP Checking at $I^0$

It is still possible to provide an analysis of VSO order in Greek and Catalan using the assumption that EPP may be weak. This would allow us to say that movement to Spec-IP will not be observed, at least at PF. The weakness of such analysis is that there is no independent motivation confirming that a language has a strong or weak EPP. A&A propose an account for the VSO issue of Greek and Catalan more grounded in the morphological evidence.

A&A propose that EPP-related  $[\phi]$  features can be checked without a specifier-head relation at IP. More precisely, they propose that the fully

explicit agreement morphology on verbs satisfies the EPP requirement by head movement of the verb to I<sup>0</sup>:<sup>4</sup>

(16)



A&A note two advantages of this proposal. The first one is that it allows us to eliminate the distinction between a *strong* and a *weak* EPP requirement. With the self-contained EPP checking mechanism, we may now assume that  $[\phi]$  feature of a language is checked only overtly. Consequently, we can abandon the parameterization of EPP. The other advantage is that the theory now correlates the degree of inflectedness of verbs with the way the EPP is implemented. A&A note that in Greek, for example, verbs overtly carry a full grammatical specification of their subjects, as shown in (17a):

(17) a. Alexiadou and Anagnostopoulou (1999:105)

agap- <i>o</i>	agap- <i>as</i>	agap- <i>a</i>	agap- <i>ame</i>	agap- <i>ate</i>	agap- <i>ane</i>
I love	you <sub>sg</sub> love	s/he loves	we love	you <sub>pl</sub> love	they love

b.

ENGLISH	GREEK
$\left\langle \textit{love}, \left[ \begin{array}{l} \phi \\ \left[ \begin{array}{l} \text{PERS} \\ \text{NUM} \end{array} \right] \end{array} \right] \right\rangle$	$\left\langle \textit{agapo}, \left[ \begin{array}{l} \phi \\ \left[ \begin{array}{l} \text{PERS} \quad \text{1st} \\ \text{NUM} \quad \text{sg} \end{array} \right] \end{array} \right] \right\rangle$
$\left[ \begin{array}{l} \dots \\ \dots \end{array} \right]$	$\left[ \begin{array}{l} \dots \\ \dots \end{array} \right]$

---

<sup>4</sup>A&A employ TP instead of IP, but the main argument is transferable.

A&A's account may thus be able to reformulate some part of the **morphological uniformity principle** (Jaeggli and Safir, 1989) into current morpho-syntactic theory.

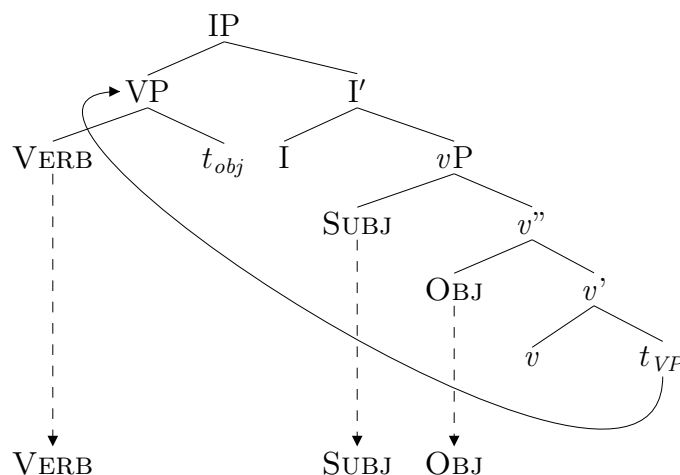
### **On Alexiadou and Anagnostopoulou (1998)**

While it works well for some verb-initial languages, the analysis proposed by A&A cannot account for the full range of languages exhibiting V-initial order and/or null subjects. They are forced to stipulate that languages whose morphology lacks subject-verb agreement, such as Japanese and Chinese, and languages whose verbal inflection has “quirky” characteristics, such as Irish (to be discussed in Chapter 5), have  $[\phi]$  feature even though these languages do not have rich and uniform morphology. This is the line of analysis A&A (specifically in their 1998 article) argue for. However, such a stipulation for NSLs whose morphology is not rich and uniform seems to be an oversimplification of the phenomenon. Also, while the fundamental observation is correct, it is worth mentioning that NSLs characterized by the morphological uniformity principle (Jaeggli and Safir, 1989) do not really form a unitary class, although they are uniformly classified as NSLs. I would like to suggest that the NSL characteristics result from several distinct and independent properties, and that rich and uniform morphology, as observed in Greek and Catalan, is just one of them. Thus, unlike the original claim by A&A (1998), my claim in this paper is that self-contained EPP checking is restricted to languages with rich and uniform morphology.

## 2.3 VP-movement type

Let us move on to the other type of VSO, which results from a syntactic operation distinct from the one discussed in the previous section. I call the VSO languages resulting from the type of syntactic operation to be discussed in this chapter **VP-movement languages**. As the term suggests, the VSO languages in this category move VP (or, more precisely, a constituent denoting a predicate) to Spec-IP:

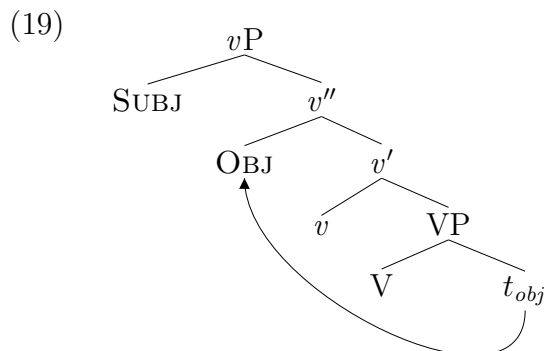
### (18) SCHEMATIC EXAMPLE OF VP MOVEMENT



Massam (2000, 2001) and Massam and Smallwood (1997) argue that in Niuean VP moves to Spec-IP as a clausal requirement driven by an EPP-related feature [+PRED].<sup>5</sup>

<sup>5</sup>See also Lee (2000) and Rackowski and Travis (2000) for relevant issues in other languages. Also, consult Koopman and Szabolcsi (2000) for issues related to VP remnant movement. I do not consider their analysis here as it is developed from quite different issues, and their arguments are orthogonal to the issue discussed in this paper.

Massam (2000, 2001) states that the VSO order in this analysis is obtained as follows. First, an object, if there is one, moves out of VP to check its Case. This provides an intermediate structure like (19):



Subsequently, the VP (i.e., the predicate) moves to Spec-IP position to check a [+PRED] feature, giving the structure of  $[[_{VP} \text{ Verb } t_{obj}] \text{ Subject Object } t_{VP}]$ , as shown in (18) above. Note that if VP-movement takes place prior to the Case-driven movement of the object, the derivation crashes due to the unchecked Case feature of the object. For this reason, the distinction between V-movement languages and VP-movement languages is obscured at the level of PF. Also, Massam assumes, following Legate (1997), that reconstruction of the VP occurs at the end of the syntax. This ensures proper binding relations, such as the coindexing of the object and its trace, at LF.<sup>6</sup>

<sup>6</sup>One may achieve the same result with the copy theory of movement. We may also say that certain (copies of) grammatical features may be interpreted at a lower position in the structure. One obvious difficulty with such an analysis, however, is how to define the conditions on realization of elements at PF. I leave this question aside, as it is orthogonal to the main point of this paper, and the conventional movement theory with reconstruction (at least technically) is sufficient for our purposes.

### 2.3.1 Massam (2000, 2001)

Niuean, an Oceanic language, is claimed to be a VP-movement language, and arguments in favour of such analysis are provided by Massam and Smallwood (1997) and Massam (2000, 2001). In this section, I review the arguments Massam (2000, 2001) provides. The reason for doing this is that these arguments are quite transparent and applicable cross-linguistically; thus, they may be employed as diagnostics to distinguish V-movement languages and VP-movement languages.

Massam (2000) gives two pieces of evidence for the VP-movement analysis of Niuean clause structure; non-verbal predicate fronting and the phenomenon formerly analyzed as Noun Incorporation.

#### Non-verbal Fronting

Let us consider the case of non-verbal fronting first. When the predicate is a nominal constituent, the entire predicate NP appears clause-initially. An example is provided in (20):<sup>7</sup>

- (20) a. [Ko Mele] e faiaoga  
           ‘ko’ Mele ABS teacher  
           ‘The teacher is Mele.’ (Massam, 2000:104)

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<sup>7</sup>Niuean non-verbal predicates require a predicate introducer *ko*. See Massam (2000) for details.

- b. [Ko e tipolo agaia ni:] ne inu ai a  
 ‘ko’<sub>-common</sub> lime still EMPH N:FUT drink PRONOUN ABS  
 lautou.  
 they  
 ‘It’s still only lime juice that they are drinking.’

If we maintain the V-movement analysis for Niuean, these data would be unexpected as there is no mechanism to motivate a movement of a phrase.<sup>8</sup> The fronting of non-verbal predicates can be felicitously accounted for with the VP-movement analysis. The non-verbal predicate phrase (Massam (2000) assumes it is a kind of prepositional phrase) moves just as VP does in verbal predication.

### **Noun-Incorporation: Pied-piping of the object**

Another piece of evidence comes from the construction formerly analyzed as “Noun Incorporation,” shown in (21):

- (21) Ne holoholo [kapiniu kiva] fakaeneena a Sione.  
 PAST wash [dish dirty] slowly ABS Sione  
 ‘Sione is washing dirty dishes slowly.’ (Massam, 2000:106)

Recall from the beginning of this section that the object must move out of VP to check the case feature of the object before the VP itself moves; otherwise the derivation crashes due to the unchecked case feature. This statement further implies that the object should move to clause-initial position along with the verb if there is no need to check the case feature of

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<sup>8</sup>Carnie (1995) proposes that in some cases, phrases move as though they were heads. I will come back to this issue in Chapter 5.

the object, giving a superficial VO order instead of VSO. Massam (2000) argues that this prediction is borne out by apparent Noun Incorporation. In this construction, the thematic object (*kapiniu kiva* ‘dirty dish’ in (21)) is fronted along with the verb. Massam argues that the object in this construction is NP, but not DP, as objects in this construction do not exhibit Case or number-marking. Since it is an NP, there is no Case-checking requirement for the object, and it remains in VP, moving when the VP moves.

## 2.4 VSO Typology

The claims and observations by Alexiadou and Anagnostopoulou (1998, 1999) and Massam (2000) provide diagnostics to divide VSO languages into the V-movement type and the VP-movement type.

There are (at least) two diagnostics for V-movement languages. First, the rich and uniform verbal agreement morphology is required for V-movement VSO but not for VP-movement VSO. In fact, Massam (p.c.) suggests that the VP-movement languages should not have any subject-verb agreement morphology, as the EPP requirement in these languages has nothing to do with the subject or its  $\phi$ -features. Another, weaker, prediction is that while V-movement languages tend to allow free SVO/VSO alternation, VP-movement VSO languages do not.

As for the diagnostics for the VP-movement VSO languages, I follow the observations made by Massam (2000). First of all, in these languages non-verbal predicates should appear clause-initially, as in (20). V-movement

languages should not exhibit this word order, on the other hand, since the languages in this type raise V to I, just as in French and English, and thus the movement of the entire predicate phrase is simply unavailable. The other diagnostic is that the object may move along with the verb. This diagnostic is slightly weaker in that object pied-piping may not be available in some languages due to independent restrictions. Therefore, if a language does not allow pied-piping of the object, it may nonetheless be a VP-movement language. The table in (22) summarizes the discussion of this section thus far:

(22)	V-movement Language	VP-movement Language
Rich and Uniform Verbal Morphology	✓	—
VSO/SVO (Free) Alternation	✓	—
Nominal Predicate Fronting	—	✓
Object Pied-piping	—	✓

Furthermore, the dichotomy can provide a very simple typological account for predication patterns among VSO languages. That is, VP-movement languages correspond to what traditional grammar called *Predicate-initial languages*, as the entire predicate need to be fronted. On the other hand, the V-movement languages have a predication structure similar to that of English and French, since the fronting of the verbal element is not driven by the feature [+PRED]. Rather, the VSO order of the languages in this category is simply attributed to the lack of overt subject-raising to Spec-IP due to explicit verbal morphology. Subject-Predicate order is visible at PF with non-verbal predicates; it is obscured with verbal predicates when the verb

moves out of VP to a position above the subject. A Catalan example of this is given below:<sup>9</sup>

- (23) a. en Joan és enginyer  
 ART Joan is engineer  
 ‘Joan is an engineer.’ (Hualde, 1992:75)
- b. aquests senyors són els electricistes  
 this.MP men be.3PL the electricians  
 ‘These men are the electricians.’ (Hualde, 1992:76)

Verb-initial order by itself can thus not be used as a diagnostic for the predication structure of a language, since it can result from two very different syntactic derivations, and is compatible with both predication structures, as shown in (24):

(24)	Movement Type	Predication Structure
	V-movement	→ [SUBJECT] [PREDICATE]
	VP-movement	→ [PREDICATE] [SUBJECT]

### 2.4.1 On Davies and Dubinsky

Finally, this typology corresponds with the typology of **V prominent languages** and **D prominent languages** proposed by Davies and Dubinsky (2001) (henceforth D&D). They claim that subjecthood is not a linguistic notion available universally. D&D observe that English non-NP (i.e., CP, PP,

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<sup>9</sup>MP = masculine plural

and AP) subjects also exhibit various subject properties (obligatory raising to subject position, licensing of emphatic reflexives etc.), and propose that these subject properties are due to the presence of an abstract D which takes a non-NP constituent as its complement. The abstract head D is necessary, since English—a typical D prominent language—checks a [D]-feature as its EPP requirement. On the other hand, there are many languages in which non-NP subjects do not show subject properties. D&D observe that Bulgarian lacks the subject-related properties observed in English, and claim that Bulgarian is a V prominent language. This cross-linguistic variability of subject status suggests that subject properties are not due to semantic properties of the subject, which are seemingly available universally. Rather they follow from some language-specific syntactic parameters.

D&D attribute this typology to different EPP checking mechanisms. That is, the D prominent languages check EPP by placing a DP in a specifier position, whereas the V prominent languages check it by moving a verb to I. Apart from some minor differences in theoretical mechanism, the overall claim which D&D make is similar to what is claimed in this paper.

