A Diachronic and Synchronic Study of *There*-Constructions: A Minimalist Approach

(There構文の通時的・共時的研究 ― ミニマリストアプローチ ―)

Yuka Makita

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A Diachronic and Synchronic Study of *There*-Constructions: A Minimalist Approach

by

Yuka Makita

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Abstract

There-constructions have received a considerable attention in the literature, and various kinds of study have been put forth about syntactic and semantic status of *there* in accordance with the development of syntactic theory. It is widely assumed in the theory of generative grammar that *there* is a syntactic subject devoid of inherent semantic content and merely serves to satisfy the *Extended Projection Principle*, the requirement that all clauses must have a subject. However, is *there* a pure expletive at all? This thesis addresses *there*-constructions from comparative and diachronic points of view, and explores this long-standing question. Cross-linguistic and diachronic investigations of *there*-constructions I will make in this thesis reveal that there are two types of *there* in English and that they participate in interpretation of the constructions. It will be specifically argued that *there* in *there+be* constructions has not been a pure expletive in the history of English; rather, it should be well analyzed as an existential operator. In presentational *there*-constructions, on the other hand, it functioned as a discourse sequencing linking word in early stages of English but was reanalyzed

as an expletive element in the course of early Modern English.

This thesis consists of two components: a comparative study and a diachronic study of *there*-constructions. In both part (chapter 2), we will discuss the following three topics: (i) the acceptability of transitive *there*-constructions among Germanic languages, (ii) the availability of overt subject raising in *there*-constructions, and (iii) the optionality of overt subject raising in *there*-constructions. I argue that '*there*'-insertion into [Spec, CP] enables overt subject movement in *there*-constructions. Furthermore, I will provide an account of the optional subject movement by arguing that lexical insertion into a non-θ-position (e.g. *there*-insertion) is equal to *Move/ Attract* in cost.

In a diachronic part (chapters 3 and 4), we will discuss the diachronic change of *there*. In chapter 3, I will first investigate the historical development of *there*-constructions, and argue that *there* in *there+be* constructions and that in presentational *there*-constructions were originally derived from the locative adverb *there* but underwent a totally different historical development.

In Chapter 4, I will discuss the historical development of transitive *there*-constructions and unaccusative and passive *there*-constructions involving overt subject raising, and demonstrate that the occurrence and the demise of these sentences give us a clue to understand the change of clause structures of presentational *there*-constructions during early Modern English. This chapter also presents a descriptive investigation of inversion constructions based on the Diachronic Part of the Helsinki Corpus, and shows that early Modern English was the transitional period where some constructions including *there*-constructions maintained the V2 structure.

Conclusion and a comment on further application of the proposed system will come in Chapter 5.

Abbreviations

Abbreviations below are used without reference to the full forms in the text.

Acc	accusative
D	D feature
Dat	dative
Gen	genitive
Inf	infinitive
Nom	nominative
Obj	object
Part	partitive
ϕ	phy-features
pl.	plural
Subj	subject
Vfn	finite verb

Chapter 1

INTRODUCTION

1.1. Is *There* a Pure Expletive?

Existential constructions (henceforth, ECs) like (1) have received a considerable attention in the literature, and various kinds of study have been put forth about syntactic and semantic status of *there* in accordance with the development of syntactic theory (Aissen (1975), Belletti (1988), Bolinger (1977), Breivik (1983), Chomsky (1993, 1995, 1998, 1999), Hannay (1985), Jenkins (1975), Lasnik (1992, 1995), Lumsden (1988), Milsark (1979), Safir (1985, 1987), inter alia).

(1) a. There were many copies of the book in the studio.

b. There were many houses burned by the fire.

c. There appeared a ship on the horizon.

d. There exists a solution to that problem.

(a-b. Moro (1997: 119), c-d. Levin and Rappaprot (1996: 121))

In the theory of generative grammar, *there* is alleged to be a syntactic subject devoid of inherent semantic content and merely serve to satisfy the *Extended Projection Principle* (EPP), the requirement that all clauses must have a subject. Being semantically empty, expletive elements are supposed to be wiped out from a representation to avoid the violation of the principle of *Full Interpretation* (FI). The FI requires that interface representations consist of only legitimate objects that can receive interpretations. For this reason, various syntactic operations has been proposed to remove *there* from a representation to ensure the interpretation of the constructions.

However, is *there* a pure expletive at all? Let us consider the following sentences for example.

(2) a. There appeared a ship on the horizon.

b. There exists a solution to that problem.

c. *There melted a lot of snow on the streets of Chicago.

(a-b. Levin and Rappaprot (1996: 121), c. Levin (1993: 90))

As is widely known, English ECs have a strict restriction on verbal selection; only the verbs of existence and the verbs of appearance are allowed in the

constructions. Therefore, sentences like (2c) with non-existential verbs are excluded because their meaning is incompatible with this characterization of the constructions. This phenomenon has been traditionally treated as one of the semantic properties of *there*-constructions. It is noteworthy, however, that a variety of verbs having nothing to do with existence or appearance are allowed in ECs in such languages as Icelandic, German and Faroese. For example, the counterpart of (2c) is fully acceptable in Icelandic, as shown in (3).

(3) *Icelandic*

Það bráðnaði mikið af snjó á götum Chicago.
There melted a lot of snow on the streets of Chicago

Maling and Zaenen (1990), Sigurðsson (1991) and Thráinsson (1979) argue that, in these languages, '*there*' functions as a dummy topic that is inserted into the sentence initial position to place a finite verb in the second position of the clauses (*Verb Second (V2) phenomenon*).[1] Given this, the grammaticality of (3) can readily be explained; *það* is required merely to obtain V2 word order and hence freely occurs with any class of verbs. Under this view, it is not clear at all why English ECs are subject to the semantic constraint on verbal selection as in (2). If *there* is a dummy element like Icelandic *það*, we will expect, contrary to fact, that nothing blocks *there*-insertion in (2c), as well as in the Icelandic counterpart (3). This distributional contrast between English *there* and Icelandic *það* might lead to the prediction that *there* is not an expletive element but has

some effects on the interpretation of ECs.

Bearing this possibility in mind, I will investigate *there*-constructions from comparative and diachronic points of view, and propose an elaborated analysis of *there*-constructions under the framework of the minimalist program initiated by Chomsky (1993, 1995) and developed by some other authors (Bošković (1997), Collins (1997), Lasnik (1992, 1995), Ura (2000), and the references cited therein). As we will see in subsequent chapters, cross-linguistic and diachronic investigations of ECs will reveal that there are two types of *there* in English. It will be specifically argued that *there* in *there+be* constructions has not been a pure expletive in the history of English; rather, it should be well analyzed as an existential operator. In presentational *there*-constructions, on the other hand, it functioned as a discourse sequencing linking word in early stages of English but was reanalyzed as an expletive element in the course of eModE.

1.2. Overview of Data

This thesis consists of two components: a comparative study and a diachronic study of ECs. In a comparative part (chapter 2), we will shed light on three types of ECs: transitive *there*-constructions, and unaccusative and passive *there*-constructions with a raised subject. '*There*'-constructions are attested in many languages, but the acceptability of these ECs varies among languages. Some examples are given in (4)-(9). (Henceforth, I will refer to these ECs as *Transitive Expletive Constructions* (TECs), *Unaccusative Expletive Constructions* (UECs) and

Passive Expletive Constructions (PECs), respectively, following the terminologies of Bobaljik and Jonas (1996), Jonas (1996), among others.) [2, 3]

Transitive Expletive Constructions (TECs)

(4) *Icelandic*

Það hafa margir jólasveinar borðað búðing.

there have many Christmas trolls eaten pudding

(Bobaljik and Jonas (1996: 209))

(5) *There has someone eaten an apple.

Unaccusative Expletive Constructions (UECs)

(6) *Icelandic*

a. Það hafa margiir menn komið hingað í dag.

there have many men come here today

b. Það hafa komið margiir menn hingað í dag.

there have come many men here today

(Koeneman and Neeleman (1998: 14))

(7) a. *There will many men come here today.

b. There will come many men here today.

Passive Expletive Constructions (PECs)

(8) *Icelandic*

a. Það hafa margir bílar verið seldir á þessu uppboði.
there have many cars been sold at this auction

b. *Það hafa verið margir bílar seldir á þessu uppboði.
there have been many cars sold at this auction

c. Það hafa verið seldir margir bílar á þessu uppboði.
there have been sold many cars at this auction

(Jonas (1996: 11-12))

(9) a. *There will some cookies be cooked for the party.

b. There will be some cookies cooked for the party.

c. *There will be cooked some cookies for the party.