One major difference, nonetheless, is observed in the treatment of V-initial languages. Unlike the claim made in this chapter, D&D treat V-initial languages as a unitary class in their analysis. That is, their analysis implies that Greek and Catalan would be included in the group of V prominent languages.<sup>10</sup> Superficially, this seems to be the right characterization of Greek

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<sup>10</sup>D&D do not discuss Greek and Catalan, so it is unknown exactly how they would characterize these languages. But their explanation of V-initial languages entails that

and Catalan, since these languages satisfy the EPP requirement by moving a verb to I. However, this generalization loses one important observation, namely that these languages have rich and uniform morphology. The claim I am making here is that V-initial languages may be either N prominent or V prominent. Greek and Catalan are N prominent in D&D's system even though they are V-initial languages. This claim should not be regarded as contradicting D&D's proposal, but rather as providing a refinement of their system.

## 2.5 Summary and Conclusion

In this Chapter, I proposed that VSO word order may be achieved by two different syntactic operations, putting together the notion of VP-movement put forth by Massam (2000, 2001), among others, and the notion of self-contained agreement put forth by Alexiadou and Anagnostopoulou (1998, 1999). VP-movement languages, such as Niuean, front a predicate to Spec-IP to satisfy EPP requirement. Consequently, these languages exhibit pied-piping of the object, and also fronting of nominal predicates. On the other hand, V-movement languages, where self-contained EPP-checking occurs, do not exhibit such characteristics; instead, they have rich and uniform subject-agreement morphology capable of satisfying the EPP requirement. Furthermore, these languages tend to have free word order alternation between VSO and SVO. This typology allows us to account for the morphological facts of

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these languages are in the V prominent group.

verbal agreement and also the facts of predication without additional stipulations. Finally, I note that this typology strikingly resembles the distinction of N-prominent languages and V-prominent languages put forward by Davies and Dubinsky, with the modification that VSO languages may be either N-prominent (= VP-movement languages) or V-prominent (= V-movement languages), contrary to D&D's initial claim that VSO languages are uniformly N-prominent.

## Chapter 3

# Typology of Wh-questions and VSO Syntax

### 3.1 Introduction

This chapter discusses the typology of wh-question patterns mainly by reviewing Cheng (1997). She proposes the **Clause Typing Hypothesis** (CTH) to account for the typology of wh-question formation; particularly, the distinction between wh-movement and wh-in-situ. Interestingly, most of the languages classified as optional wh-movement language in Cheng's analysis have two properties; VSO order, and similarities between the wh-question structure and the cleft structure. However, it is not the case that all VSO languages are optional wh-movement languages. To account for this, I claim that it is only VP-movement languages, described in the previous chapter, that employ the cleft construction for wh-questions. I will provide an account

of the wh-structure of some VSO languages under a VP-movement analysis, and show that Cheng's generalization still holds with this modification.

The chapter is structured as follows. In section 3.2, I review Cheng (1997), particularly the CTH (Cheng, 1997:Ch. 2) and some questions about Optional Wh-movement Languages (Cheng, 1997:Ch. 3). I also discuss non-argument wh-words. Finally, it is noted that this chapter does not exhaust the issues of wh-clefts. One of the key issue, the cleft construction, requires careful examination. For the sake of organization, I will address issues more related to clefts in the following chapter.

## 3.2 Review of Cheng (1997)

### 3.2.1 Clause Typing Hypothesis

Let us review the claims that Cheng makes. A number of authors have observed that languages which have a yes/no interrogative particle are wh-in-situ languages (see references in Cheng, 1997).<sup>1</sup> A clear example of this is Japanese:

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<sup>1</sup>the correlation provided here is slightly simplified. Cheng makes a distinction between yes/no interrogative particles and wh-particles. A complication arises as some wh-in-situ languages form wh-question sentences without an overt wh-particle. In such cases, Cheng assumes that they have a phonologically covert wh-particle, and that the existence of such an element can be deduced from the existence of a yes/no interrogative particle.

- (25) a. Taroo-wa sakana-o tabe-ta-**no/ka**  
 Taroo-TOP fish-ACC eat-PAST-Q  
 ‘Did Taroo eat fish?’
- b. Taroo-wa **nani-o** tabe-ta-**no/ka**  
 Taroo-TOP what-ACC eat-PAST-Q  
 ‘What did Taroo eat?’

To provide an account of this correlation, Cheng proposes the **Clause Typing Hypothesis** (CTH). She assumes that (a feature encoding) illocutionary force needs to be interpreted in any sentence of a language; that is, it is necessary for every sentence to be *typed* as to whether it is declarative or interrogative. Cheng further assumes that typing of a clause is done either at either C(omplementizer), by means of wh-particle as observed in Japanese, or at Spec-CP, by wh-movement to Spec-CP, as observed in English, but crucially it is not possible for a language to use both typing mechanisms, since such flexibility is redundant and is thus a violation of several well-established principles, such as the Principle of Economy of Derivation. This is why we observe the correlation between the absence of wh-movement and the availability of an interrogative particle. The formal statement of CTH is given below:

- (26) **CLAUSE TYPING HYPOTHESIS** (Cheng, 1997:22(9))  
 Every Clause needs to be typed. In the case of typing a wh-question, either a wh-particle in  $C^0$  is used or else fronting of a wh-word to the Spec of  $C^0$  is used, thereby typing a clause through  $C^0$  by Spec-head agreement.


Based on CTH, Cheng provides three predictions listed in (27) below:

- (27) PREDICTIONS (Cheng, 1997:28)
- a. No language has yes-no particles (and thus wh-particles) and syntactic wh-movement.
  - b. No language has the option of using either a wh-particle or syntactic wh-movement of wh-words to type a sentence as a wh-question.
  - c. No language fronts more than one wh-word for Clausal Typing.

Among these three, (27a) and (27b) are particularly relevant to this paper. (27a) correlates the availability of a yes/no particle with wh-in-situ in a given language (and negatively correlates the availability of a yes/no particle with wh-movement in a given language). The second prediction is that the correlation is absolute and there is no room for optional wh-movement/optional wh-in-situ. At first, it seems that this prediction cannot be maintained as some languages allow optional fronting of wh-words, but closer study of these languages indicates that such fronting is due to other syntactic operations. This point is reviewed in section 3.2.3.

### 3.2.2 Ambiguity of wh-words and availability of a wh-particle

It is well-known that in Chinese and Japanese wh-words have several interpretations. In the case of Japanese, wh-words need to be bound by a particle *-ka* or *-mo* to determine their interpretation, as shown below:

- (28) a. kinou-wa      **nani**-o      shimasu-ta-**ka**  
yesterday-TOP    what-ACC    do-PAST-Q  
‘What did you do yesterday?’
- 

- b. Yooko-wa **nani-ka**-o tabe-ta  
 Yooko-TOP what-Q-ACC eat-PAST  
 ‘Yooko ate something.’

- c. Yooko-wa **nani**-o shite-**mo**, sugu sippai-suru  
 Yooko-TOP what-ACC do-Q, soon fail-PRES  
 ‘Whatever Yooko does(/tries), soon (she) fails it.’

On the other hand, there are some other wh-in-situ languages whose wh-expressions are unambiguous. Cheng notices that languages whose wh-particles are phonologically null have unambiguous wh-expressions, and thus that the (un)ambiguity of wh-words and the availability of the wh-particles show correlation. Cheng attributes this to a functional reason that wh-particles are used also to resolve ambiguity.

### 3.2.3 Optional Wh-movement languages: Wh-clefts

As mentioned earlier, CTH predicts that no language has an option as to how it types a clause. Cheng notes that some languages appear to contradict this prediction, as they allow optional fronting of a wh-word (henceforth **optional fronting languages**). Among them are Egyptian Arabic, Bahasa Indonesia, and Palauan.

However, Cheng examines these languages and shows that they have several peculiar characteristics which distinguish them from canonical wh-fronting languages such as English. The most notable and important is that in these optional fronting languages the wh-fronting construction resembles

the relative construction and/or the cleft construction. This point is illustrated in (29):

- (29) Egyptian Arabic (Cheng, 1997:44)
- a. (dah) muhamad *illi* gih  
 this Mohammed that came  
 ‘It is Mohammed who came.’ (CLEFT)
- b. eeh *illi* ?arit-uh  
 what that Mona read-it  
 ‘What did Mona read?’ (WH-QUESTION)

Both sentences in (29) have *illi* ‘that’, which can be taken as some kind of complementizer. It is also noteworthy that the complementizer used in this kind of wh-fronting construction does not have typing properties, as it may be used in other constructions such as clefts and relative clauses. Similar observations can be made in the other optional fronting languages as well. Of course, as their name implies, optional fronting languages may form wh-sentences with a wh-word in-situ, as shown below:

- (30) Fariid hawil yi’mil *eeh*  
 Fariid tried to-do *what*  
 ‘What did Fariid try to do?’ (Cheng, 1997:48)

From these observations, Cheng claims that wh-fronting questions in these languages are in fact cleft sentences; hence **wh-clefts**. Thus, optional fronting languages are a subset of wh-in-situ languages, and the fronting is not due to the need to type the clause for [+WH], but to other syntactic-semantic reasons. For now, of particular importance for us is that wh-fronting is an

instance of the cleft construction, a syntactic operation quite distinct from the wh-movement found in English.

### 3.2.4 Non-argument wh-elements

One important observation is that the wh-words in the optional fronting languages do not act uniformly with respect to the wh-cleft construction.

A major distinction can be drawn between argument and adjunct wh-phrases. It is often the case that adjunct wh-words cannot undergo clefting. When these items are fronted, some other syntactic operation is taking place. Cheng shows the following example:

(31) Egyptian Arabic (Cheng, 1997:47)

- a. *ma'a miin* Mona raahi il-Qahirah  
with whom Mona went to-Cairo  
'With whom did Mona go to Cairo?' (WH-QUESTION)
- b. *fi-l-shari'dah,* Mona kaanit bidawwar'ala sha??ah  
on-the-street DEM Mona was looking for apartment  
'On the street, Mona was looking for an apartment.' (TOPICALIZATION)

What is interesting in (31) is that the complementizer *illi*, which is observed in (29), cannot appear when an adjunct wh-phrase *ma'a miin* 'with whom' is fronted. Rather, Cheng observes that the entire structure of the sentence resembles that of topicalization and she suggests that wh-adjunct fronting is an instance of topicalization.

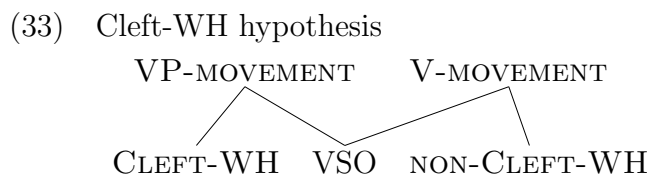
Cheng admits that the issue remains enigmatic, as in English PPs and

some adverbs may be clefted:<sup>2</sup>

- (32) Cheng (1997:62)
- a. It is **for this reason** that Bill left.
  - b. It was **very angrily** that John left the room.

### 3.3 Adding to Cheng (1997)

While Cheng's discussions of optional fronting languages and related issues are quite extensive, there are several comments yet to be made. What is the most noticeable in Cheng's analysis is that most of the optional fronting languages she discusses are V-initial. However, it is not the case that all V-initial languages are optional fronting languages. Based on this, I propose that optional fronting languages are in fact VP-movement languages discussed in chapter 2, and those verb-initial languages which do not follow this clefting strategy are V-movement languages. Thus, now we have the following diagram:



Now let us consider how this analysis affects Cheng's analysis of optional

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<sup>2</sup>Cheng comments that some adverbs like *intentionally* cannot be clefted, for unknown reasons.

fronting languages and wh-clefts.

### 3.3.1 Wh-cleft and V-initial languages

#### Structure of Wh-cleft

The first observation has to do with the analysis of wh-clefts. Based on the analysis of the Irish **reduced cleft** by McCloskey (1979), Cheng proposes that the syntactic structure of wh-cleft is a “reduced” version of the normal (English) cleft. Reduced cleft is a term used by McCloskey (1979) for a type of cleft found in Irish where an indefinite nominal item is clefted. It is “reduced” because the copular *is* (or its variant), which optionally appears in a cleft with a definite nominal, cannot appear in this case. An example of an Irish reduced cleft (as well as a normal cleft), and Cheng’s application of the reduced cleft analysis to the wh-cleft are provided below:

(34) Irish (from McCloskey, 1979:90-91)

a. Normal Cleft

- i. **Is** é Seán Bán a<sup>L</sup> d’inis an scéal dom  
 COP [AGR] Seán Bán COMP told the story to:me  
 ‘It was Seán Bán who told me the story.’
- ii. \***Is** Capall mór bán a<sup>L</sup> chonaic mé  
 COP horse big white COMP saw I  
 ‘It was a big white horse that I saw.’

b. Reduced Cleft

- i. Seán Bán a<sup>L</sup> d'inis an scéal dom  
 Seán Bán COMP told the story to:me  
 'It was Seán Bán who told me the story'
- ii. Capall mór bán a<sup>L</sup> chonaic mé  
 horse big white COMP saw I  
 'It was a big white horse that I saw.'

(35) Wh-cleft (Egyptian Arabic Cheng, 1997:53)

[<sub>CP</sub> [<sub>DP</sub> miin] [<sub>CP</sub> Op<sub>i</sub> illi [<sub>IP</sub> Mona shaafit-uh<sub>i</sub>]]]  
 who that Mona saw-him

'Who did Mona saw?'

Further, Cheng notes that under the proposed structure (35), the clefted wh-word (*miin* in (35)) is functionally acting as a (grammatical) subject, and the following CP is acting as a predicate.

Although her general argument is compatible with more recent versions of generative syntax, this aspect of it requires some refinement. The syntactic structure of the wh-cleft and Cheng's view of its predication structure seems to be inadequate, given the dichotomy of VSO languages proposed in the previous chapter.

It is noteworthy that many of the optional fronting languages have VSO (or at least V-initial) word order. Several languages across (at least) two distant linguistic families (the Oceanic family, such as Niuean (Seiter, 1980; Massam, 2002), and the Salish family, such as Lushootseed (Hess, 1995, 1998)), show VSO order and wh-clefts. This suggests that this characteristic

is *not* due to some language-specific feature inherited by current daughter languages from the same proto-language in a single linguistic family; but rather it is more natural to view the phenomenon as a consequence of more general syntactic considerations.

What could we say if we bring together the observations made about optional fronting languages and the typology of the VSO languages which I am discussing in this paper? More specifically, what consequences would follow if the languages which allow optional fronting of wh-words are a subset of the VP-movement languages defined in the previous chapter? This is indeed what I want to propose in this paper. That is, the optional fronting languages discussed by Cheng are VP-fronting languages. This analysis of VSO syntax, in fact, provides a novel yet natural syntactic structure of wh-clefts, as well as normal clefts, in optional fronting languages.

One major discrepancy is observed in the treatment of the predicational status of the clefted wh-word and the CP. Recall that the VP-movement languages have the functional structure of [ [PREDICATE] [SUBJECT] ], due to the EPP requirement to move a predicative phrase to Spec-IP position. If we adopt this structure as a template for the wh-cleft and if the CP in the cleft construction in these languages can act nominally, just like an English headless relative clause, then we may say that the wh-word in the wh-cleft construction is the predicate and what we have conceived of as CP is the subject. The resulting structure, shown in (108), strikingly resembles the **pseudo-cleft** construction:

(36) [<sub>predicate</sub> WH ] [<sub>subject</sub> COMP ... ]

A reexamination of the Palauan data discussed by Cheng seems to support this pseudo-cleft approach to optional wh-fronting.<sup>3</sup> In Palauan wh-clefts, what Cheng takes as CP is headed by a nominal marker *a*, not by a complementizer:

(37) Palauan from Cheng (1997:59)

- a. ng-Basilia [ **a** mengau er tia er tet *t* ]  
 CL-Basilia NOM R-weave P DEM L bag  
 ‘It’s Basilia who’s weaving this bag.’
- b. ng-te’a [ **a** kileldii a sub *t* ]  
 CL-who NOM R-PF-heat-3S NOM soup  
 ‘Who heated up the soup?’

It is tempting to say that the phrase headed by a nominal marker is nominal, and the VP-movement analysis of wh-cleft permits such a claim.

Further, relative clauses in Palauan do not employ the nominal marker *a*. The language instead uses a complementizer *el* to construct a relative clause (Data from Cheng, 1997:60):<sup>4</sup>

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<sup>3</sup>Palauan is a VOS language, which differs from VSO languages as to the placement of object. This seems to be a trivial matter, as the VP-movement analysis can still capture this word order either by not having case-driven movement of the object or by fronting AgrOP (or its equivalent) to Spec-IP position.

<sup>4</sup>Originally, this example was presented to show that apparent violation of CNPC. The grammaticality of the sentence indicates, Cheng says, that the movement is distinct from normal wh-movement observed in English.

- (38) ng-nger<sub>i</sub> [ a 'om-omes er [ a rese'al<sub>j</sub> [ el omtanget er  
 CL-what NOM IR-2-see P NOM boys COMP R-polish P  
 ngii<sub>i</sub> t<sub>j</sub>]]]  
 it

‘What are you watching the boys who are polishing (it)?’

This observation, again, can be easily explained with VP-movement analysis. We may simply say that the nominal marker of Palauan acts as some kind of D, and it heads the following CP forming the subject for the wh-cleft construction. In turn, the wh-item *ng-nger<sub>i</sub>* is acting as the predicate for the clause.

Another piece of evidence for the predicate status of the wh-word in the Palauan wh-cleft construction is the third-person agreement clitic *ng*. This marks third person singular subject in realis mood (Georgopoulos, 1991:26). A simple declarative sentence shows this clearly:

- (39) ng-kiltmeklii a ulaol a Peter  
 R-3S-clean-3s floor  
 ‘Peter cleaned the floor.’ (Georgopoulos, 1991:26)

Notice that this placement of agreement morphology contradicts Cheng’s claim that the fronted wh-item acts as the subject. Why does an agreement marker need to attach to the subject rather than to the predicate, exactly when the subject is a wh-cleft? In fact, the matter suddenly becomes straightforward once we adopt the predication structure of [[PREDICATE] [SUBJECT]] for Palauan syntax.

### **Interpretation of Wh-cleft**

The other issue which Cheng did not discuss is the interpretation of the wh-cleft construction. The most peculiar point of the syntactic optionality between wh-in-situ and wh-cleft is the fact that two distinct constructions are in free variation. As is often said, absolute synonymies do not exist, and it is usually the case that synonymous expressions actually carry slight semantic differences. Thus, it is natural to posit that wh-in-situ and wh-clefts are distinct from each other in some way. This matter is dealt in the following chapter.

### **Why VP-movement languages?**

So far, I have discussed only *how* the VP-movement analysis works for the optional fronting languages and wh-clefts, and I have not dealt with the question of *why*.

To my knowledge, there are no VP-movement languages which type clauses by wh-movement. On the other hand, it is possible for a language which is unlikely to have VP-movement to type a clause by wh-particle. Persian, for example, seems to be an example of this (Kahnemuyipour, 2001). Persian, an SOV language with full subject-verb agreement morphology, types a clause by wh-particle, and wh-words appear essentially in-situ.<sup>5</sup> Thus, what we have is an implicational universal; that is, if a language has VP-movement,

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<sup>5</sup>More precisely, Persian wh-words undergo focus movement, which is motivated by a mechanism different from the CTH.

then it types illocutionary force by a particle.

While there is no definite explanation or reason for this implicational universal, I may speculate on one possibility. Suppose that we were to extend the notion of VP-movement to a more general mechanism applicable to any movement in a given language. Under this view of movement, a language has to be parameterized as for what can be in Spec positions. If a language chooses a [+D] or [ $\phi$ ] element, it systematically excludes the possibility of a [+PRED] element from being in a Spec position. If [+PRED] is chosen, then no [+D] type element can be in a Spec position. If this is true, it is impossible to put a wh-argument in a Spec position; hence the wh-particle is the only way in which the language can type a wh-question.

Although interesting, such an approach suffers from many immediate problems. For example, it is not clear how we can deal with the case-related movement in VP-movement languages under this analysis. For now, I leave this question aside, and assume that VP-movement somehow causes a language to type illocutionary force with a particle.

### 3.4 Summary and Conclusion

In this section, I considered the issues of wh-clefts mainly by reviewing Cheng (1997). She claims that the optional fronting languages, an apparent problem for her proposal of the Clause Typing Hypothesis, do not have genuine optionality between wh-in-situ and wh-movement, and what seems to be wh-movement in fact is clefting. To this claim, I added that most of the optional

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fronting languages are VP-movement V-initial languages, and analyzed that VP-movement creates a structure rather like a pseudo-cleft, based on the analysis provided by Paul (2001). However, I have not fully discussed what is meant by “(pseudo-)cleft” in this chapter. In the next chapter, I will focus more on the cleft construction.

# Chapter 4

## Focusing (Pseudo-)Cleft

### 4.1 So, what happened? And then?

In the previous chapters, I reviewed the analysis of optional fronting languages by Cheng (1997), and suggested that the wh-cleft construction found in the optional fronting languages should be unified with the VP-movement analysis of some VSO languages, and that the structure of the wh-cleft seen in these languages is more like that of a pseudo-cleft construction.

Both Cheng's claim and the claim I am proposing in this paper must be based on a good understanding of (pseudo-)cleft. What do we mean by (pseudo-)cleft? What kind of predictions do we make by basing the analysis of wh-questions on the cleft construction? These questions are simple, but crucial to the claim proposed in this paper. In this chapter, I will try to figure out ( at least some aspects of the cleft construction, including wh-(pseudo)-cleft. It is a common assumption that the notion of "cleft" is associated with

the other notion “focus.” Let us start this chapter by looking at focus.

## 4.2 Focus

It is often observed that there are no absolute synonyms in a language, and any two expressions must contrast in some way however close their meanings are. An intuitive assumption, then, is that *wh*-in-situ and *wh*-cleft in the same language should have different meanings, at least slightly. If this is true, then the source of the difference comes from the fact that *wh*-cleft is a “cleft.” Now a question arises: What is meant by “cleft”? It is often said that a cleft encodes “focus.” Another question: what do we mean by “focus”? In this section, I will consider the question of focus, by reviewing Rooth (1996) and É. Kiss (1998).

### 4.2.1 Contrastive Focus (Rooth, 1996)

(Rooth, 1996:271) uses the term *focus* “to describe prosodic prominence serving pragmatic and semantic function.” An instance of this kind of focus can be easily found in a fragment of a discourse:

- (40) a. Who studies linguistics?  
       b. i. HOMER studies linguistics.  
        ii. ?Homer studies LINGUISTICS.  
        iii. ?Homer STUDIES linguistics.

Small capitals in the sentences above indicate the constituent has prosodic prominence focus. All the sentences in (40b) have the same words and the same syntactic structure but only (40b-i) sounds appropriate as an answer to the question in (40a). Similar observation can be made with the sentence below:

- (41) In Saint Petersburg, OFFICERS always escort ballerinas. (Rooth, 1996:272)

If *officers* is stressed, the sentence implies that individuals with other occupations would not be allowed to escort ballerinas.

Rooth considers that, in these instances, intonational focus may be taken as an instance of (re-)structuring of the semantic composition and evoking of *alternatives*. Thus, uttering BERT *gave beer to Homer* evokes the set of individuals who *gave beer to Homer*, i.e., alternatives to *Bert*, as well as it provides the proposition that “Bert gave beer to Homer.”

At first, this may sound as if there is a syntactic operation of quantification at LF corresponding to the semantic interpretation evoked by intonational focus. However, Rooth argues that there is not. Rooth considers the following set of sentences in (42) to illustrate the point (data from Rooth, 1996:283):

- (42) a. Dr. Svenson only rejected the proposal that JOHN submitted.  
 b. Dr. Svenson rejected the proposal that exactly one student submitted.  
 c. Dr. Svenson will only complain if BILL doesn't finish his job.

- d. Dr. Svenson will complain if exactly one lab assistant doesn't finish his job.

Sentence (42b) has a quantificational constituent *exactly one student* inside a relative phrase, and it cannot take scope over any element outside the relative clause. The sentence therefore does not have a reading *there is exactly one student such that Dr. Svenson rejected the proposal that s/he submitted*. On the other hand, (42a) indicates that a similar effect is not observed with a prosodically focused constituent. Adverbials such as *only* are called focus-sensitive adverbs because they interact with intonationally marked focus. In the case of (42a), *only* associates with the focused constituent *John*, which is in the embedded clause. A similar distinction is observed between (42c) and (42d); a quantificational phrase cannot scope outside an adjunct phrase, but a focal element can be associated with a focus-sensitive item beyond such a boundary. If we were to attribute focus phenomena such as the ones shown above to LF movement, we would also have to account for this distinction.

Finally, Rooth shows that intonationally marked focus only introduces alternatives; it does not introduce an existential presupposition. This may first sound contrary to one would assume, as the intonational focus and presupposition often appear together. Rooth illustrates this point with the following dialogue (from Rooth, 1996:292-293):

- (43) a. Did anyone win the football pool this week?  
 b. i. I doubt it, because it's unlikely that MARY won it, and I know that nobody else did.

- ii. # I doubt it, because it's unlikely that it's MARY who won it, and I know that nobody else did.

If a cleft induces the same type of focus as that marked by prosodic prominence, both (43b-i) and (43b-ii) should be equally sensible as a reply to (43a). Nonetheless, that is not the case; (43b-ii) sounds odd. The cleft construction, on one hand, induces the existential presupposition that someone won the football pool, and it is not Mary. On the other hand, the following statement says that it is not the case that someone other than Mary won it. This conflict does not occur in (43b-i) since focusing on *Mary* does not create an existential presupposition.

To conclude: Rooth's examination of intonational focus indicates that, contrary to our intuition, the semantics of clefts differs slightly from that of the type of focus marked by prosodic prominence. First, intonational focus seems not to involve LF syntax, as it is shown that this type of focus is not sensitive to syntactic boundaries such as CPs or adjunct phrases. Furthermore, focus does not create an existential presupposition, while a cleft does. The discourse in (43) is a clear illustration of the distinction. This distinction is also borne out by a pair of sentences with a negative quantifying element such as *no one*:

- (44) a. NO ONE hates Charles.  
 b. # It is no one who hates Charles.

At any rate, it would be false to simply presume that cleft has a focus, and it is necessary to have a precise articulation of the phenomena.

### 4.2.2 Identificational Focus (É. Kiss, 1998)

É. Kiss (1998) has come to a similar conclusion that what is uniformly assumed to be “focus” in fact consists of two different kinds; **identificational focus** and **informational focus**. She notes that the notion of these two types of focus is not a new finding and is mentioned in various studies. However, the distinction was not clear, and often it was assumed that they are the same. What is novel about her claim is that they should be distinguished, and they have different semantics and syntax. Her claim supports the conclusion that we came to in the review of Rooth (1996), in that intonational focus is distinct from cleft. Roughly speaking, É. Kiss claims that what Rooth calls focus is informational focus, and (English) cleft is an instance of identificational focus.

É. Kiss argues that informational focus is syntactically inert, marking non-presupposed new information.<sup>1</sup> It thus has looser restrictions on what items it may apply to; *even-* or *also-*phrase and various quantifiers may bear this type of focus. The last point can be observed in (44); the negative existential quantifier *no one* can bear prosodic prominence.

On the other hand, identification focus is syntactically manifested, providing exhaustive identification. Also, what can receive this type of focus is strictly restricted; universal quantifiers, *even-*phrases, and *also-*phrases cannot receive this focus.

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<sup>1</sup>However, I do not claim here that information focus is syntactically inert cross-linguistically, as Kahnemuyipour (2001) shows that Persian shows syntactic movement driven by what seems to be a kind of informational focus. Also, see references therein.

In terms of its syntax, É. Kiss argues for a focus phrase (FP) and Spec-FP receives identificational interpretation.<sup>2</sup> How to derive Spec-FP varies: Hungarian identificational focus is achieved by the movement of a focused item to Spec-FP along with V-to-F movement of a verb:

- (45) a. Mari fel hívta Pétert  
 Mary up called Peter.ACC  
 ‘Mary called up Peter.’
- b. Mari Pétert hívta fel  
 Mary Peter.ACC called up  
 ‘It was Peter that Mary called up.’ (É. Kiss, 1998:256)

On the other hand, É. Kiss claims that the focal item in English cleft construction is in Spec-FP, but it may be either moved from lower position or base-generated. In the following example, according to É. Kiss, *me* is base-generated:

- (46) It is me who/that is sick. (É. Kiss, 1998:259)

Such analysis can account for the fact that the verb *is* does not agree with *me*. What is most crucial is that identificational focus is structural, and its interpretation is done only at Spec-FP.

The aim of this section is to observe characteristics of clefts in general. It has been commonly and intuitively assumed that clefts induce “focus.” To make this idea more transparent, I reviewed Rooth (1996) and É. Kiss

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<sup>2</sup>The location of FP is vague in her analysis. For Hungarian, it is somewhere between VP and Top(ic)P. For English, FP is situated just above CP.