The distribution of these ECs is summarized below.[4]

	TEC	Optional Subject Raising in UECs/PECs	V2	V-to-T	Object Shift
German	○	○	○	○	○
Icelandic	○	○	○	○	○
Yiddish	○	○	○	○	○
Faroese I	○	○	○	○	×
Faroese II	×	×	○	○	×
Danish	×	×	○	×	×
Swedish	×	×	○	×	×
English	×	×	×	×	×
French	×	×	×	○	×

Table1. The distribution of TECs and UECs/PECs with a raised subject

Table 1 obviously shows that the languages which allow TECs are those which allow overt subject raising in UECs and PECs, and vice versa. It should be further mentioned that UECs and PECs may have *in-situ* subjects, as in (6b) and (8c), which shows that overt subject movement involved in these ECs is applied optionally.

Based on these observations, we will investigate these three types of ECs from a comparative point of view in chapter 2. In particular, my major concerns are the following three issues.

(I) How does overt subject raising affect the acceptability of TECs?

(II) Why does the acceptability of TECs and ECs with a raised subject vary among languages?

(III) How should we account for the optionality of overt subject raising in UECs and PECs under the feature-checking theory?

I will make a close examination of the distribution of *there* and the subjects in ECs, and propose that (i) '*there*'-insertion into [Spec, CP] enables overt subject movement to [Spec, TP], and that (ii) overt subject movement out of vP is essential for convergence of TECs. In addition, I will provide an account of the issue (III) in terms of the cost of *Merge* and *Move/Attract*, more specifically, by hypothesizing that lexical insertion into a non-θ position is equal to *Move/Attract* in cost. Needless to say, this position is contrary to the opinion advocated by Chomsky (1993, 1995, 1998, 1999). The reconsideration of the cost of each syntactic operation will make a theoretical contribution to the recent feature-based minimalist program.

In a diachronic part (chapters 3 and 4), we will investigate TECs and ECs with a raised subject in the history of English. As we saw above, these constructions are all unacceptable in present-day English. The relevant examples are repeated here as (10)-(12).

(10) *There has someone eaten an apple.

(11) *There will many men come here today.

(12) *There will some cookies be cooked for the party.

It is noteworthy, however, that they were attested with some frequency during Middle English (ME) and early Modern English (eModE) (Breivik (1983), Ingham (2000), Jacobsson (1951), Jonas (1996), Kishida (1997), Kobayashi (1993), Tanaka (1999, 2000a, 2000b, 2000c), among others). Some examples are given in (13)-(15).[5]

TECs

(13) Ther may no man clepen it cowardye.

there may no man call it cowardice

(Chaucer *The Knight's Tale* 2730, Kobayashi (1993: 63))

UECs with a raised subject

(14) there shall no man dar appere in þe place.

there shall no man dare appear in the place (*Paston Letters* 204. 16)[6]

PECs with a raised subject

(15) there nys no thing doon for cause of yvel, ...

there is not nothing done for the sake of evil

(Chaucer *Boece* IV. Prosa 6. 171, Breivik (1983: 301))

An interesting fact to note here is that these three types of ECs disappeared during the same period. According to Breivik (1983), Jacobsson (1951) and Visser (1963), TECs were attested from the 14th to the 17th century.[7] As for UECs and PECs with a raised subject, they can be frequently observed during ME but had gradually declined from the 14th to the 17th century (see Jonas (1996), Tanaka (1999), among others). These facts pose two questions:

(I) Why were TECs and ECs with a raised subject permitted in the early stages of English?

(II) Why did these ECs demise in the course of eModE?

In order to answer these questions, we will first investigate the historical development of *there*-constructions in chapter 3, focusing on the syntactic status of *there*. The observation to be made in this chapter will lead us to conclude that (i) there are two types of *there* in English, *there* in *there+be* ECs and *there* in presentational ECs, and that (ii) they were in the same origin but underwent a totally different historical development. Based on this argument, we will explore the issues (I) and (II) in chapter 4. I will show that the historical development of these ECs give us a clue to understand the structural change of presentational ECs during eModE, and that the above two questions are straightforwardly accounted for under the analysis of ECs proposed in chapters 2 and 3.

Additionally, (10) above indicates that TECs are usually excluded in present-day English. The sentences in (11) show, however, that they are improved

when the subjects are postposed to the clause final position by Heavy NP Shift (HNPS).

(16) a. Suddenly there entered the hall an ugly old man.

b. There was slowly making its way toward us a figure in black.

c. There visited us last night a large group of people who traveled all the way from India.

(a. Levin (1993: 90), b. Bolinger (1977: 102), c. Chomsky (1995: 343))

A question which immediately arises here is:

(III) Why does the postposing of the subjects affect the acceptability of TECs in present-day English?

I will investigate this special type of TECs in section 4.4, and demonstrate that these examples give us a convinsing support for a close correlation between TECs and overt subject raising out of vP.

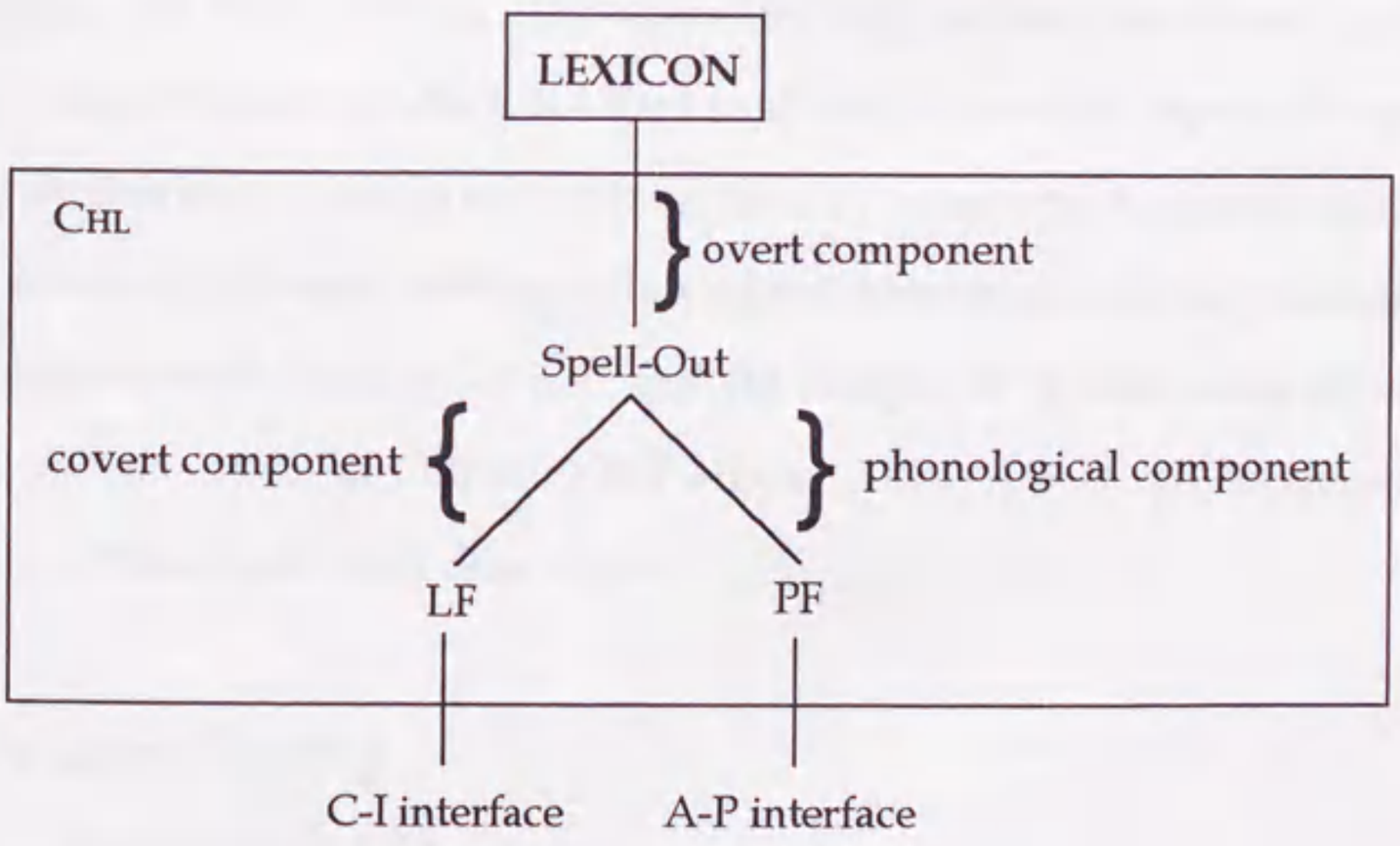
1.3. Theoretical Assumptions

1.3.1. Conceptual Backgrounds of the Minimalist Program

Throughout this thesis, I assume the minimalist program developed by Bošković (1997), Chomsky (1993, 1995), Collins (1997), Lasnik (1992, 1995), Ura (2000), among others. This section briefly outlines the theoretical assumptions which are relevant to discussion in subsequent chapters.