(1998), and it became clear that the general notion of “focus” per se is not sufficient to characterize clefts. More precisely speaking, there are two types of focus, identificational and informational, and clefts carry identificational focus. The analysis of É. Kiss (1998) raises a number of issues which need to be considered. First, if wh-cleft is the correct analysis for optional wh-fronting languages and if the analysis of wh-cleft is on the right track, then we should see some interpretational distinction between the wh-in-situ construction and wh-(pseudo-)cleft construction. The second issue has to do with FP. This paper is trying to refine the analysis of wh-clefts, claiming that they have a pseudo-cleft structure consequent to VP-movement analysis. Under this analysis, we do not see any clear structural evidence for the existence of FP. Do we therefore need to posit the vacuous movement of a focal item to Spec-FP? Or do we have another way to achieve a similar interpretation without projecting FP? In the following section, I will try to answer these questions.

## 4.3 Towards the Analysis of Wh-pseudo-cleft

### 4.3.1 Pseudo-cleft?

Let us first define the term *pseudo-cleft*. An early analysis of the English pseudo-cleft construction is provided by Higgins (1979), who gives the following definitions:<sup>3</sup>

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<sup>3</sup> Higgins further shows two kinds of pseudo-cleft construction; **specificational** pseudo-clefts and **predicational** pseudo-clefts. Often a pseudo-cleft sentence is ambiguous in this regard:

- (47) Definitions of Pseudo-cleft (Higgins, 1979:1-2)
- a. A semantic kinship to cleft sentences, and a consequent semi-formal requirement that pseudo-cleft sentences should have bipartite form, looking like a broken-up form of a simple sentence, with a “focal” constituent which in some sense is being emphasized, and a remainder.
  - b. A formal requirement that the sentence is a copular sentence having a subject that consists of a clause introduced by a *Wh*-item, usually *what*, this subject clause constituting the remainder of the simple sentence, and a portion which follows the copula and constitutes the focal constituent, the constituent which is being emphasized.

Notice that what I have been calling “pseudo-cleft” in the previous chapter differs from a canonical (English) pseudo-cleft à la Higgins in several respects. First, as has been being suggested in this paper, the languages under consideration here have the predication structure [ [PREDICATE] [SUBJECT] ], not [ [SUBJECT] [PREDICATE] ]. This suggest us that the clefted item should appear at the left side of the copular sentence, given that the observation that the predicate position somehow encodes focus is still maintained in the VP-movement VSO languages. The second distinction is that *what* or any

- 
- (1) What John is is silly. (Higgins, 1979:7)
- a. PREDICATIONAL:        John is an x, and being an x is silly.
  - b. SPECIFICATIONAL:     John is silly.

Some pseudo-clefts are unambiguous:

- (2) a. What John is is important to himself.                    Specificational only  
 b. What John is is important to him.                            Predicational only

It is not known whether the languages which allow wh-cleft have this kind of distinction.

other equivalent of an English *wh*-word is not used to introduce the “remainder” in the examples of *wh*-cleft given in the previous chapter. According to Cheng (1997), the remainder is introduced by *illi* and *yang* in Egyptian Arabic and Bahasa Indonesia respectively and they are glossed with the English complementizer *that*:

(48) a. Egyptian Arabic (Cheng, 1997:49)

dah Ali **illi** Mona darabit-uh  
 this Ali that Mona hit-him  
 ‘It’s Ali that Mona hit.’

b. Bahasa Indonesia (Cheng, 1997:54)

Mary-lah **yang** Bill cium  
 Mary-SUF that Bill kissed  
 ‘It was Mary who Bill kissed.’

In Palauan, on the other hand, the remainder is introduced by *a* which marks a nominal argument in a clause:

(49) Palauan (Cheng, 1997:59)

ng-Basilia **a** mengau er tia er tet  
 CL-Basilia NOM R-weave P DEM L bag

‘It’s Basilia who’s weaving this bag.’

We may generalize these observations by saying that the remainder of the pseudo-cleft construction consists of a headless relative clause. Thus, I posit that there is an phonetically empty D head in front of *illi* and *yang* in the cases of Egyptian Arabic and Bahasa Indonesia. In the case of Palauan,

we may say that the D head is realized instead of a complementizer if we assume that the nominal marker *a* is a type of determiner. If this is on the right track, then the conclusion is that what we call as the “pseudo-cleft” for these VP-movement languages is actually a copular sentence with a headless relative as its subject, which would look similar to the following structure:

(50) [ *Predicate* Clefted Item ] [ *Subject* D [ COMP Remainder ] ]

Note that I do not assume any functional projection for focus in this structure. It is tempting to say that the clefted item is in Spec-FocP since it is the focus of the clause, and it is often argued that in some languages *wh*-elements moves to a focus position (Kahnemuyipour, 2001; Otsuka, 2002). Consider an English pseudo-cleft sentence:

(51) [ *Subj* What I want ] is [ *pred* a pint of beer ]

It is a common observation that the element in the predicate position receives the focus (in the case above *a pint of beer*) in a pseudo-cleft construction. If we were to argue that the pseudo-cleft structure of VSO languages requires movement of clefted item to Spec-FocP position, then we would have to explain why the pseudo-cleft construction in English does not exhibit a corresponding fronting of the clefted element. To account for this focus fact, I suggest that being in a predicate position can itself license a focus interpretation. Let us consider what is said about the information structure of a language. It is a common assumption that being in the predicate position induces focus. Thus, we may attribute some type of focus to the predicate

location. Based on this reasoning, we may not need to attribute any additional special syntactic properties to the focal element in the pseudo-cleft construction cross-linguistically.

## 4.4 The Case of Malagasy: Paul (2001)

The claim that I am making here about the cleft construction in VP-movement type languages is in fact not a novel one. Paul (2001), for example, provides a similar analysis for the cleft structure in Malagasy. Here I will sketch her analysis of Malagasy cleft structure.

### 4.4.1 Structure

Like many other (Austronesian) languages, a focal element in Malagasy cleft construction appears clause-initially, as shown in the following examples:<sup>4</sup>

- (52) a. Nanapaka ity hazo ity tamin'ny antsy i Sahondra  
 PAST.AT.cut this tree this PAST.P.GEN.DET knife Sahondra  
 ‘Sahondra cut this tree with the knife.’ (Paul, 2001:709)
- b. I Sahondra no nanapaka ity hazo ity  
 Sahondra DET PAST.AT.cut this tree this  
 ‘The one who cut this tree was Sahondra.’ (Paul, 2001:711)

Paul provides the following tree for the Malagasy cleft construction (52b):

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<sup>4</sup>Malagasy is a VOS language which has a voice alternation (topic marking) system similar to that of Tagalog. AT in the gloss of Malagasy examples indicates that the verb is marked for the actor topic.



- (55) Amin'Ny antsy no monapaka bozaka i Bakoly  
 P.GEN.DET knife DET AT.cut grass Bakoly  
 'It is with a knife that Bakoly is cutting grass.' (Paul, 2001:719)

If we were to try to analyze the sentence in (55) in a similar fashion, we would obtain an odd reading like *the X such that Bakoly is cutting grass is with a knife*, in which a PP is equated with an individual nominal.

In order to account for this, Paul suggests two possible analyses. The first and preferred one is that the headless relative may have an interpretation as an event nominal. She shows that this analysis is supported by the interchangeability of the individual reading and the event reading for the zero nominals:

- (56) a. Faly ny manapaka bozaka INDIVIDUAL READING  
 happy DET AT.cut grass  
 'the ones who are cutting grass are happy.'
- b. Sarotra ny manapaka bozaka EVENT READING  
 difficult DET AT.cut grass  
 'Cutting grass is difficult.' Paul (2001:720)

The second possible treatment of adjunct clefts is that the construction involves movement:

- (57)  $\left[ \left[ \text{Amin'ny antsy} \right]_i \text{ no } \left[ \text{monapaka bozaka } t_i \text{ i Bakoly} \right] \right.$   
 P.GEN.DET knife DET AT.cut grass Bakoly  
 'It is with a knife that Bakoly is cutting grass.'

This simplifies what we need to consider for pseudo-clefts, as we may leave adjunct clefts aside. In any case, either of the analyses can provide

us with a valid solution, and adjunct clefts, although they may seem to be counterexamples at first glance, do not seriously harm the pseudo-cleft analysis.

#### 4.4.2 Interpretation

What is novel about Paul's analysis is that it also provides insights about the interpretation. It is commonly noted that clefts are associated with two interpretations; **(existential) presupposition** and **exhaustivity**.

##### Presupposition

Clefting a proposition, let us say  $P(x)$ , presupposes the existence of an individual which saturates the proposition; hence  $\exists xP(x)$ . For example, a cleft sentence *It is John who loves to eat cat food* presupposes *someone loves to eat cat food*. Paul points out that a similar observation holds for the Malagasy clefts:

- (58) \*Tsy na iza na iza no mandoko trano  
 NEG or who or who DET AT.paint house  
 'It's no one who is painting houses.' (Paul, 2001:722)

The oddness of (58) comes from the contradiction of two different interpretations. The sentence presupposes that *someone is painting houses* (i.e.,  $(\exists x)[x \text{ is painting houses}]$ ). At the same time, we have a base expression *no one is painting houses*, which is roughly interpreted as  $\neg(\exists x)[x \text{ is painting houses}]$ . This gives a contradiction:  $P \& \neg P$ . If the sentence does not carry

the presupposition, then no contradiction would arise.

### Exhaustivity

The second point Paul makes is that a cleft expresses exhaustive identification. Consider the following sentences:

- (59) a. Nandeha taiza ianao ?  
 PAST.AT.go PAST.where 2SG.NOM  
 ‘Where did you go?’
- b. i. Nandeha tany Ambositra aho  
 PAST.ATgo PAST.where Ambositra 1SG.NOM  
 ‘I went to Ambositra.’
- ii. Tany Ambositra no nandeha aho  
 PAST.there Ambositra DET PAST.AT.go 1SG.NOM  
 ‘It was to Ambositra that I went.’

Although both (59b-i) and (59b-ii) are appropriate answers to the question (59a) and they are synonymous, they differ in one respect: exhaustivity. Answering (59b-i) does not necessarily entail the exhaustive reading that there is no place the speaker went to other than Ambositra, and it may have a meaning that *I went to Ambositra, among other places*. Thus, the sentence is true as long as there is a set of places where the answerer went (i.e.,  $D = \{x \mid \text{I went to } x\}$ ), and Ambositra is a member of that set (i.e.,  $\text{Ambositra} \in D$ ). On the other hand, the answer employing the cleft construction (59b-ii) entails that the answer is exhaustive. By answering (59b-ii), the answerer means that s/he did not go to any other place than Ambositra, and the statement would be false if s/he went any other place. Thus, the sentence

(59b-ii) is true if and only if the set of places that the answerer went is a singleton set, whose sole member is denoted by the clefted item; namely *Ambositra*.

### Deriving Presupposition and Exhaustivity with Pseudo-cleft

Now we have observed that existential presupposition and exhaustivity are observed in the pseudo-cleft construction in Malagasy. These are typical characteristics of identificational focus (É. Kiss, 1998). This further entails under É. Kiss's analysis that there is a functional projection FP to provide such interpretation from syntactic structure to semantics. However, the problem is that there seems to be no syntactic evidence for such a projection in the cleft construction of VSO languages. Paul (2001) claims that these interpretations can be achieved without positing FP for pseudo-clefts.

First, Paul notices that the effect of existential presupposition can be achieved by definite expressions. Thus, uttering *The present president of Japan lives in Tokyo* entails the existence of an entity denoted by the description of *the present president of Japan*. Furthermore, Paul notes that headless relatives are definite. Thus, it is a natural consequence that a headless relative subject provides existential presupposition.

The exhaustivity effect may also be achieved by other syntactic means, without projecting FP. Paul suggests that the Malagasy pseudo-cleft is essentially an equative copular construction where the subject and the predicate have to be absolutely equal to each other. The construction thus ensures exhaustivity without FP.

Therefore, it is possible to reduce the properties associated with FP without actually positing FP, if a definite expression and an equative construction are used in one sentence.

### Extending the Analysis without FP

The approach Paul takes seems to be on the right track, and there are additional good reasons to adopt it.

Assume an analysis of pseudo-cleft with FP for a moment. Such an analysis may be possible, but requires a new account for English pseudo-clefts. If we were to say that the focused constituent (i.e., the predicate constituent) of English pseudo-cleft is in fact in Spec-FP, in order to make the structure analogous to the analysis of English clefts á la É. Kiss, it would be, then, necessary to explain why the *wh*-constituent in a pseudo-cleft, analogous to the remainder in a cleft, appears at the left edge.

Also, such an analysis would overlooks a very subtle distinction obtained between (normal) clefts and pseudo-clefts in English. First consider the following pairs of sentences:<sup>5</sup>

- (60) a. i. What John LIKES is cake.  
       ii. ? It is cake that John LIKES.  
       b. i. What JOHN likes is cake.  
       ii. ?? It is cake that JOHN likes.

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<sup>5</sup>Small capitals indicate the item is prosodically focused.

Notice how the prosodic focus interacts with the pseudo-cleft and the cleft. In pseudo-cleft construction it is possible to have prosodic focus almost anywhere in the remainder constituent. On the other hand, having prosodic focus in the remainder of a normal cleft sentences makes them quite difficult to parse. At best, they require a very restricted and complicated discourse environment to achieve pragmatic/semantic soundness. If we were to say that both clefts and pseudo-clefts have certain properties of identificational focus due to the presence of an FP projection, it would be difficult to account for this difference. If we maintain that pseudo-clefts do not project FP, whereas normal clefts do, then the oddity of prosodic-focusing in true clefts may be attributed to the existence of FP.

## 4.5 Interaction with Wh-question

Now let us come back to the old question about wh-clefts in optional fronting languages. Let us assume that the interrogative force is handled by an interrogative operator “?” in the semantics. Given that the semantics of wh-questions is constant throughout a language, the semantic difference between wh-pseudo-cleft and wh-in-situ should be the same as the semantic difference between a pseudo-cleft and a normal sentence. The semantics of a plain wh-question (wh-in-situ of optional fronting languages) should look like the following:

(61) What did John eat?

$?x[at'e'(John, x)]$

One may postulate the function of  $?x$  is a) to evoke a set of entities which satisfy the predicate ([John ate  $x$ ] in (61)), and b) to ask for at least one member of the set, if any. Thus, if the set of what John ate is  $J = \{ \text{the cake, the banana muffin, the haggis} \}$ , answering any one item should satisfy the question, and leaving some entities unmentioned may be allowed depending on pragmatic factors.