The minimalist program presupposes that a language consists of a lexicon and a computational system CHL for human language. The organization of the human language computation CHL is represented in (17).

(17)



The computational system CHL interacts with two performance systems, *articulatory-perceptual* (A-I) and *conceptual-intentional* (C-I) interfaces, through

two syntactic levels, *Phonological Form* (PF) and *Logical Form* (LF) (cf. Bobaljik (1995, 1999)). At some point in the computation to LF, an operation *Spell-Out* is applied, which strips away those elements relevant only to PF from the structure already formed. The pre-Spell-Out component is called *overt component*. The subsystem that derives PF is called *phonological component*, and the subsystem to LF is called *covert component*.

A first step in a derivation of sentences is to draw lexical items from the lexicon. Then, operations of CHL recursively construct syntactic objects with these items. We assume, essentially following Bošković (1997) and Collins (1997), that CHL involves three syntactic operations to form syntactic objects: *Copy*, *Merge* and *Move/Attract*. The operation *Copy* takes a constituent and produces its identical copy which is added to the set of syntactic objects. *Merge* takes a pair of syntactic objects and replaces them by a new object. *Move/Attract* yields a new syntactic object with the following two subcomponents: (a) selection of a already formed syntactic object, and (b) merger of it with some other syntactic object. Thus, as Collins (1997) argues, *Move/Attract* can be simply defined as a sequence of *Copy* plus *Merge*.

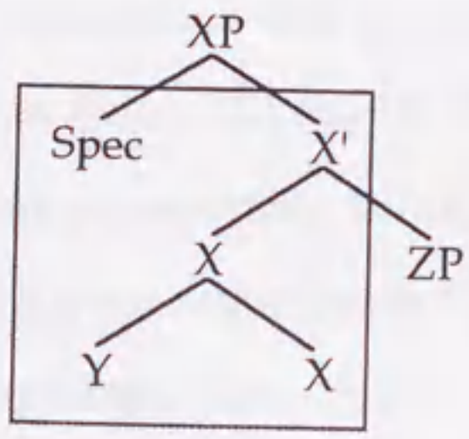
1.3.2. *Feature Checking*

1.3.2.1. Mechanism of Checking

Each lexical item has formal features (FFs), some of which are intrinsically encoded and the others are optionally assigned as an item is drawn from the lexicon. These FFs undergo feature checking in the course of C_{HL} to be formally

licensed. Essentially following Chomsky (1995), this thesis presupposes the following assumptions concerning feature checking.

1. Feature checking takes place only when two features of the same sort are in the checking domain. The checked features are deleted when possible (see assumption 2).[8]



□ = checking domain of X

2. FFs are distinguished in terms of *interpretability*. Major FFs which are responsible for subsequent discussion are categorized as follows.

+Interpretable: ϕ-features of D, D feature of D

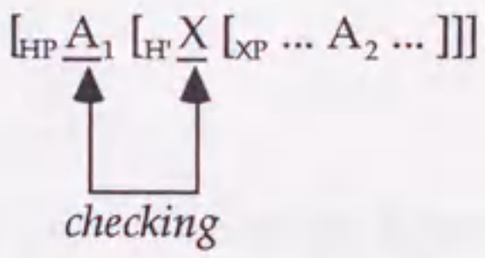
−Interpretable: D feature of T, V feature of T and C

Case features of D, T and V

−Interpretable FFs, which are illegitimate syntactic objects at LF, must be checked and deleted in the course of CHL to satisfy the FI; otherwise, the derivation crashes. On the other hand, +Interpretable FFs satisfy the FI by themselves since they are required for LF interpretation. Therefore, they do not need to be deleted after checking, and hence are still accessible to further operations after checking.

3. FFs are also distinguished in terms of *strength*. Strong features (e.g. D feature of T) must be checked and deleted before Spell-Out for convergence; otherwise, the derivation crashes. On the other hand, weak features can be checked in covert syntax. As Chomsky (1995) and Ura (2000) suggest, this strong/weak distinction is subject to parametric variation.

4. I hypothesize with Ura (2000) that *Checking* is an independent syntactic operation. This implies that feature checking may take place without feature attraction. When a head H is in a checking configuration with A_1, H automatically enters into a checking relation with it without attracting some other features such as the FFs of A_2.



In addition, counting *Checking* as an independent operation, we claim that it is subject to general economy conditions just like other operations *Merge* and *Move/Attract*. This means that *Checking* takes place only when it is required for convergence.

5. I assume, contra Chomsky (1995), that elements can undergo feature checking in their base-generated positions (cf. Ura (2000)). See 2.3.3.3 for more discussion.

It is assumed that nouns have their categorial D feature, Case feature and ϕ-features, and verbs have their categorial V feature, Case-assigning feature and ϕ-features. Functional categories also have FFs that *attract* corresponding features of nouns and verbs. The definition of *Attract F* in Chomsky (1995) is given below.

(18) *Attract F*

K *attracts* F if F is the closest feature that can enter into a checking relation with a sublabel of K. (Chomsky (1995: 297))

The notion *closeness* is defined in terms of c-command as follows.

(19) *Closeness*

β is *closer* to the target K than α if β c-commands α. (op. cit., p. 358)

Given these definitions, a head H attracts the FFs of A_1, but not those of A_2, in (20), because the former c-commands the latter and hence is closer to H.

(20) ... $[_{HP}$ H $[_{XP}$ A_1 $[_{X'}$ X A_2]]]

The only case that the FFs of A_2 is attracted by H is when A_1 raises overtly over H, as illustrated by (21).[9]

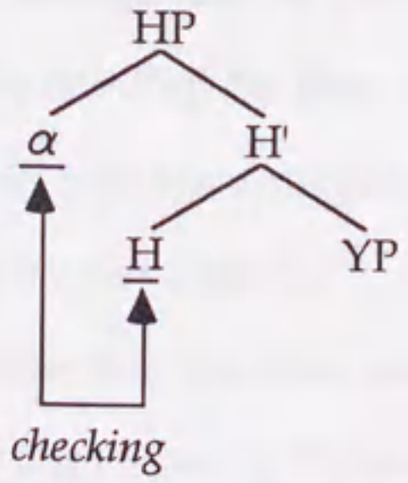
(21) ... A_1 ... [$_{HP}$ $\underline{FF(A_2)}$ $\underline{H}$ [$_{XP}$ t_{A1} [$_{X'}$ X A_2]]]

checking

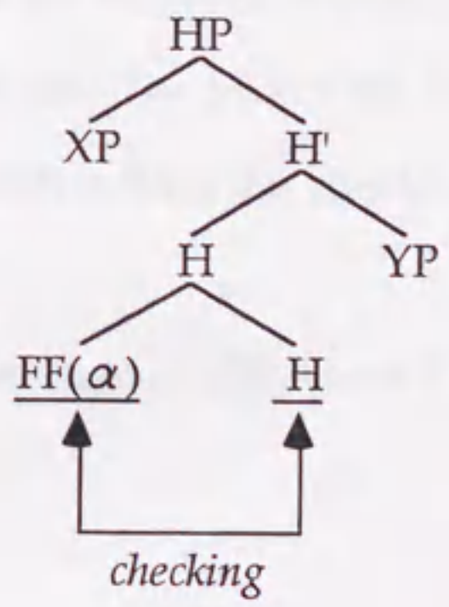
When A_1 moves overtly, it pied-pipes all FFs which are relevant to checking. Accordingly, the FFs of A_2 can be attracted by H as the closest set of FFs at covert component because there are no FFs left in [Spec, XP].

FFs of functional categories which serve as attractors are always −Interpretable, and some of them are strong. The configurations of checking relations in overt/covert syntax are delineated in (22).

(22) a. Overt feature checking



b. Covert feature checking



The overt movement/attraction, which is induced by strong features of a head H, involves a category movement to a specifier position. The covert movement/attraction, which is induced by −Interpretable features of H, involves

feature adjunction onto H.

To see how the hypothesized system works, let us consider the derivation of active transitive constructions in English for example. Chomsky (1995) postulates the following general structure of a clause which presupposes a Larsonian shell.[10]

(23) $[_{CP}$ C $[_{TP}$ T $[_{vP}$ Subj $[_{v'}$ v $[_{VP}$ V Obj]]]]]

Adopting Hale and Keyser's (1993) complex predicate analysis, Chomsky (1995) claims that the head v is a light verb which assigns an external θ-role, Agent or Causative, to an element in its specifier, and that Theme is discharged within the minimal domain of the lowest V in a given VP-shell. The subject and the object are base-generated inside vP, where they are assigned θ-roles, and must be formally licensed by their appropriate checkers. The FFs of the subject and those of the object are supposed to be checked off within the checking domain of TP and vP, respectively.

Suppose that the derivation has reached the stage of (24) where T is merged at the root with a strong D feature.

(24) $[_{T'}$ T $[_{vP}$ Subj $[_{v'}$ V-v $[_{VP}$ t_V Obj]]]]

Chomsky (1995: 232) argues that the EPP be reduced to a strong D feature of T. It attracts the subject from [Spec, vP] to the specifier position of TP, thereby deriving the effect of the EPP, as in (25).

(25) $[_{TP}\ \underline{\text{Subj}}\ [_{T'}\ \underline{T}\ [_{vP}\ t_{\text{Subj}}\ [_{v'}\ \text{V-}v\ [_{VP}\ t_{V}\ \text{Obj}\ ]]]]]$

D, Nom

Given that *Move F* automatically carries along a set of FFs of a lexical item (Chomsky (1995: 265)), the subject pied-pipes its Case feature and ϕ-features when it moves up to [Spec, TP]. Assuming that checking takes place automatically as soon as a checking configuration is formed, we thus claim that overt subject raising results in the simultaneous deletion of the D feature and the nominative Case feature of T, because they are in a spec-head relation with an appropriate checker, namely T.

LF feature checking is induced by weak −Interpretable FFs of functional categories. These features must be checked to ensure LF convergence since they play no role in interpretation. (26) and (27) show the covert process of checking. Firstly, [V-v] attracts the FFs of the object to have its −Interpretable accusative Case feature and ϕ-features checked. This movement yields the structure of (26).

(26) $[_{TP}\ \text{Subj}\ [_{T'}\ \text{T}\ [_{vP}\ t_{\text{Subj}}\ [_{v'}\ \underline{\text{FF(Obj)}}\ \underline{\text{V-}v}\ [_{VP}\ t_{V}\ \text{Obj}\ ]]]]]$

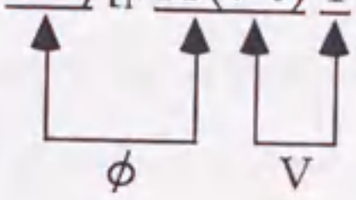
Acc, ϕ

Given that a trace of A-movement has no FFs and thus is invisible to *Attract F* (Chomsky (1995: 303)), the FFs of the object is the only candidate for attraction

in (26) because there remain no Case feature and ϕ-features in [Spec, vP] after overt subject raising. This implies that the subject blocks attraction of the FFs of the object only when it remains in [Spec, vP] until LF.

Secondly, the FFs of [V-v] is adjoined to T in order to check its V-feature. The complex [FF(V-v)-T], which is formed by this covert v-to-T movement, enters into a checking relation with ϕ-features of the subject under spec-head relation.

(27) $[_{TP}$ Subj $[_{T'}$ FF(V-v)-T $[_{vP}\ t_{Subj}\ [_{v'}$ FF(Obj) V-v $[_{VP}\ t_{V}$ Obj]]]]]



As a consequence, the derivation converges since all −Interpretable FFs are satisfactorily checked off.

An important point of this checking system is that formation of the complexes ([V-v] in (26) and [FF(V-v)-T] in (27)) precedes feature attraction. The operation *Attract F* never takes place unless attractors are formed properly, and hence is applied cyclically throughout the derivation.

1.3.2.2. The Derivation of *There*-Constructions

Based on the theoretical assumptions presented in 1.3.2.1, the derivation of *there*-constructions basically proceeds as follows. (28) below shows the derivation of unaccusative *there*-constructions in present-day English.[11]

(28) Overt: $[_{TP}\ \underline{there}\ [_{T'}\ \underline{T}\ [_{VP}\ V\ Subj\ ]]]$

D

LF: $[_{TP}\ there\ [_{T'}\ \underline{FF(Subj)}\ \underline{FF(V)\text{-}T}\ [_{VP}\ V\ Subj\ ]]]$

Nom, ϕ

There enters into a checking relation with the strong D feature of T in overt syntax, thereby deriving the effect of the EPP. Accordingly, the subject remains in its original position until LF. Its FFs are covertly adjoined onto the complex [FF(V)-T], which is formed by covert V-raising to T, to have its nominative Case feature and ϕ-features checked. This entails that checking of the D feature takes place independently of checking of the nominative Case feature.

We adopt the standard assumption that *there* has the categorial D feature but lacks both Case feature and ϕ-features (Chomsky (1993, 1995); cf. Chomsky (1998), Groat (1995, 1997)). It is problematic whether the D feature of *there* is +Interpretable or −Interpretable. This problem is closely related to whether interpretability of FFs is associated with semantic content. Chomsky (1995) suggests that it is −Interpretable, because *there* is an illegitimate object without lexical meaning and should be deleted to avoid the violation of the FI. However, contrary to Chomsky (1995), I assume that it is +Interpretable. This claim is theoretically supported by the example below.

(29) $[_{TP}$ There$_i$ $[_{T'}$ T $[_{VP}$ seems $[_{TP}$ t_i $[_{T'}$ to $[_{VP}$ be a man in the garden]]]]]]

In (29), *there* satisfies the EPP both in the matrix clause and in the embedded clause. If the D feature of *there* was −Interpretable and was deleted in a checking relation with the embedded T, it could not undergo further movement to the matrix [Spec, TP] contrary to fact. Therefore, the D feature of *there* should be categorized as a +Interpretable feature.

Let us next turn to covert subject raising. (28) above shows that the FFs of the subject are covertly raised onto [FF(V)-T] to have its nominative Case feature and ϕ-features checked. There is a piece of empirical evidence to prove the claim that the subject is actually nominative in ECs. Let us consider the following sentence from Icelandic.

(30) *Icelandic*

Það	höfðu	sennilega	sokkið	einhverjir	bátar	í	firðinum.
there	had	probably	sunk	some	boats.NOM	in	the bay

'Some boats had probably sunk in the bay.' (Sigurðsson (1991: 346))

(30) shows that the subject must be nominative in *það*-sentences.[12] Based on this data, we find it reasonable to extend the same analysis to English *there*-constructions.

Covert feature movement of the subject is empirically supported from the following sentences. Let us compare (31a) and (32a) on the one hand, and (31b) and (32b) on the other hand.

(31) a. There arrived **three men**$_i$ (last night) without identifying **themselves**$_i$.

b. There arrived with **their**$_i$ own books **three men**$_i$ from England.

(Chomsky (1995: 274))

(32) a. *I met **three men**$_i$ (last night) without identifying **themselves**$_i$.

b. *I found with **their**$_i$ own books **three men**$_i$ from England. (ibid.)

In (32a), *three men* cannot be coreferential with *themselves* because the FFs of *three men* does not move to a position from which it c-commands the *without*-clause. By contrast, *three men* binds *themselves* in (31a). This shows that the FFs of *three men* are covertly raised to a preverbal position to check its nominative Case feature and ϕ-features, thus landing in a position from where it c-commands *themselves* in the *without*-clause. Similarly, *three men* can be coreferential with *their* in (31b), but not in (32b). This contrast also demonstrates that the FFs of *three men* covertly moves up to T.[13]

1.3.3. *Cost of* Merge *and* Move/Attract

One of my major concerns in this thesis is the cost of *Merge* and *Move / Attract*. Chomsky (1995) argues that *Merge* is a costless operation because no derivation is generated without merger of lexical items. On the other hand, *Move/Attract* is supposed to be more complex than *Merge* because of its displacement property. Accordingly, *Merge* is always preferred over *Move/Attract* in terms of economy considerations under his system. Chomsky (1995) argues that preference of *Merge* over *Move/Attract* is empirically supported by the contrast in (33).

(33) a. There seems to be a man in the room.

b. *There seems a man to be in the room.