A similar process should apply to wh-pseudo-clefts, except that the wh-question is formed on top of the pseudo-cleft construction. Recall that Paul (2001) claims that the existential presupposition arises because a headless relative is definite. I use the  $\iota$ -operator for the semantic representation of definite description (See Cowper, 2002). Also, I employ “=” to denote the semantics of the equative construction. Let us consider the pseudo-cleft variant of (61) now:

- (62) What was what John ate? (What John ate was what?)  
 $?x[\iota y[\text{ate}'(\text{John}, y)] = x]$

What would be the effect of asking the question in this way? As the definite expression is used, we have the presupposition of  $\exists y[\text{ate}'(\text{John}, y)]$ . Furthermore, what is asked should be exactly equal to the entity marked by the definite description  $\iota y[\text{ate}'(\text{John}, y)]$ . These semantic considerations restrict the range of possible answers. For example, if John did not eat anything, it is necessary to explicitly deny the proposition that *John ate something* to cancel the presupposition:

- (63) What was what John ate?
- a. ? Nothing.
  - b. He didn't eat anything.

As this effect is driven by the presuppositional effect, a similar result should be seen with a definite description headed by *the* and with a cleft construction:

- (64) What was the thing John ate?  
 What was it that John ate?
- a. ? Nothing.
  - b. He didn't eat anything.

The exhaustivity effect requires the answer to be the complete set of items which satisfy the condition of the question. Therefore, if the set of items that John ate is {the cake, the haggis, the kebab, the sushi} and did not eat anything else, the answer should contain all four of these items. Of course, an *even-* or *also-*phrase would cause the answer to be infelicitous:

- (65) What was/were what John ate?
- a. ? The cake and the haggis (among other things).
  - b. ? Even/also the cake.
  - c. The cake, the haggis, the kebab, and the sushi.

Again, an equative construction with a definite description headed by *the* and a cleft show similar restrictions.

(66) What was/were the thing(s) John ate?

What was it that John ate?

- a. ? The cake and the haggis (among other things).
- b. ? Even/also the cake.
- c. The cake, the haggis, the kebab, and the sushi.

Now, let us consider how this analysis of pseudo-wh-cleft would interact with Cheng's (1997) analysis. This semantic analysis of wh-pseudo-cleft does not detract from her analysis in any way, but rather strengthens it. The analysis here clearly shows that the wh-cleft and wh-in-situ are not free variants of each other, and thus these so-called optional fronting languages are indeed wh-in-situ languages. As a result, the semantic analysis of wh-pseudo-cleft supports the Clause Typing Hypothesis.

## 4.6 Summary and Conclusion

In this chapter, the nature of "cleft" has been examined. Unlike the common intuition, Rooth (1996) showed that the general notion of (contrastive) focus is not necessarily associated with the cleft construction. É. Kiss (1998) has arrived at a similar conclusion. She proposes that there are two different types of focus available in a grammar; identificational focus and informational focus. According to her analysis, what Rooth (1996) described is classified as informational focus, which does not necessarily have a corresponding syntactic mechanism. É. Kiss shows that the cleft construction in English, on the

other hand, is a realization of identificational focus. Identificational focus has two major semantic characteristics. They are an existential presupposition and exhaustivity. Also, she considers that the identificational focus has a corresponding syntactic projection FP.

Subsequently, I reviewed Paul (2001) on how the discussion of É. Kiss interacts with the wh-pseudo-cleft analysis proposed in Chapter 2. Paul observes that both the existential presupposition and exhaustivity are observed in Malagasy pseudo-cleft construction. Instead of simply assuming FP for a pseudo-cleft, she provide an alternative account. Both interpretive effects are achieved by having an equative construction with a definite headless relative subject. I extend her analysis to the wh-pseudo-cleft construction, and concludes that the wh-pseudo-cleft construction has a different interpretation from wh-in-situ.

# Chapter 5

## Application to Irish

The derivation of VSO order has been a central issue in Irish syntax.<sup>1</sup> While it seems that the issue has come to its maturity along with the development of syntactic frameworks, possible accounts for VSO order can still be made. In this chapter, I argue for a novel analysis of Irish, and a new approach to Irish wh-question formation. I claim that Irish is a *VP-movement language*, which is one of the possibilities yet unexplored (see Carnie, 2000), and I provide evidence, both empirical and theoretical, in favour of this claim.

### 5.1 General Structure

It would facilitate our discussion to have some descriptive understanding of Irish syntax. Thus, before discussing theoretical issues, I will discuss the syntactic characteristics of Irish, as concretely as possible, in this section.

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<sup>1</sup>See Carnie (1995) for an extensive review of the previous accounts.

### 5.1.1 Finite Clause

It is well-known that an Irish finite clause has VSO order, as shown in (67):

- (67) a. Thóg [<sub>Subj</sub> sí] [<sub>Obj</sub> teach] daofa ar an Mhullach Dubh.  
 raised she house for-them on the Mullaghduff  
 ‘She built a house for them in Mullaghduff.’ (McCloskey, 2002)
- b. Do fuair [<sub>Subj</sub> sé] [<sub>Obj</sub> nuachtán Meiriceánach] óna  
 PAST got he newspaper American from-his  
 dhearthár an lá chearna.  
 brother the-other-day  
 ‘He got an American paper from his brother the other day.’ (McCloskey, 2002)
- c. Leanann [<sub>Subj</sub> an t-ainmní] [<sub>Obj</sub> an briathar] i nGaeilge  
 follow.PRES the subject the verb in Irish  
 ‘The subject follows the verb in Irish.’ (Carnie, 1995:18)

VSO word order is restricted to only finite clauses; when a clause is infinitival, different orders are exhibited. It has (S)OV order in the northern dialect, and SVO or S<sub>PRO</sub>OV in the southern dialect (Noonan, 1994):<sup>2</sup>

- (68) a. Northern Dialect
- Ba mhaith liom [ Séan an caora a<sup>L</sup> mheá ar an bhfeirm]  
 I-would-like Séan the sheep a<sup>L</sup> weigh on the farm  
 ‘I would like Séan to weigh the sheep on the farm.’ (Noonan, 1994:321)

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<sup>2</sup>a<sup>L</sup> is a particle used in the infinitival construction, and it is difficult to determine what exactly it is. See Bobaljik and Carnie (1996); Duffield (1995); Legate (1997) for possible analyses of a<sup>L</sup>. The superscript *L* indicates that the particle lenites (i.e., fricativize) the following consonant. Similarly, superscript *N* is used to indicate eclipse (i.e., nasalization).

## b. Southern Dialect

Ní theastaíonn leat [ mé a<sup>L</sup> dhíol an chaora]  
 NEG pleases with:you me a<sup>L</sup> the sheep.GEN

‘It doesn’t please you for me to sell the sheep.’ (Noonan, 1994:329)

Verbs in the infinitival construction have verbal noun form, which is more or less equivalent to English nominalizations such as to *destruction*, and, as the name suggests, they may be used nominally:

- (69) Chuir [caitheamh na liathróide de Shíle] isteach orm  
 put.PAST throw.VN the ball.GEN of Síle in on:me  
 ‘Síle’s throwing of the ball annoyed me.’ (Legate, 1997:39)

The change of syntactic category suggests that the morphology of verbal noun is derivational rather than inflectional. Thus, the morphology and the word order alternation indicate that the infinitival construction requires an analysis different from that of the finite construction in Irish. In this paper, I do not attempt to make an analysis for the infinitival construction, and the focus is entirely on the finite construction.

### 5.1.2 Copular Structure *Is* vs. *Bí*

There are two copulae in Irish; *is* and *bí*. The distribution of these is needs to be defined.

***Is***

Roughly, *is* is found in the predicative copular construction, and in the equative construction.<sup>3</sup> The predicative construction can be structurally defined as a copular construction in which a bare nominal phrase appears in the predicate position. Semantically, the subject shares the property denoted by the predicate nominal. An example is given below:<sup>4</sup>

- (70) a. *Is fear maith é*  
           COP man good he  
           ‘He is a good man.’ (OD:731)
- b. *Is amhrán a<sup>L</sup> bhuailfidh an píobaire* [<sub>Subj</sub> “Yellow  
           COP song COMP play.FUT the bagpiper  
           Submarine”]

“‘Yellow Submarine’ is a song which the bagpiper is going to play.’ (Carnie, 1995:183)

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<sup>3</sup>There are other uses of this copula. It may be used in idiomatic expressions, as in (68a). Also, there are handful of adjectives which may appear with *is*. I ignore these uses of *is* in this discussion, since they are not productive in Modern Irish. See Carnie (1995:Ch. 4) for details.

<sup>4</sup>It is not clear to my knowledge whether the *a<sup>L</sup>* in the example (70b) is same as the *a<sup>L</sup>* observed in the transitive infinitival construction discussed in section 68. I assume that they are syntactically different, and consider the *a<sup>L</sup>* in the example (70b), as well as other pre-verbal particles, as a complementizer, following McCloskey (2001). See references therein (particularly Duffield, 1995) for alternative approaches.

The predicative construction has the structure of [COP NOM<sub>Pred</sub> (AGR) NOM<sub>Subj</sub>], and the predicate nominal always appears immediately after the copula, regardless of its phrasal status.

The other construction where *is* is found is the equative construction. The equative construction may be defined as a copular construction in which the predicate nominal is definite. Thus, semantically, the subject and the predicate are equal. While English does not show any structural difference between the predicative construction and equative construction, Irish makes a clear distinction between them:

- (71) a. Is [<sub>Subj</sub> mise] an páiste is sine sa chlann  
 COP I.EMPH the child SUP old in:the family  
 ‘I am the oldest child in my family.’ (OF:1)
- b. Ach ba iad Rí an Roc agus Elvis the Pelvis  
 but COP.PAST AGR King the Rock.GEN and  
 na cinn ba choitianta  
 the ones SUP common  
 ‘But the King of Rock and Elvis the Pelvis were the most common ones.’ (FO:107)
- c. Is é [<sub>Subj</sub> “Yellow Submarine”] an amhrán a<sup>L</sup>  
 COP AGR the song COMP  
 bhuaifidh an píobaire  
 play.FUT the bagpiper  
 ‘“Yellow Submarine” is the song which the bagpiper is going to play.’ (Carnie, 1995:194)

Notice that the word order changes. In the equative construction, the predicate nominal does not front, and thus the structure shows the order of [COP

(AGR) NOM<sub>Subj</sub> NOM<sub>Pred</sub>].

### *Bí*

*Bí* is used elsewhere; this form of copula is used when the predicate is not nominal, but either prepositional or adjectival:

- (72) a. Tá mé i mo chónaí i gContae Chorcaí  
 Be.PRES I in my living in County Cork.GEN  
 ‘I am living in County Cork.’ (OF:3)
- b. Bhí an aimsir go dona  
 be.PAST the weather wretched  
 ‘The weather was wretched’ (OD:106)

Also, this form of copula is used for the progressive construction:

- (73) Tá mé ag staidéar ocht n-ábhar i mbliana  
 Be.PRES I at(/ASP) study.VN eight courses in year  
 ‘I am studying eight courses this year.’ (OF:6)

Stenson (1981) points out an interesting semantic distinction between the use of *is* and *bí*. There are two ways to translate an English sentence *My brother is a priest* into Irish:

- (74) a. Is sagart é mo dhreatháir  
 COP priest AGR my brother  
 ‘My brother is a priest.’
- b. Tá mo dhreatháir ina sagart  
 be my brother in:his priest  
 ‘My brother is a priest.’ (Stenson, 1981:94)

Stenson says that (74a) is discussing one the permanent characteristics of *my brother*, while (74b) is talking about his (temporal) profession.

Syntactic differences are observed between *is* and *bí*. *Is* is in a complementary distribution with the negative marker and the interrogative marker, whereas *bí* cooccurs with them:<sup>5,6</sup>

- (75) a. [Is /Ní /An] lia é  
           COP /NEG /Q   lia é  
           ‘[He is /He isn’t /Is he] a surgeon.’ (Stenson, 1981)
- b. [Tá /Níl /An bhfuil] sé dúnta  
      be.PRES /bePRES.NEG /Q be.PRES.DEP it closed  
      ‘[It is /It isn’t /Is it] closed.’

Based on phonological and morphological evidence, as well as distributional evidence similar to that provided above, Carnie (1995) argues that *is* is a complementizer, and not a verb. This seems to be reasonable, and I will follow his analysis in this paper.

On the other hand, *bí* has verbal characteristics, and I will treat it as a verb. I ignore the exact status of *bí* in this paper, as much of it is orthogonal to the question under discussion. See McCloskey and Sells (1988) for details.

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<sup>5</sup>*Bí* shows irregular form *níl* for present negative. The negative particle *ni* appears when *bí* has other tense, as *ni raibh mé ...* ‘I was not ...’ and *ni bheidh mé ...* ‘I will not be ...’.

<sup>6</sup>DEP means ‘dependant form’. There are five irregular verbs including *bí* which shows the distinction between dependent and independent. The distinction roughly corresponds with that of matrix/embedded.

### 5.1.3 Cleft Construction in Irish

Another important characteristic of the copula *is* is that it is employed to form the cleft construction:

- (76) a. Is é Seán Bán a<sup>L</sup> d'inis an scéal dom  
 COP [AGR] Seán Bán COMP tell.PAST the story to:me  
 ‘It was Seán Bán that told me the story.’ (McCloskey, 1979:91)
- b. Ní hé Pól a chuaigh ar scoil  
 NEG AGR Pól COMP go.PAST on school  
 ‘It was not Pól that went to school.’ (CB:125)

Prepositional phrases and adverbial phrases, like nominal phrases, may undergo clefting (data from CB:125):

- (77) Chuaigh Seán go Doire inné  
 go.PAST Seán to Derry yesterday  
 ‘Seán went to Derry yesterday.’
- a. Is é **Seán** a<sup>L</sup> chuaigh go Doire inné  
 COP AGR Seán COMP  
 ‘It was Seán that went to Derry yesterday.’
- b. Is **go Doire** a<sup>L</sup> chuaigh Seán inné  
 COP to Derry COMP  
 ‘It was to Derry that Seán went yesterday.’
- c. Nach **inné** a<sup>L</sup> Seán chuaigh go Doire?  
 COP.NEG.Q yesterday COMP  
 ‘Was it not yesterday that Seán went to Derry?’

McCloskey (1979) dubs this type of cleft, in which the copula *is* (or its variant) appears overtly, the **full cleft**, as opposed to **reduced clefts**, where the copula is not present:

- (78) a. Capall mór bán a<sup>L</sup> chonaic mé  
 horse big white COMP see.PAST I  
 ‘It was a big white horse that I saw.’ (McCloskey, 1979:90)
- b. Seán Bán a<sup>L</sup> d’inis an scéal dom  
 Seán Bán COMP tell.PAST the story to:me  
 ‘It was Seán Bán that told me the story.’ (McCloskey, 1979:90)

Both full clefts and reduced clefts may be formed with definite nominals, as in (76a) and (78b). However, indefinite nominals may appear only in reduced clefts, as in (78a), and they cannot be preceded by a copula. Compare the following sentence with (78a):

- (79) \*Is capall mór bán a<sup>L</sup> chonaic mé  
 COP horse big white COMP see.PAST I  
 ‘It was a big white horse that I saw.’ (McCloskey, 1979:91)

#### 5.1.4 The Irish Interrogative Construction

In this section, I briefly discuss the Irish interrogative construction. First, let us consider how yes/no questions are formed. They are formed with a clause-initial particle *an* (*ar* for past tense):

- (80) **Ar** shíúil sibh abhaile ansin?  
 Q.PAST walk.PAST you.textscpl home then  
 ‘Did you walk home then?’ (MO:18)

It is in complementary distribution with the copula *is*:

- (81) a. **Is** dochtúir é  
 COP doctor he  
 ‘He is a doctor.’

- b. **An**<sup>N</sup> dochtúir é?  
 Q doctor he  
 ‘Is he a doctor?’ (SMC1:17)

and with the complementizer *go*<sup>N</sup>:

- (82) a. **An**<sup>N</sup> mbuaileann sé a bhean?  
 Q beats he his wife  
 ‘Does he neat his wife?’
- b. **go**<sup>N</sup> mbuaileann sé a bhean  
 COMP beats he his wife  
 ‘that he beats his wife.’ (McCloskey, 1979:89)

From this it is concluded that the interrogative particle is in the complementizer position.

On the other hand, the formulation of *wh*-questions resembles the relative construction, as McCloskey (1979) notes. The interrogative particle never appears in *wh*-questions; instead, a relative particle is used:<sup>7</sup>

- (83) a. Cé a<sup>L</sup> dhíol an domhan?  
 who COMP sold the world  
 ‘Who sold the world.’
- b. an fear a<sup>L</sup> dhíol an domhan  
 the man COMP sold the world  
 ‘the man who sold the world.’ (McCloskey, 1979:52)

The *wh*-word must always be fronted, and it is ungrammatical to leave it in-situ with verbal predicates Carnie (1995):

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<sup>7</sup>Both the normal relative particle and the resumptive relative particle may be used to form *wh*-questions.

- (84) \*Bhuail Cathal cad?  
hit.textscpast Charles what  
'Charles hit what?' (Carnie, 1995:194)

Furthermore, it is also ungrammatical to have more than one wh-word in one clause:

- (85) \*Cé a<sup>L</sup> rinne caidé?  
who C did what  
'Who did what?' (McCloskey, 1979)

## 5.2 Theoretical Application

Having discussed the general characteristics of Irish syntax, I turn now to a theoretical account of it in this section.<sup>8</sup> First, I will show that Irish has the characteristics more common to VP-movement languages, applying the analysis made in Chapter 2. Subsequently, I will consider the structure of wh-questions. Specifically, I will show that McCloskey's (1979) analysis of wh-questions is not compatible with the current Minimalist Program, and I will propose an approach based on the wh-pseudo-cleft construction. Also, I will briefly explain why wh-in-situ is not allowed in Irish.

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<sup>8</sup>Much of the discussion in this section is based on Oda (2002). I would like to thank the audience for valuable help.

### 5.2.1 Irish as a VP-movement Language

In this section, I first examine the syntactic characteristics of Irish, applying the analysis presented in chapter 2 as the diagnostics, concluding that Irish behaves like a VP-movement language. In the latter part of the section, I will briefly discuss the syntactic mechanism required to achieve VSO order in Irish.

We may now consider where Irish fits into the picture, using the tests discussed in chapter 2. Recall that V-movement languages have rich and uniform subject-verb agreement morphology, but VP-movement languages do not. Irish verbal morphology is neither rich nor uniform, as shown in (86) below:

(86)	Present	Singular	<b>bris-im</b> I break	<b>bris-eann tú</b> you <sub>sg</sub> break	<b>bris-eann sé/sí</b> s/he breaks
		Plural	<b>bris-imid</b> we break	<b>bris-eann sibh</b> you <sub>pl</sub> break	<b>bris-eann siad</b> they break
	Past	Singular	<b>bhris mé</b> I broke	<b>bhris tú</b> you <sub>sg</sub> broke	<b>bhris sé/sí</b> s/he broke
		Plural	<b>bhris-eamar</b> we broke	<b>bhris sibh</b> you <sub>pl</sub> broke	<b>bhris siad</b> they broke

While Jaeggli and Safir (1989) claim that Irish verbal morphology is rich, the paradigm above reveals that it is not. Only first person singular and plural are uniquely marked by suffixing *-im* and *-imid* in the present tense verbal morphology. On the other hand, the distinction between second and third person is not made in Modern Irish, as *-(e)ann* marks both of them. Past

tense morphology shows even fewer contrasts, as only first person plural is morphologically marked. Thus, the verbal morphology does not explicitly mark  $\phi$ -features, unlike in Greek and Catalan as shown in chapter 2. Also, Irish has a peculiar morphological system; morphological agreement marking does not cooccur with an overt subject, as shown in (87):<sup>9</sup>

- (87) a. Táim            (\*mé) tuirseach.  
           be:PRES:1SG I        tired  
           ‘I am tired.’
- b. Tá            \*(mé) tuirseach.  
           be:PRES I        tired  
           ‘I am tired.’

This suggests that Irish verbal morphology has properties different from the typical subject-verb agreement morphology exhibited in many other languages, and thus it should not be treated in the same way.

Second, Irish does not allow free alternation between VSO and SVO order. SVO order is ungrammatical in a finite clause Doherty (1996:3). Consider (88):

- (88) a. D’fhág Máire a cóta ar an urlár.  
           leave:PAST Máire her coat on the floor  
           ‘Máire left her coat on the floor.’
- b. \*Máire d’fhág a cóta ar an urlár.  
           Máire leave:PAST her coat on the floor  
           ‘Máire left her coat on the floor.’

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<sup>9</sup>See Legate (1999) for a derivation of this morpho-syntactic pattern within a recent version of minimalist theory.

The minimal pair in (88) shows that free alternation is not available in Irish, and the language rigidly shows VSO order for the finite syntax. While Irish allows constituents to be fronted in the cleft construction (which requires an overt complementizer), clefting is not equivalent to the “free alternation” discussed by Alexiadou and Anagnostopoulou (1998, 1999). Thus, Irish lacks free SVO/VSO alternation completely.

Third, nominal predicates must appear clause-initially in Irish, as described in section (5.1.2). More examples of this are given in (89) below:

- (89) a. Is cúpla iad Niall agus Fíona agus . . .  
           COP twin AGR Niall and Fíona and  
           ‘Niall and Fíona are twins and . . .’ (MO 3)
- b. Deir sé [ gur banaltra Máire ].  
           Say:PRES he C nurse Máire  
           ‘He says that Máire is a nurse.’ (SMC2-103)

The fourth diagnostic is object pied-piping. Irish does not have a construction equivalent to the Niuean so-called Noun Incorporation reviewed in section 2.3.1. However, the predicative copular construction may be seen as an instance of object pied-piping. The predicate nominal does not have a case feature to check, as it is not an argument. Thus, it does not move to a higher Spec position for case-checking. As the whole predicate phrase moves to check the EPP feature [+Pred], the predicate nominal, which is contained in it, also moves. In this sense, we may consider object pied-piping and nominal predicate fronting as essentially the same operation. Again, there are no other instances of object pied-piping in verbal clauses in Irish. This may be

due to the case-marking system of Irish which is different from Niuean.

The table below in (90) gives a summary:

(90)

	V-movement Language	VP-movement Language	Irish
Rich & Uniform V Morphology	✓	no	no
VSO/SVO (Free) Alternation	✓	no	no
Nominal Predicate Fronting	no	✓	✓
Object Pied-piping	no	✓	???

Comparing what we observe in Irish and the diagnostics, we can now conclude that Irish may be viewed as a VP-movement language. Interestingly, Legate (1997) proposes an XP-movement analysis for Irish nominal predication, while retaining a V-movement approach for verbal predication. However, her analysis is thus forced to treat verbal and non-verbal predicates as entirely distinct from each other in the syntax. An analysis that treats them consistently is to be preferred. What I am claiming can thus be seen as an extension of Legate's approach.

### 5.2.2 Salient Unaccusatives:

#### Evidence for non-D oriented EPP

There is another piece of evidence for the VP-movement analysis of Irish syntax. The main claim of the analysis is that the predicate fronts due to an EPP requirement to check a [+PRED] feature. One of the predictions this analysis makes is that no 'grammatical subject' need appear in a clause if a subject is not semantically/lexically required. This sounds too striking to be

true at first, but **salient unaccusative** construction in Irish confirms the prediction.

Salient unaccusatives (McCloskey, 1996a) are one of the major anomalies observed in Irish. No grammatical subject is found in this construction, and a sole argument is realized as the object of a preposition. This contrasts with *putative* unaccusatives where the argument is realized directly in a clause without the mediation of a preposition. A comparison between salient and putative unaccusatives is provided in (91) below:

(91) (McCloskey, 1996b:251)

- a. Neartaigh [<sub>PP</sub> ar a ghlór ].  
strengthened on his voice  
'His voice strengthened.' (SALIENT UNACCUSATIVE)
- b. Neartaigh [<sub>DP</sub> a ghlór ].  
strengthened his voice  
'His voice strengthened.' (PUTATIVE UNACCUSATIVE)

McCloskey (1996b) claims that the prepositional argument does not raise to the 'grammatical subject' position, and that the preposition is not the realization of Case, but it is indeed a preposition. Below I review some of the arguments which McCloskey (1996b) makes.

It is a well-known fact of Irish syntax that the oblique argument does not front in an infinitival clause, unlike the normal argument (92). Thus, an infinitival clause has [S O V Obl] order.<sup>10</sup> This generalization holds for

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<sup>10</sup>Note that there is a dialectal variation about this construction (Noonan, 1994). Some dialects do not front an object if a phonologically overt subject is present in the non-finite

salient unaccusatives. Thus, as shown in 93, prepositional arguments (*as fhéithleoga* ‘out of sinews’ and *air* ‘on him’ in (93)) cannot precede their verbs:

- (92) Dúirt sé Seán [*an teach* a thógáil].  
 Say:PAST he Seán the house build:VN.  
 ‘He told Seán to build the house.’ (CB 148)
- (93) a. Braithim [*SC* ag teach **as fhéithleoga**].  
 I-feel come.PROG out-of sinews  
 ‘I feel sinews stretching.’
- b. I ndiaidh [*INFIN* fealladh **air** fiche uair].  
 After fail[VN] on.him twenty time  
 ‘after he had failed twenty times.’ (McCloskey, 1996b:246)

If *as fhéithleoga* and ‘out of sinews’ *air* ‘on him’ in (93) are subjects, then they should appear to the left of the verb.

Another argument is that the oblique argument does not raise to the “subject” position of the matrix clause. The examples in (94) are progressive sentences based on the sentence (91a):

- (94) a. Bhí ag neartú **ar an nglór**.  
 was strengthen:PROG on the noise  
 ‘The noise was getting louder.’
- b. \* Bhí ar an nglór ag neartú.  
 (McCloskey, 1996b)

---

construction.

The ungrammatical example (94b) shows that it is ungrammatical to bring the prepositional argument of a salient unaccusative to the subject position of the matrix clause. This contrasts with a sentence with a non-prepositional argument, shown in (95):

- (95) Bhí sí ag cur an airgid sa bhosca.  
 was she put:PROG the money:GEN in.the box  
 ‘She was putting the money in the box.’ (SMC2 67)

The question of why this kind of phenomenon occurs in Irish is now easy to answer, once we assume the VP-movement analysis of Irish predication. Since we now assume that Irish takes [+PRED], but not [ $\phi$ ], as the EPP feature, this phenomenon is expected. Simply, there is no grammatical subject in the salient unaccusative construction, as there is need for an Irish sentence to have a grammatical subject.

### 5.2.3 Two Possibilities of EPP

Before moving on to the issue of wh-cleft, let us consider briefly the nature of EPP. Various claims have been made to account for anomalies in Irish syntax, such as the salient unaccusative construction discussed in the previous section, and many of them concern EPP properties. I summarize some of the predominant analyses in (96):

## (96) WHAT IS EPP IN IRISH?

	EPP = ?	Status of EPP in Irish
Carnie (1995)	([+D] or [+ $\phi$ ])	Inactive
McCloskey (1996b)	([+D] or [+ $\phi$ ])	Inactive
Legate (1997)	[CASE]	Checked at Spec-AgrS (below TP)
A&A (1998,1999)	[+D]	Stipulated in $V^0$ and head-movement

Notice that there are several different interpretations of EPP features available. An assumption common to many of these approaches is that EPP is *inert* in Irish. Crucially this abandons the uniformity of EPP as a principle, which ideally should apply universally, as suggested by Chomsky (1995).

## (97) EXTENDED PROJECTION PRINCIPLE (Chomsky, 1995:55)

*Extended Projection Principle* (EPP) states that [Spec, IP] is obligatory, perhaps as a morphological property of I or by virtue of the predicational character of VP.

While Chomsky himself focuses on the nominal “subject” of Spec-IP, it is not stated that EPP is specifically about the subject, but rather about the *predication*. Therefore, according to Chomsky (1995), the issues of EPP are not necessarily related to discussions of [ $\phi$ ] features, despite the fact that many analyses regarding EPP in general subsume [ $\phi$ ] and its related phenomena. Now we have two opposing general views concerning the EPP.

One is that the EPP is a subject requirement for a given language. Under this definition of EPP, the EPP feature is restricted to [ $\phi$ ] (or any nominal-related) feature, and [+PRED] is not an available option. Languages such as English and V-movement languages discussed in section 2.2, including Greek

and Catalan, have no trouble with this version of the EPP, as it is clear that these languages use  $[\phi]$  feature as the predicational requirement. It is, on the other hand, problematic when it comes to languages like Irish. As described in the previous section, constructions like the salient unaccusatives indicate that the postulation of a  $[\phi]$ -related EPP is not adequate for Irish syntax. Under this assumption, it is inevitable to claim that the EPP does not exist in Irish, as Carnie (1995) and McCloskey (1996a) do.