Suppose that the derivation has reached the stage of (34) where the embedded T is merged at the root with the strong D feature.[14]

(34) $[_{TP}$ to $[_{VP}$ be a man in the room]]

UnderChomsky's system, the strong D feature of T is eliminated by the application of *there*-insertion, rather than overt subject raising. At a later stage in the derivation, *there* undergoes further movement to the matrix [Spec, TP] for the requirement of the EPP. This yields the structure in (35).

(35) $[_{TP}$ There seems $[_{TP}$ t_{theer} to $[_{VP}$ be a man in the room]]]

Therefore, the ungrammatical order in (33b) is automatically ruled out under his approach.

In this thesis, I will propose an alternative analysis that the operation *Merge* may be equal to *Move/Attract* in cost. A crucial point to our argument is that *Merge* can be classified into two groups: *Merge* purely induced for lexical requirement (lexical insertion into a θ-position), and *Merge* accompanied by feature checking (lexical insertion into a non-θ-position). Bošković (1997) and Collins (1997) argue that lexical insertion, as well as *Move/Attract*, involves a sequence of *Copy* plus *Merge*: (a) selection of a lexical item from the lexicon, and (b) merger of it with some other syntactic object. Given this, lexical insertion

can be defined as a kind of movement of lexical items out of the lexicon, and we can say that these two types of lexical insertion involve the following subcomponents.[15] As illustrated in (36a), lexical insertion into a θ-position, which is purely induced for lexical requirement, involves a sequence of *Copy* plus *Merge*. By contrast, lexical insertion into a non-θ-position is always motivated by feature checking, and hence involves an extra operation *Checking* in addition to *Copy* and *Merge*.

(36) a. Lexical insertion into a θ-position: Copy + Merge

b. Lexical insertion into a non-θ-position: Copy + Merge + Checking

With respect to *Move/Attract*, it is always accompanied by feature checking. Therefore, it involves a sequence of *Copy*, *Merge* and *Checking* just like lexical insertion into a non-θ-position. Comparing the number of their subcomponents of these operations, we conclude that lexical insertion into a θ-position is less costly than that into a non-θ-position, and that *Move/Attract* and lexical insertion into a non-θ-position are equal in cost. The cost of each operation can be thus illustrated as follows.

(37) Cost of *Merge* and *Move/Attract*

Lexical insertion into a θ-position	<	Lexical insertion into a non θ-position	=	Move/Attract

In the following chapters, I will present some pieces of empirical evidence for this argument, and provide a new explanation for the contrast in (33) without resorting to Chomsky's condition selecting *Merge* over *Move/Attract*.[16]

1.4. The Organization of the Present Thesis

This thesis is organized as in the following way. Chapter 2 is dedicated to a comparative investigation of TECs and ECs with a raised subject. In particular, we focus our attention on the following issues.

(I) How does overt subject raising affect the acceptability of TECs?

(II) Why does the acceptability of TECs and ECs with a raised subject vary among languages?

(III) How should we account for the optionality of overt subject raising in UECs and PECs under the feature-checking theory?

I will provide an account of the first two issues by arguing that (i) overt subject movement is an essential condition for convergence of TECs, that (ii) '*there*'-insertion into [Spec, CP] enables overt subject movement to [Spec, TP], and that (iii) '*there*' functions as an expletive topic in the languages with TECs but as a syntactic subject in the languages without TECs. The issue (III) will be answered from the hypothesis that '*there*'-insertion is equal to overt subject movement in cost.

Chapter 3 investigates the historical development of *there*, and offers a new approach to English ECs. It will be claimed that there are two types of

there in English: an existential operator *there* in *there+be* ECs, and a discourse sequencing linking word *there* in presentational ECs. I will show that the notion of *Retention / Persistence* plays an important role in the historical development of these ECs.

In Chapter 4, we will explore the issues (I) and (II) below, and demonstrate that the analysis proposed in chapters 2 and 3 provides a straightforward account of the occurrence and the demise of these ECs in the history of English.

(I) Why were TECs and ECs with a raised subject permitted in the early stages of English?

(II) Why did these ECs demise in the course of eModE?

It will be specifically argued that (i) *there*-insertion into the C-domain, viz. [Spec, CP] or the C-adjoined position, enabled overt subject movement to [Spec, TP], and that (ii) the demise of these constructions is attributable to the loss of the V2 structure in the 17th century. This chapter also presents a descriptive investigation of inversion constructions based on the Diachronic Part of the Helsinki Corpus, and shows that eModE was the transitional period where some constructions including ECs maintained the V2 structure.[17] In section 4.4, I will discuss English TECs with a postposed subject in present-day English, and show that these examples give us a convincing support for a close correlation between TECs and overt subject raising out of *v*P.

Chapter 6 is concluding remarks and comments on further applications of our theory.

Notes to Chapter 1

[1] Henceforth, '*there*' expresses an expletive which is equivalent to English *there*.

[2] In subsequent discussion, I will mainly deal with two SVO languages as the typical languages with and without TECs for the sake of comparison of the word order: Icelandic and present-day English.

[3] Sigurðsson (1991) and Jonas and Bobaljik (1993) suggest that PECs with a raised subject like (8a) are somewhat marked without a context or a continuation. For example, one Icelandic native speaker I have asked judges that (8a) is acceptable when we are emphasizing the fact that the cars were sold, but not given away or sold when no one expected them to be sold. However, I am not concerned with such factors. What is relevant here is the contrast between (8a) and (9a).

[4] Table 1 is based on Bobaljik (1995), Bobaljik and Jonas (1996), Bures (1992), Holmberg and Platzack (1995), Koeneman (2000), Vikner (1995), and among others.

Bobaljik and Jonas (1996) observe that the judgement of TECs varies among dialects of Faroese. One dialect labeled here as Faroese I accepts TECs, whereas the other one (Faroese II) does not.

(i) *Faroese I / *Faroese II*

Tað bygdu nógvir íslendingar$_i$ [$_{vP}$ t_i hús í Havn]
there built many Icelanders houses in Tórshavn
(Jonas (1996: 106))

cf. *Faroese I / Faroese II*

Nógvir íslendingar bygdu hús í Havn.
many Icelanders built houses in Tórshavn (ibid.)

Faroese I is also different from Faroese II in that the subjects can appear in the position following finite auxiliaries in PECs.

(ii) *Faroese I / *Faroese II*

Tað hava nakrar lagkøkur verið bakaðar til veitsluna.
there have some cakes been baked for the party (op. cit., p. 107)

(ii) **Faroese I / *Faroese II*

Tað hava verið nakrar lagkøkur bakaðar til veitsluna.
there have been some cakes baked for the party (ibid.)

(ii) *Faroese I / Faroese II*

Tað hava verið bakaðar nakrar lagkøkur til veitsluna.
there have been baked some cakes for the party (ibid.)

These contrasts strongly supports a close correlation between TECs and overt subject raising in ECs, which we will see in section 2.1.

As Vikner (1995: 4) suggests, almost all speakers of Faroese can speak Danish. That is to say, Faroese might be in a middle position between Icelandic and the Mainland Scandinavian languages.

[5] In what follows, I will give both word-to-word glosses and translations to Old English (OE) examples, and only glosses to ME examples.

[6] The examples of *Paston Letters* are cited from Davis (1971). Henceforce, the first numbers denote the letter numbers, and the second ones the line numbers of Davis' (1971) edition.

I also searched for the distribution of *there*-constructions in *Paston Letters* by accessing the Electronic Text Center at the University of Virginia. The URL for this website is http://etext.lib.virginia.edu/index.html.

[7] Visser (1963), Breivik (1983), among others, suggest that TECs were attested from the 14th to the 16th century. This observation is confirmed by Tanaka's (2000c) comprehensive survey of TECs based on the Diachronic Part of the Helsinki Corpus and the Corpus of Early English Correspondence Sampler (EECS), which are summarized in the following tables. (As for the Diachronic Part of the Helsinki Corpus, see note 17.)

1150-1250	1250-1350	1350-1420	1420-1500	1500-1570	1570-1640	1640-1710
0	0	9	10	1	0	0

Table 2. The Distribution of TECs in Helsinki Corpus

(Tanaka (2000c: 6))

1418-1638	1580-1680
4	0

Table 3. The Distribution of TECs in the Corpus of EECS (ibid.)

Jacobsson (1951) suggests, however, that TECs were indeed observed in the 17th century. Some examples are cited in (i).

(i) a. there had fifteene severall Armados assailed her.

(Raleigh *Selections* 151, Jacobsson (1951: 208))

b. There shall no Sunne nor Weather overwarme him.

(Austin *Medit* 291, OED, cited in Tanaka (2000b: fn. 6))

Based on this, I will follow Jacobsson's observation that TECs disappeared in the 17th century, but not in the 16th century.