Now let us consider the other view of the EPP, a weaker version which is described by Chomsky (1995). Under this view, the EPP is a clausal requirement for a given language, and is not restricted to the subject properties. If this idea is extended, then the EPP feature to be checked at Spec-IP is parameterized and could be other than  $[\phi]$ . For now let us be restrictive by supposing that the parameter is either  $[\phi]$  (i.e., nominal argument feature) or  $[+\text{PRED}]$ , as these are often regarded as the most fundamental notions of predication relation. If this approach is pursued, as examined in this paper, Irish takes  $[+\text{PRED}]$  as the EPP feature to be checked at Spec-IP.<sup>11</sup>

#### (98) THE TWO POSSIBILITIES

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<sup>11</sup>I further speculate that the EPP, hence the predication relation, may be boiled down to semantic types. Thus, when an item  $\alpha_{\langle e \rangle}$  and  $\beta_{\langle e, t \rangle}$  merge,  $\beta_{\langle e, t \rangle}$  is considered as the predicate inevitably. However, this does not guarantee that any item of type  $\langle e, t \rangle$  acts as the predicate. It would be considered as the subject when it merges with another item  $\gamma_{\langle \langle e, t \rangle, t \rangle}$ . An analysis along these lines may provide a new account for some cases where  $[+\text{D}]$  is insufficient, such as locative subjects. Although it is definitely worth trying, such an analysis would constitute another paper.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• EPP = Subject Requirement for a given language           <ul style="list-style-type: none"> <li>- EPP is active/present (English, Greek, etc.)</li> <li>- EPP is inert/absent</li> </ul> </li> </ul> <p style="margin-left: 40px;">→ <b>Irish does not have EPP</b></p> | <ul style="list-style-type: none"> <li>• EPP = Clausal Requirement for a given language           <ul style="list-style-type: none"> <li>- EPP is [<math>\phi</math>/D] (English, ...)</li> <li>- EPP is [+PRED] (Niuean)</li> </ul> </li> </ul> <p style="margin-left: 40px;">→ <b>Irish requires [+Pred].</b></p> |
|--|---|

Technically speaking, it is possible to account for various phenomena in Irish syntax an inert EPP. Nonetheless, as we have seen, the evidence indicates that the [+PRED] analysis of Irish predication is strongly preferred to the inert EPP analysis.

Firstly, the analysis with the feature [+PRED] enables universal EPP. EPP is a principle of predication, which should be universally applicable. If we assume that the EPP is a subject requirement, then it is unavoidable to lose this universality when it comes to Irish. On the other hand, taking EPP as a clausal requirement may make it impossible to achieve a unified analysis of the EPP feature, but it allows us to keep the universality of the principle as a whole. Also, if we assume that a language can lack the EPP requirement, it implies that such language lacks the notion of predication, and virtually anything can be interpreted as a legitimate clause. Such a claim seems (at least to me) to be untenable.

Secondly, if we were to assume that EPP is strictly a subject requirement, then we need one more stipulation regarding which language permits XP-adjunction to  $X^0$  (i.e., the analysis of nominal fronting by Carnie (1995)). While the analysis proposed by Carnie is generally correct and on the right

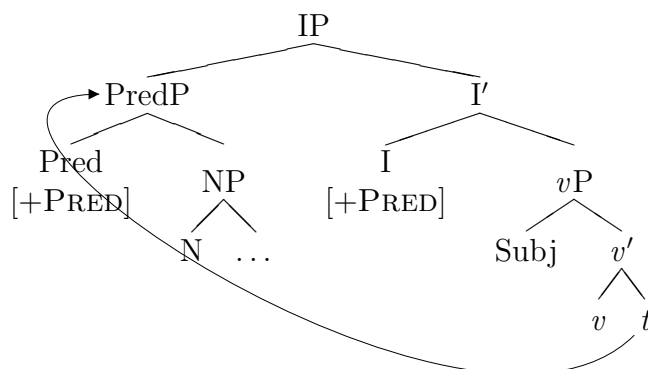
track, it cannot provide any typological prediction as to which language permits this operation. If we assume  $[_{EPP} +PRED]$ , on the other hand, then we can now unify these two separate phenomena as one while incorporating most of the observations made by Carnie (1995).

### 5.2.4 Mechanisms

Let us now consider how the surface order of VSO in Irish is derived under the VP-movement analysis. The basic analysis is identical to the analysis by Massam (2000, 2001), which was roughly described in section 2.3.

The tree in (99) shows the structure of nominal predication:

(99) Nominal Predicate



Here, I assume the projection PredP in nominal predicate constructions for conventional reasons, and it should not distort the overall analysis. Notice that this analysis can account for cases like the following, where the predicate has phrase-like appearance as a natural consequence of the predicate movement:

- (100) Is [<sub>Pred</sub> amhrán a<sup>L</sup> bhuailfidh an píobaire ] “Yellow Submarine”  
 C [ song C be:FUT the piper ] “Yellow Submarine”  
 ‘Yellow Submarine is a song which the bagpiper is going to play.’  
 (from Carnie, 1995:181)

To account for the similar fact, Carnie (1995) claims that “the ‘phrasal’ status of a phrase marker is determined not inherently, but rather is a function of its behavior” (p. 184), following the notion of Bare Phrase Structure by Chomsky (1994). Essentially, Carnie’s claim allows adjunction of  $X^{max}$  to  $X^0$ , and thus the whole nominal predicate “phrase” undergoes head-movement, just like a typical verb. It is theoretically possible, but such claim seems to be permissive, given that the instances where this analysis may apply are extremely limited. Also, this analysis does not provide any answer to why. Why does Irish undergo such construction whereas, say, (some dialects of) Arabic do not employ the same strategy? What is the trigger of such a process? To answer such questions, the analysis which relies on adjunction requires arbitrary stipulations. On the other hand, the VP-movement analysis allows us to account for the data without any further stipulations and at the same time account for the fact that there are VSO languages which front nominal predicates and those which do not.

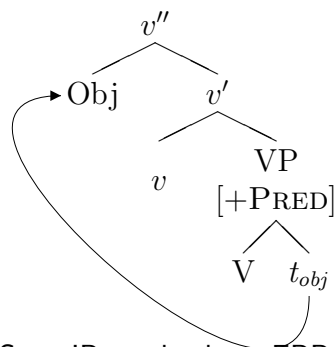
Now let us move on to the analysis of the verbal clause. Since one of the tenets of the VP-movement analysis is to treat verbal predicate and nominal predicate uniformly, the basic syntactic operation is similar to that with nominal predicate explained in the previous paragraph. That is, VP (or a constituent equivalent to “predicate”) moves to Spec-IP due to the EPP

feature [+PRED]. If the verb is transitive, the object needs to move out of the VP-internal position to check its case prior to VP-movement; otherwise the derivation crashes because of the unchecked Case feature of the object.

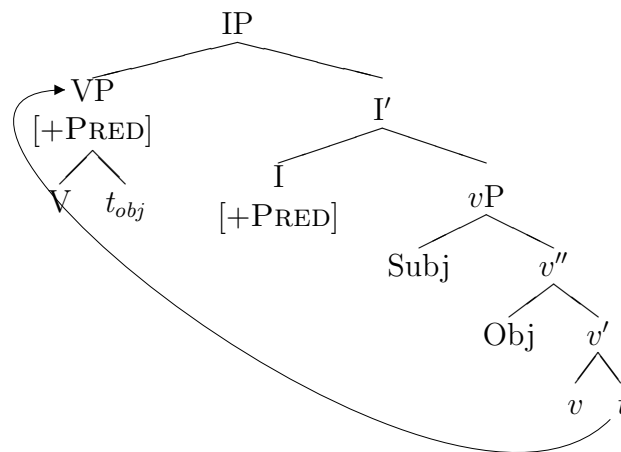
The derivation is schematized in (101):

(101) Verbal Clause

1. The object, if there is one, moves out of VP to check Case



2. VP moves to Spec-IP to check an EPP feature [+PRED]



Following Legate (1997) and Massam (2000), reconstruction of the predicate is assumed, and thus no modification of c-commanding or the Binding Theory is required.

One complication is brought about when the equative construction is considered. Recall that the nominal inside the predicate does not front in the equative construction in Irish, unlike in the predicative construction. Another illustration of this point is given in (102) below:

- (102) Deir sé gurb é [subject an tAthair Seán] [object an sagart  
 say:PRES he C AGR [ the Father Seán] [ the priest  
 paróiste].  
 parish:GEN]  
 ‘He says that the Father Seán is the parish priest.’ (SMC2 104)

In case of the equative construction, the constituent which is seemingly a predicate does not front, unlike the predicative construction (see (100)). Following Carnie (1995), I consider that there is an abstract verb meaning to *equals* in the equative construction. The object therefore moves out of VP for case-checking just as in a verbal clause, and thus it is not available for pied-piping by the time the entire predicate moves to Spec-IP.<sup>12</sup>

### 5.3 Wh-questions in a VP-movement analysis

In this section, I reexamine wh-question formation in Irish in light of VP-movement analysis. The Irish wh-question construction presents apparent problems for the typology given by Cheng (1997), and I will provide an

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<sup>12</sup>Another possible solution is that the “object” in an equative is referential and thus requires case, whereas predicative nominals do not.

account of this in this section.

### 5.3.1 The Issue

Recall that, according to the **Clause Typing Hypothesis** of Cheng (1997), an overt [+Q] particle and wh-movement do not coincide in a language. Irish does not follow this prediction straightforwardly. As mentioned in section (5.1.4), Irish uses a [+Q] particle *an* (or its variant, depending on other circumstances) when yes/no questions are formed. More illustrations of this are given in (103):

- (103) Yes/No questions
- a. *An bhfaca tú An Túr Eiffel?*  
 C[+Q] see:PAST:DEP you the Tower Eiffel  
 ‘Did you see the Eiffel Tower?’ (MO 145)
  - b. *Ar shiúil sibh abhaile ansin?*  
 C:PAST[+Q] walk you:PL home then  
 ‘Did you walk home then?’ (MO 19)

According to Cheng (1997), the existence of a yes/no question particle in a language entails the existence of wh-particle, even though it may not appear overtly. Thus, this entails that Irish has wh-particle marking and thus it should not have obligatory fronting of wh-elements. However, this prediction does not hold since Irish has obligatory wh-fronting. More examples of wh-questions are given in (104):

(104) Wh-questions

- a. *Céard a rinne Éamonn?*  
 what COMP do:PAST:DEP Éamonn  
 ‘What did Éamonn do?’ (MO 20)
- b. *Cé a scríobh an dráma seo?*  
 who COMP write:PAST the drama this  
 ‘Who wrote this drama?’ (MO 63)

If we assume that Cheng (1997) is fundamentally correct, the fronting of the wh-element cannot be an instance of canonical A'-movement to Spec-CP. This seems to be on the right track, as the wh-construction resembles the cleft construction in Irish (Recall the discussion in section 5.1.4. Also see McCloskey (1979)). Nonetheless, the possibility of Irish being an *Optional Fronting Language* described in chapter 3 is ruled out, since it is ungrammatical to have wh-word in-situ (shown in (84)).<sup>13</sup>

### 5.3.2 Analysis of Irish Wh-construction

There are (at least) two possible analyses to account for the phenomena observed above without rejecting the Clause Typing Hypothesis. One is what I call the **relative clause analysis** which is an extension of the analysis provided by McCloskey (1979). This analysis is examined first below. Subsequently, I will describe another possibility, the **predicate analysis**. I will

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<sup>13</sup>McCloskey (p.c.) acknowledges that there are a few cases where wh-in-situ is judged grammatical by his informants. However, this needs further investigation, as it may be due to a superstratum effect.

show that the relative clause analysis faces some difficulties within the current Minimalist Program, and that the predicate analysis, which is consistent with the VP-movement analysis of Irish predication, is to be preferred.

### Relative Clause Analysis

McCloskey (1979) provides an analysis of Irish wh-questions based on the similarity between wh-questions and clefts:

- (105) a. Cén fear<sub>i</sub> a<sup>N</sup> bhfaigheann tú an t-airgead uaidh<sub>i</sub>?  
 which man C get:PRES you the money from.him  
 ‘Which man do you get the money from (him)?’
- b. an fear<sub>i</sub> a<sup>N</sup> bhfaigheann tú an t-airgead uaidh<sub>i</sub>?  
 the man  
 ‘The man from whom you get the money’ (McCloskey, 1979:52)

Both sentences in (105) have a complementizer  $a^N$ , and both the wh nominal phrase *cén fear* ‘which man’ (105a) and the relativized nominal phrase *an fear* ‘the man’ precede the complementizer.

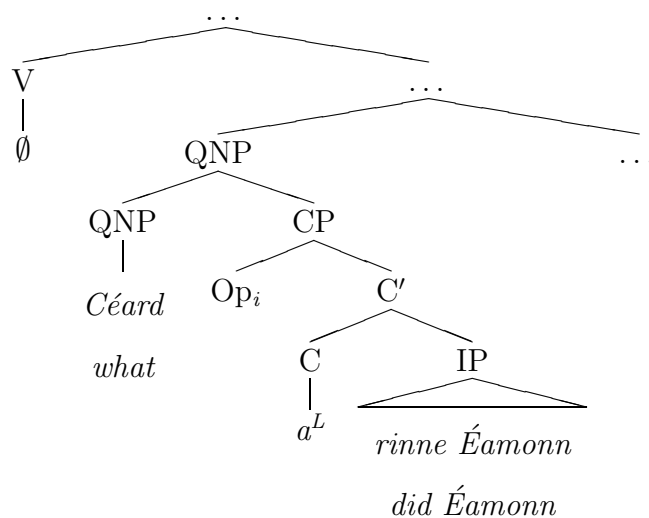
In spite of similarity of those two constructions, there is one significant difference between them. That is, unlike the relative clause example (105b) where the DP *an fear* ‘the man’ heads the relative clause, the clause in (105a), headed by the question DP *cén fear* ‘which man’, does not have a nominal reading, but rather has a sentential reading. To achieve this in an earlier version of generative grammar, McCloskey (1979) proposes a Phrase Structure rule  $Q \rightarrow QNP \bar{S}$ . However, if we were to adopt the relative construction for the analysis of Irish wh-construction along with the current

theories of syntax which do not allow any extra Phrase Structure rules to ensure a sentential interpretation in this particular case, then the relative clause analysis of wh-construction predicts that the wh-clause in Irish should have a nominal reading, as shown in (106b):

- (106) a.  $DP$   $D$  [  $NP$  [ $CP$   $Op_i$  [  $C$  [ $IP$  ...  $t_i$  ... ]]]] (Relative Clause)  
 b. [  $NP$   $NP_{[+Q]}$  [ $CP$   $Op_i$  [  $C$  [ $IP$  ...  $t_i$  ... ]]]] (Wh-clause)

Certainly, this is an unwanted result. The problem may be mitigated by postulating a verb which is phonologically and semantically null. This yields a structure like one shown in (107):

(107)



This assumption of an expletive verb achieves the desired result in regard to the Irish wh-construction. Furthermore, these may seem to be external evidence for such a claim. As McCloskey (p.c.) points out, cleft constructions

with an indefinite head may have a *presentational* reading (often used as an opening of a story). A similar reading may be applicable to wh-questions, since wh-words are generally considered to be indefinite (Cheng, 1997). However, such an assumption leads us to conclude that most, if not all, indefinite nominal expressions in Irish should be interpretable as full sentences. Also, it is necessary to give strong independent evidence in order to introduce an abstract element such as this one, or the theory relying on such an element will lack falsifiability. Thus, if there is an alternative analysis which could equally achieve the same result with less arbitrariness and/or abstractness, it should be preferred. Thus, I will conclude, after considering the predicate analysis, that the relative analysis should be rejected.