[8] I do not assume the distinction between *deletion* and *erasure* in the sense of Chomsky (1995).

[9] I use the notation FF(LI) in referring to a set of FFs of LI (LI= Lexical item). Furthermore, for notional convenience, I will simply write traces where the copy theory of movement is not at issue.

[10] In the earlier version of the minimalist program (Chomsky (1993), among others), AgrS and AgrO have played a crucial role in the theory of feature

checking. Chomsky (1995) suggests, however, that they should be dispensed with on conceptual grounds, and postulates the Agr-less clause structure in (22).

[11] *There* is directly inserted into the canonical subject position [Spec, TP] in (28), but I will propose in chapter 3 that *there* is merged into the V-domain, [Spec, VP] or the V-adjoined position, in present-day English.

[12] It should be noted, however, that the subjects may appear with the dative Case in Icelandic ECs, as shown by (i).

(i) *Icelandic*

... að það mun einhverjum hafa þótt Ólafur laðinlegur.
that there will someone.DAT have thought Ólafur boring
(Vikner (1995: 173))

Dative nominals may appear in the positions where the nominative Case or the accusative Case are normally assigned, as in (ii).

(ii) *Icelandic*

a. Mér kólnar.
Me.DAT is getting cold (Belletti (1988: 25))

b. Hann telur stúlkunni hafa svelgtz á súpunni.
he believes the girl.DAT to have misswallowed on the soup
(ibid.)

Under the current minimalist framework, the dative nominals in (i) and (ii)

should be assigned both the dative Case feature and the nominative or the accusative Case feature in the lexicon. This phenomenon is interesting to investigate, but it is beyond the scope of this paper to argue this in detail. (As for the realization of inherent Cases, see Freidin and Sprouse (1991)).

[13] This phenomenon is also observed in German, Icelandic, the Mainland Scandinavian languages and Itarian, but not in French See Bošković (1997), Cardinaletti (1997), Chomsky (1995) and den Dikken (1995).

[14] Following the standard assumption, I will classify the existential verb *be* as an unaccusative verb which has simple VP structure without the projection of *v* (Belletti (1988), Burzio (1986), Lasnik (1992, 1995), Stowell (1981), among others).

[15] Under this view, we can dispense with the notion of *numeration* (see Bošković (1997) and Collins (1997)).

[16] See Bošković (1997), Collins (1997), Shima (2000) and Ndayiragije (1999) for more discussion of the cost of *Merge* and *Move / Attract*.

[17] The Diachronic Part of the Helsinki Corpus consists of about 1.5 million words (413,250 words in Old English (OE), 608,570 words in ME, 551,000 words in ModE), and its organization follows the traditional division into OE, ME and eModE, which are further divided into subperiods of 70 or 80 years. The periods and the total number of words are as follows.

	Period	Words
OE1	-850	2,190
OE2	850-950	92,050
OE3	950-1050	251,630
OE4	1050-1150	67,380
ME1	1150-1250	113,010
ME2	1250-1350	97,480
ME3	1350-1420	184,230
ME4	1420-1500	213,850
ModE1	1500-1570	190,160
ModE2	1570-1640	189,800
ModE3	1640-1710	117,040

Table 4: The periods and the total number of words in the Helsinki Corupus

As for much more information about the corpus, access the website of UPenn Linguistics Department (http://www.ling.upenn.edu./).

Chapter 2

'*There*'-Insertion and Overt Subject Movement

2.1. Introduction

It is a well-known fact that TECs are invariably acceptable in German and the Insular Scandinavian languages (e.g. Icelandic, Dutch, Yiddish), but not in languages like present-day English and the Mainland Scandinavian languages (e.g. Danish, Norwegian, Swedish). The distribution of TECs is summarized in (1) and (2).

(1) Languages with TECs (see (3))

Icelandic, German, Dutch, Faroese I, Frisian, Yiddish

(2) Languages without TECs (see (4))

Present-day English, Faroese II, Danish, Norwegian, Swedish, Afrikaans, French

TECs

(3) a. *Icelandic*

Það hafa margir jólasveinar borðað búðing.

there have many Christmas trolls eaten pudding

'Many Christmas trolls have eaten pudding.'

b. *German*

Es essen einige Mäuse Käse in der Küche.

there eat some mice cheese in the kitchen

'There are some mice eating cheese in the kitchen.'

(Bobaljik and Jonas (1996: 209))

(4) a. *There has someone eaten an apple.

b. *Danish*

*Der har nogen spist et æble.

there has someone eaten an apple

'Someone has eaten an apple.' (op.cit., p.208)

TECs have received a considerable attention in recent theory of generative grammar, but it is a very controversial problem to determine what kind of languages permit the constructions (see Alexiadou and Anagnostopoulou (1998), Bobaljik (1995), Bobaljik and Jonas (1996), Bobaljik and Thráinsson (1998), Bures (1992), Chomsky (1995), Christensen (1991), Jonas (1996), Koster and Zwart

(2000), Koeneman (2000), Koeneman and Neeleman (1998), Ndayiragije (1999), Thráinsson (1996), Vikner (1995), Zwart (1992, 1997), among others).

An interesting fact to note here is that the languages with and without TECs exhibit an additional difference in ECs: the distribution of the subjects. As Jonas (1996), Koeneman and Neeleman (1998) and Koeneman (2000) point out, the languages with TECs optionally permit overt subject raising in UECs and PECs, whereas the languages without TECs completely exclude such movement. The relevant examples are given in (5)-(8).

UECs

(5) *Icelandic*

a. Það hafa **margiir menn**$_i$ komið t_i hingað í dag.
there have many men come here today

b. Það hafa komið **margiir menn** hingað í dag.
there have come many men here today

(Koeneman and Neeleman (1998: 14))

(6) a. *There will **many men** come t_i here today.

b. There will come **many men** here today.

PECs

(7) *Icelandic*

a. Það hafa **margir bílar**$_i$ verið seldir t_i á þessu uppboði.
there have many cars been sold at this auction

b. *Það hafa verið **margir bílar**$_i$ seldir t_i á þessu uppboði.
there have been many cars sold at this auction

c. Það hafa verið seldir **margir bílar** á þessu uppboði.
there have been sold many cars at this auction

(Jonas (1996: 11-12))

(8) a. *There will **some cookies**$_i$ be cooked t_i for the party.

b. There will be **some cookies**$_i$ cooked t_i for the party.

c. *There will be cooked **some cookies** for the party.

The following table demonstrates that the distribution of TECs seems to have a close correlation with overt subject movement in ECs, and we now obtain the generalization in (9).

	TEC	Optional Subject Raising in UECs/PECs	V2	V-to-T	Object Shift
German	○	○	○	○	○
Icelandic	○	○	○	○	○
Yiddish	○	○	○	○	○
Faroese I	○	○	○	○	×
Faroese II	×	×	○	○	×
Danish	×	×	○	×	×
Swedish	×	×	○	×	×
English	×	×	×	×	×
French	×	×	×	○	×

Table 1. The distribution of TECs and ECs with a raised subject

(9) *Generalization: TECs and overt subject movement*

The languages which allow TECs are those which may allow overt subject raising in ECs, and vice versa.

Given these observations, I will investigate the above three types of ECs focusing on the issues (I)-(III).

(I) How does overt subject raising affect the acceptability of TECs?

(II) Why does the acceptability of TECs and ECs with a raised subject vary among languages?

(III) How should we account for the optionality of overt subject raising in UECs and PECs under the feature-checking theory?

I will provide a straightforward account of the issues (I) and (II) in terms of the (non)availability of [Spec, CP] for '*there*'-insertion. Specifically, it will be argued that (i) TECs have a close correlation with overt subject movement out of *v*P, and that (ii) '*there*'-insertion into [Spec, CP] is prerequisite for overt subject movement to [Spec, TP]. With respect to the issue (III), we will attempt to account for the optional subject movement by assuming that lexical insertion into a non-θ-position is equal to *Move / Attract* in cost.

This chapter is organized as follows. Section 2.2 makes a few remarks concerning V2 phenomenon, because the languages which permit TECs are all V2 languages. Sections 2.3 and 2.4 are devoted to ECs in the languages with TECs and those without TECs, respectively. In section 2.5, I will examine the distribution of the subjects in Icelandic ECs with a raising predicate, which will be a strong support for the claim that lexical insertion into a non-θ-position is equal to *Move / Attract* in cost. Section 2.6 gives the conclusion of this chapter.

2.2. Verb Second

In Germanic languages like Icelandic and German, finite verbs (or auxiliaries) obligatorily occupy the second position in root clauses. They are preceded by only one constituent and thus appear in the second position, as shown in (10).

(10) *Icelandic*

a. Þeir færðu alla bílana.
they moved all the cars

b. Marga hluti veit Ólafur.
many things knows Ofaf

c. Illa syngur Ólafur.
badly sings Olaf

d. Fallegur er kjóllinn.
beautiful is the dress

e. Á Íslandi tala menn íslensku.
in Icelandic speaks one Icelandic

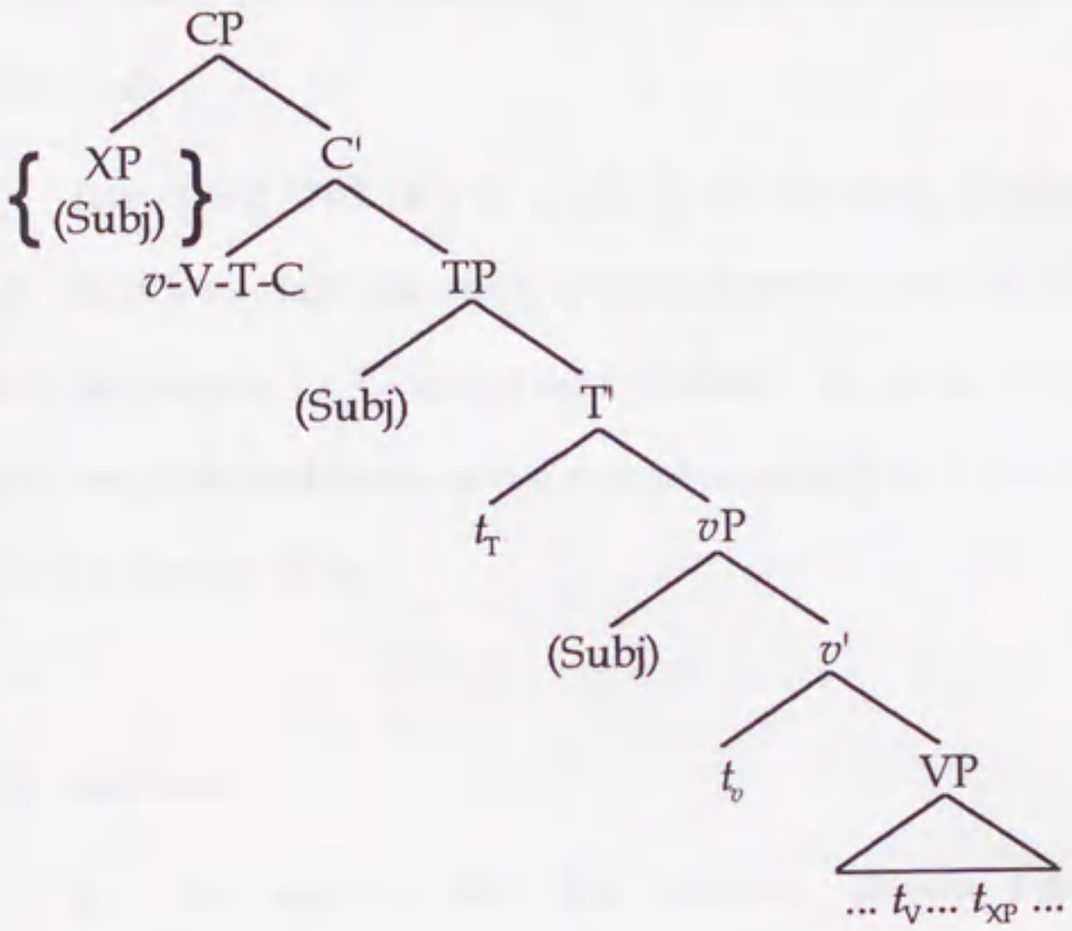
f. Að senda þig heim aftur væri réttast.
to send you back home would be best

g. Að Jón tali sjálfur við kennarann er langbest.
that John himself talk to the teacher is best
(a. Thráinsson (1979: 28), b-e. (ibid.: 60), f-g. (ibid.: 31))

These examples show that the sentence initial position serves as the landing site for topicalized elements of any categories: the subject DP in (10a), the object DP in (10b), AdvP in (10c), AP in (10d), PP in (10e), TP in (10f) and CP in (10g). According to Maling (1980: 72), 20% of declarative sentences begin with elements other than subjects in modern Icelandic prose. Fronting of these elements is traditionally analyzed as *Topicalization* (Thráinsson (1979), Maling (1980), Diesing (1988), Vikner (1995), Schwarts and Vikner (1996), among others).

A number of studies has been made about the phenomenon, and it is generally argued that a finite verb (or auxiliary) occurs in the position of C with a fronted XP in its specifier, as schematized in (11).[1, 2]

(11) V2 structure



Overt verb movement to C is supported from the fact that the finite verbs (or auxiliary verbs) in the second position always precede sentential adverbs, as in (12).

(12) *Icelandic*

a. Helgi **hefur trúleqa** keypt bókina.
   Helgi has probably bought the book

b. *Helgi trúleqa hefur keypt bókina.
   Helgi probably has bought the book (Vikner (1995: 47))

Given that sentential adverbs like *trúleqa* 'probably' mark the left hedge of TP, it is concluded that the auxiliary verb *hefur* has crossed this adverb on its way to C in (12a).

Assuming that (11) is taken to be the basic structure of V2 sentences, we can plainly explain the root/non-root asymmetry of V2 topicalization found in such languages as German and Danish. In these languages, V2 phenomenon and complementizers are in a complementary distribution in embedded context. Let us consider (13).

(13) *German*

a. Er sagt, [$_{CP}$ **daß** die Kinder diesen Film gesehen **haben**]
   He says that the children this film seen have

b. Er sagt, [$_{CP}$ die Kinder **haben** diesen Film gesehen]
   He says the children have his film seen

c. Er sagt, [$_{CP}$ diesen Film **haben** die Kinder gesehen]
   He says his film have the children seen

d. *Er sagt, [$_{CP}$ **daß** die Kinder **haben** diesen Film gesehen]
   He says that the children have this film seen

e. *Er sagt, [$_{CP}$ **daß** diesen Film **haben** die Kinder gesehen]
   He says that this film have the children seen

(Vikner (1995: 66))

In German, V2 word order is permitted only when embedded clauses are the complement of bridge verbs (see Vikner (1995)). (13a) indicates that *haben* 'have' must appear in the sentence final position when the C-position is occupied by overt complementizer *daß* 'that'. This incompatibility of *daß* and V2 phenomenon receives a straightforward account if we assume that the finite verbs in the second position occupy the same position as *daß*, namely C; *daß* blocks the finite V from raising to C and appearing in the second position, as in (13a).[3]

The structure in (11) indicates that V2 sentences involve two movement operations: V-to-C movement and XP-movement to [Spec, CP]. We now should be explicit about the motivation of these operations. On the minimalist assumption that overt movement is motivated by a strong feature of a head H, we must assume that C contains at least two strong features for these movement operations in V2 languages. Here, I essentially follow Holmberg (1986, 2000) and Rizzi (1990) in assuming that these languages have predicational C encoding finiteness, and that V-/AUX-raising to C is motivated by a strong V feature of this C.[4] Now, how about XP-movement to [Spec, CP]? Santelmann (1999) argues in his discussion of V2 in Child Swedish that the relevant operations are not independently motivated; rather, they are linked by a common set of features in C. It is problematic to determine what connects these movements in V2, but the key factor might be that V2 languages have a special type of C encoding finiteness and that a head H encoding finiteness (e.g. T, predicational C) always requires its specifier to be overtly realized. We thus adopt the generalized

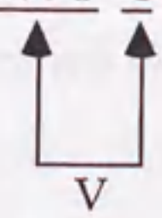
notion of the EPP advocated by Chomsky (1998, 1999), Roberts and Roussou (2000), among others, and assume that predicational C intrinsically has a strong EPP feature triggering overt raising of a topic XP. Given this much, it follows that V2 parameter can be reduced to the parameter as to whether a given language has a specification of predicational C with the strong V feature and the strong EPP feature.

On these assumptions, V2 sentences are derived as follows. In (14), predicational C attracts the closest verbal element (the [*v*-V-T] complex in (14a) and the [AUX-T] complex in (14b)) under the definitions of *Attract F* and *closeness* in (15) and (16), and have its strong V feature checked off.[5]

(14) V-/AUX-raising to C

a. $[_{CP}$ V-*v*-T-C $[_{TP}$ Subj t_T $[_{vP}$ t_{Subj} t_v $[_{VP}$ t_V ... XP ...]]]]

b. $[_{CP}$ AUX-T C $[_{TP}$ Subj t_T $[_{VP}$ t_{AUX} $[_{vP}$ t_{Subj} *v*-V $[_{VP}$ t_V ... XP ...]]]]]