### **Predicate Analysis**

Now let us turn to the other possibility, the predicate analysis. That is, Irish wh-construction can be analyzed in the way the optional fronting languages are analyzed. What is different is that the optionality has been eliminated in Irish. Thus, this analysis is an application of the analysis provided in chapter 2 and 3, and its main claim, as the name suggests, is that the wh-element appears in the predicate of the wh-interrogative construction, as shown in (108). Such an analysis is a natural consequence of the predication structure driven by the feature [+PRED] which is pursued in chapter 2. Thus, the overall structure resembles the pseudo-cleft construction in Malagasy discussed by Paul (2001). An example from Malagasy is repeated in (109a):

- (108) [<sub>predicate</sub> WH ] [<sub>subject</sub> COMP ... ]
- (109) a. [<sub>predicate</sub> I Sahondra] [<sub>subject</sub> no nanapaka ity hazo ity].  
           Sahondra                  DET PST.AT.cut this tree this  
           (lit.) ‘The one who cut this tree was Sahondra.’ (Paul, 2001:711)
- b. Cad a chonaic siad ón mbarr?  
           what C see:PAST they from.the summit  
           ‘What did they see from the summit?’ (MO 20)

Following Paul’s analysis, I assume that that the predicational subject (i.e., the constituent consisting of the clause an item is clefted from) of the pseudo-cleft construction is a headless relative, and thus there is a phonologically covert determiner preceding  $a^L$ . The wh-interrogative structures as in (109b) should therefore look like the following:

- (110) [<sub>predicate</sub> Cad ] [<sub>subject</sub>  $\emptyset$   $a^L$  chonaic siad ón mbarr ].  
           what                  DET C saw them from.the summit  
           ‘What did they see from the summit?’  
           → ‘That which they saw from the summit is what?’

Like Paul’s analysis, this account suffers from the fact that the phrase headed by the complementizer  $a^L$  does not behave like a DP in other constructions. Nonetheless, it is clear that the DP-hood is somehow licensed under a copular structure. For instance, consider (111). The predicational subject  $a^L$  *shíl mé  $a^L$  dhéanfadh sé* ‘What I thought he would do’ in (111) clearly lacks an overt element equivalent to English headless relative wh-element *what*. Note that the structure in (111) is a type of equative construction, and hence there is no fronting of *imeacht go Meiriceá* ‘to go to America’.

- (111) Is é <sub>[subj]</sub> a<sup>L</sup> shíl mé a<sup>L</sup> dhéanfadh sé [ imeacht go  
 COP [AGR] C thought I C would-do he to.go to  
 Meiriceá ].  
 America  
 ‘What I thought he would do was to go to America.’ (McCloskey,  
 1979:154(15a))<sup>14</sup>

There is one significant difference from Paul’s analysis of pseudo-clefts which needs some explanation. Recall that the Irish equative construction does not front the nominal phrase in the predicate, and I attributed this to checking of object case. If the same logic applies to wh-questions in Irish, then we would expect a wh-word not to appear in the clause-initial position. Thus, the data suggest that wh-questions are a variant of the predicative construction. Although this seems to be an apparent problem for the wh-pseudo-cleft analysis, this seems to be correct. Recall that Cheng (1997) claims that wh-words are indefinite. Let us assume that this holds in Irish as well, and if we assume further that Irish wh-words do not carry any case feature to check, then the construction should rather look like the predicative construction.

Another remark of this assumption is that it accounts for the similarity between the relative construction and the wh-interrogative observed by McCloskey (1979). It follows that they should be similar, since a headless relative clause is a subtype of relative clause.

Finally, the combination of the wh-construction and the copular construction, given in (112), show that the wh-element is in the predicate position:

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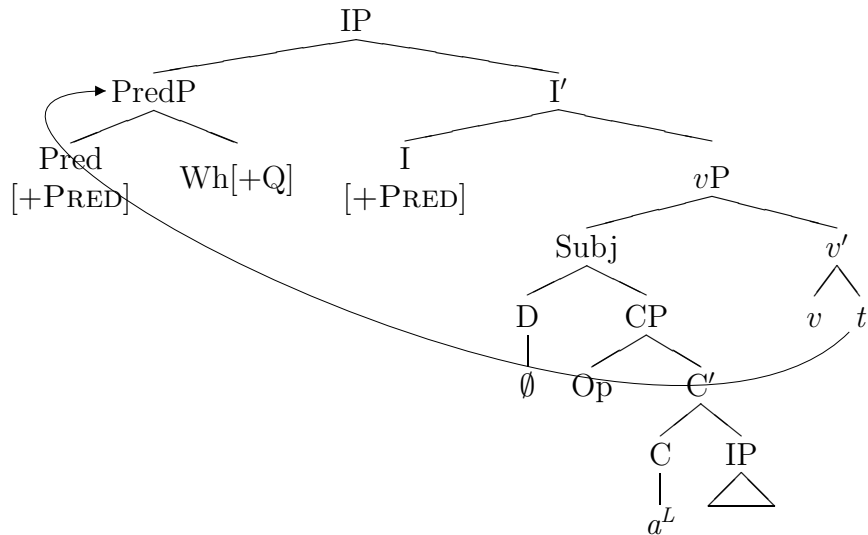
<sup>14</sup>Note that the verb *imeacht* has a verbal noun form, although it is originally glossed as if it is infinitival.

- (112) a. Cé hé an bainsteoir?  
 who [AGR] the manager?  
 ‘Who is the manager?’ (Stenson, 1981:105)
- b. Cé hé an duine is oige sa chlann?  
 who [AGR] person youngest in.the house  
 ‘Who is the youngest person in the house?’ (MO 3)

Notice that in the sentences in (112), there is no complementizer observed. While it is not possible to have a *wh*-word in-situ in any other contexts, it is grammatical to have one only in this context. If we were to take an *A'*-movement approach for *wh*-fronting, we would expect to find a complementizer following the *wh*-elements. Now we may safely say that *wh*-elements in Irish stay in predicate position, concluding that the predicate analysis is a more appropriate approach.

Now the question is: How does this analysis fit with the VP-movement analysis? The VP-movement analysis can accommodate this treatment of *wh*-question quite smoothly, without additional stipulations. It is fundamentally identical to the nominal predicate construction discussed in (99):

(113) Wh-interrogative = Nominal Predicate



In this analysis of Irish wh-question, the wh-elements appear clause initially as a consequence of the predicational requirement, and the movement has nothing to do with the checking of a [+Q] feature.

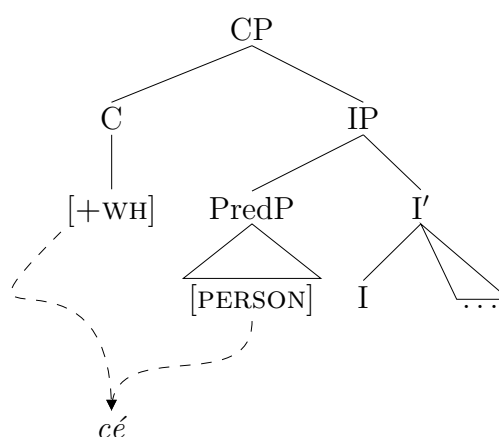
### Obligatory “Optional” Fronting

Unfortunately, this is not the end of the story. It is necessary to explain why it is ungrammatical to have a wh-word in-situ. That is, why the wh-pseudo-cleft construction is the only way to form wh-question in Irish. Also, it is necessary to consider why it suddenly becomes grammatical to have a wh-word in-situ *only* when a wh-word is in the predicate position of predicative copular construction, as shown in (112) above.

To account for this, I propose that all Irish wh-words are essentially portmanteaux which are phoneticized as single words, but carry a syntac-

tic structure composed of wh-words per se and a wh-particle which provides the interrogative force to a clause. We may assume Distributed Morphology (in the way Cowper and Hall (2002) do for the realization of nominal features) for the mechanism of morpho-phonological realization of wh-words. Thus, a wh-word, *cé* ‘who’ structurally looks like this:

(114)



Therefore, wh-words in Irish always have to be in the C-SpecIP complex. Of course, A'-movement of a wh-word is not available in the language, due to Clause Typing Hypothesis, and thus, only the way to solve the apparent problem is to rely on the pseudo-cleft construction. Therefore, keeping a wh-word in situ in a verbal clause (or in an equative clause) causes ungrammaticality due to an unchecked feature [+WH]. On the other hand, in the predicative construction, a wh-word is already in the right position; therefore, clefting is unnecessary.

Furthermore, this analysis explains why Irish does not allow multiple wh-questions, as illustrated in (85), in the same fashion. Thus, although one

wh-word in the predicate position types the illocutionary force of a clause, the in-situ wh-word also has an unchecked [+WH] feature.

Also, this analysis explains on why the yes/no question particle *an* or its variant do not cooccur with wh-words. If *an* and a wh-word coincide in a single clause, then a [+WH] feature of either word would be left uninterpreted.

There is one more consequence to this analysis: Wh-words in Irish are unambiguous, unlike Chinese or Japanese wh-words which receives appropriate interpretation from their binder. Since Irish wh-words are always associated with a [+WH] feature, other interpretations should not be available.

Thus, we have come to generalize a number of superficially different phenomena by positing a lexical accident which happened to occur in Irish.

### **A Residual Issue**

Unfortunately, the predicate analysis of Irish wh-construction is not perfect; it fails to capture one crucial aspect. Recall that we have established that optional fronting is in fact a wh-pseudo-cleft, and it is associated with particular semantic interpretations such as the existential presupposition and the exhaustivity effect. The line of analysis pursued here entails that Irish wh-questions should always show these effects, and in fact, it should be impossible to form a wh-question without evoking these effect. This is not a felicitous result; wh-questions in Irish do not necessarily show these interpretive effects. I leave this issue unresolved for now.

## 5.4 Conclusion

This chapter investigated a new approach to Irish syntax, by applying the typology of VSO languages provided in chapter 2. A closer look indicates that Irish shows characteristics which are shared among VP-movement languages.

Subsequently, I looked at the *wh*-interrogative construction in Irish. I observe that McCloskey (1979)'s analysis does not fit in context of the current syntactic theory. The observation and analysis suggest that the *wh*-element in Irish stays in predicate position, rather than in any specifier position in the C-system. This analysis is still compatible with the observations made by McCloskey (1979) as we assume the headless relative construction for the subject clause. This observation can be incorporated into the theory of syntax quite nicely, if we assume that Irish is a VP-movement language.

# Chapter 6

## Conclusion

In this paper, I have considered the syntactic property of VSO languages from a broader point of view and tried to account for the characteristics observed in the *wh*-interrogative construction. More specifically, I have claimed that VSO surface order may result from two different syntactic mechanisms, V-movement with self-contained EPP checking and VP-movement, and I further proposed that it is VP-movement languages whose *wh*-questions strikingly resemble the cleft construction.

The proposal made in this paper intersects with Cheng's (1997) Clause Typing Hypothesis and the analysis of languages in which *wh*-words optionally front, in that she claims that optional fronting of *wh*-word is actually a case of clefting. Assuming her fundamental assumption is correct, I proposed a modification that the *wh*-cleft is in fact an instance of the pseudo-cleft construction, and is driven by the predication requirement of VP-movement languages.

It was then necessary to establish what kinds of distinct properties clefts may have. Rooth (1996) and É. Kiss (1998) reveal that the notion of “focus” is not an essential property of the cleft construction. Under É. Kiss’s analysis, the cleft construction provides identificational focus. Among the characteristics of identificational focus is an existential presupposition and exhaustivity effect. Also, under her analysis, a syntactic projection of FP is motivated to denote such semantic readings. I then reviewed Paul (2001) to discuss the application of É. Kiss’s analysis to the pseudo-cleft construction. She observes that the same effects are observed in the pseudo-cleft construction in Malagasy. However, she also reveals that pseudo-clefts do not have to have an extra projection to achieve the semantic considerations, as a headless relative provides an existential presupposition and the equative construction provides exhaustivity. I showed that similar properties are observed with wh-pseudo-cleft, and conclude that the analysis of clefts strengthens the initial assumption of wh-pseudo-cleft.

In chapter 5, I attempted to apply the analysis developed in the preceding chapters to the wh-construction in Irish.

I began by observing the properties of Irish, using the properties discussed in chapter 2 as diagnostics, and showed that it is a VP-movement language, contrary to what has previously assumed. This analysis is also independently supported by both empirical and theoretical evidence. Irish has a peculiar construction called salient unaccusative (McCloskey, 1996b) where the grammatical subject does not surface. This may be accounted for in two ways. One is to claim VP-movement, thus the language selects [+PRED] as an

EPP requirement. It is also possible to achieve a similar effect by assuming that there is no EPP requirement in the language. However, I rejected the latter account, as it is not theoretically preferred, as such an analysis cannot maintain the universal model of predication proposed by Chomsky (1995).

Then, I considered Irish *wh*-questions in turn in light of the VP-movement analysis. Essentially, the *wh*-pseudo-cleft analysis is applied to the case of Irish as well, but the language also has another peculiarity, in that *wh*-pseudo-cleft is not optional. I account for this obligatoriness as an instance of lexical accident in Irish, as *wh*-words carry the [+WH] feature to be interpreted at head C, and placing such items anywhere else would leave the feature uninterpretable.

The issues of VSO languages are not exhausted, and there are many unexplored issues after decades of study in generative grammar. Also, there has been little attempt to come to an analysis by looking at the forest rather than at individual trees in it.<sup>1</sup> I hope this paper, and further research in the field of VSO syntax, leads us to a fruitful success.

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<sup>1</sup>I ignore the question whether I was successful or not.

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**The sources of the data:**

- CB = Christian Brothers (1999)  
MO = Ó Fionnmhacáin (2000)  
OD = Foclóir Gaelilge-Béarla (Irish-English Dictionary)  
by Niall Ó Dónaill, An Gúm, Dublin  
SMC1 = Course book for introductory Irish, Celtic Studies,  
St. Michael's College, U of Toronto  
SMC2 = Course book for intermediate Irish, Celtic Studies,  
St. Michael's College, U of Toronto