(15) *Attract F*

K *attracts* F if F is the closest feature that can enter into a checking relation with a sublabel of K. (Chomsky (1995: 297))

(16) *Closeness*

β is *closer* to the target K than α if β c-commands α. (op. cit., p. 358)

The derivation further proceeds as in (17), in which the strong EPP feature of predicational C attracts a topic XP.

(17) XP-movement to [Spec, CP]

a. $[_{CP}\ \underline{XP}\ [_{CP}\ V\text{-}v\text{-}T\text{-}\underline{C}\ [_{TP}\ Subj\ \ t_T\ [_{vP}\ t_{Subj}\ t_v\ [_{VP}\ t_V \ldots t_{XP} \ldots]]]]]$

EPP

b. $[_{CP}\ \underline{XP}\ [_{C'}\ AUX\text{-}T\text{-}\underline{C}\ [_{TP}\ Subj\ \ t_T\ [_{VP}\ t_{AUX}\ [_{vP}\ t_{Subj}\ \ v\text{-}V\ [_{VP}\ t_V \ldots t_{XP} \ldots]]]]]]$

EPP

We assume that structures have predicational CP only when they contain a topicalized or focused element since the relevant C-domain is responsible for topic interpretation. Needless to say, it heavily depends on discourse which element is topicalized or focused, that is, which element is attracted to [Spec, CP]. It will follow that the EPP feature of predicational C is a kind of discourse-related feature and can be checked by any categorial feature of a topic XP.[6] Given this, when a non-subject is attracted to [Spec, CP] as in (17), the subject never prevents the attraction though it intervenes between the attractee and the

attractor. It is invisible to attraction unless it is understood as a topicalized or a focused element.

2.3. Languages with TECs

2.3.1. 'There' *as an Expletive Topic*

Having established theoretical background concerning V2 phenomenon, we can now go on to discuss the following issues.

(I) How does overt subject raising affect the acceptability of TECs?

(II) Why does the acceptability of TECs and ECs with a raised subject vary among languages?

(III) How should we account for the optionality of overt subject raising in UECs and PECs under the feature-checking theory?

First of all, we have to take a close look at the distribution of '*there*' in the languages with TECs, which will be crucial in subsequent discussion of overt subject movement in ECs.

It has been argued in the literature that the existential *there* is a dummy subject which is inserted into the canonical subject position to satisfy the EPP (Belletti (1988), Bures (1992), Chomsky (1995), Bobaljik (1995), Bobaljik and Jonas (1996), Jonas (1996), Lasnik (1992, 1995), among others). As mentioned in 1.3.2.2,

it is usually assumed under the recent feature-based theory that *there*-insertion into [Spec, TP] is motivated by the strong D feature of T, thereby deriving the EPP effect, as in (18).

(18) $[_{TP}$ <u>There</u> <u>T</u> $[_{VP}$ arrived three men from England]]

D

A piece of evidence in support of the subject status of *there* comes from subject-auxiliary inversion in interrogative sentences. (19) indicates that *there* can follow *is* and *are* in *yes-no* question sentences.

(19) a. Is **there** nobody living there?

b. Is **there** someone knocking at the door?

c. Are **there** several patients waiting to see the doctor?

d. Were **there** papers, ink and pens on the table?

(a-c. Radford (1997: 316))

On the traditional assumption that subject-auxiliary inversion moves an auxiliary verb to C across a subject in [Spec, TP], it follows that *is* and *are* have passed over *there* in [Spec, TP] on their way to C in (19).

However, contrary to this familiar assumption, Christensen (1991), Holmberg and Platzack (1995), Sigurðsson (1991), Vikner (1995) and Zaenen

(1985) argue that '*there*' occupies [Spec, CP], rather than [Spec, TP], in V2 languages like Icelandic and German. Let us examine some pieces of evidence to prove their claim. The first one concerns subject-auxiliary inversion of '*there*'. (20) indicates that Icelandic *það* 'there' cannot undergo subject-auxiliary inversion in interrogative sentences.[7]

(20) *Icelandic*

a. Voru (*__það__) blöð, blek, og pennar á borðinnu?
Were there papers, ink and pens on the table

b. Eru (*__það__) mýs í baðkerinu?
Are there mice in the bathtub

c. Hefur (*__það__) einhver étið hákarlinn?
Has there somebody eaten the shark

(a. Breivik (1983: 373), b-c. Thráinsson (1979: 478))

This behavior of '*there*' sharply contrasts with present-day English *there* in (19). It is obvious from this that '*there*' occupies a position other than the canonical subject position in these V2 languages.

The second evidence is from the complementary distribution of '*there*' and a topicalized constituent. As (21) shows, '*there*' is incompatible with a topicalized element.

(21) *Icelandic*

a. Það voru blöð, blek, og pennar á borðinnu.
There were papers, ink and pens on the table

b. Á borðinnu voru (***það***) blöð, blek, og pennar.
On the table were there papers, ink and pens

(Breivik (1983: 373))

This complementary distribution of *það* and a topicalized XP leads us to conclude that they occupy the same position. Given that a topicalized XP is located in [Spec, CP] in V2 sentences, it follows that *það* is also located in [Spec, CP] in (21a).

The third evidence for the claim that '*there*' occupies [Spec, CP] in these languages comes from the distribution of '*there*' in embedded clauses. As Vikner (1995) notes, German *es* 'there' cannot appear in embedded clauses introduced by overt complementizer *daß*, while Icelandic *það* 'there' is always realized after overt complementizer *að*. This is illustrated in (22) and (23).

(22) *German*

*Ich weiß, daß **es** ein Junge gekommen ist.
I know that there a boy come is (Vikner (1995: 70))

(23) *Icelandic*

Ég veit að **það** hefur komið strákur

I know that there has come a boy (ibid.)

Although German and Icelandic are similar in exhibiting V2 phenomenon in main clauses, they are different when it comes to embedded clauses. Let us compare (24) with (25).

(24) *German*

a. *Er sagt, daß die Kinder haben diesen Film gesehen.

He says that the children have this film seen

b. *Er sagt, daß diesen Film haben die Kinder gesehen.

He says that this film have the children seen

(Vikner (1995: 66))

(25) *Icelandic*

Jón efast um að á morgun fari María snemma á fœtur.

John doubts that tomorrow get Mary early up

(Rögnvaldsson and Thráinsson (1990: 23))

In German, V2 topicalization is allowed only in the complement clauses embedded under bridge verbs. In this case, complementizer *daß* 'that' is oblig-

atorily omitted due to the complementary distribution of V2 and *daß* (see (13)). In Icelandic, on the contrary, V2 order can freely occur in embedded clauses, as well as in main clauses, even when complementizer *að* 'that' is overtly realized.[8] Given that clauses usually consist of *v*P, VP, TP and CP, it is problematic to explain the occurance of embedded V2 in Icelandic. Vikner (1995), for example, postulates the following structures for German and Icelandic embedded clauses, respectively.

(26) *German*

a. ... V_{matrix} [$_{CP}$ daß [$_{TP}$ ... V ...]] ⇒ non-V2

b. ... V_{matrix} [$_{CP}$ Topic [$_{C'}$ V-*v*-T-C [$_{TP}$ ...]]] ⇒ V2

(27) *Icelandic*

... V_{matrix} [$_{CP}$ að [$_{CP}$ Topic [$_{C'}$ V-*v*-T-C [$_{TP}$ ...]]]] ⇒ V2

(26) shows that embedded clauses contain one CP in German, which enables us to capture the complementary distribution of complementizer and V2 phenomenon. By contrast, Icelandic embedded clauses contain two instances of CPs in (27). This analysis, which is called the *CP-recursion analysis*, makes possible V2 phenomenon after complementizer; *að* 'that' originates in the upper C and a finite verb moves to the lower C with a topicalized element in its specifier.[9]

Adopting the CP-recursion analysis, we can readily account for the distributional contrast of embedded V2. German (22) and Icelandic (23) are

assigned the structures in (28) and (29), respectively.

(28) *German*

*Ich weiß, [$_{CP}$ daß [$_{TP}$ es ein Junge gekommen ist]]

I know that there a boy come is

(29) *Icelandic*

Ég veit [$_{CP}$ að [$_{CP}$ það hefur [$_{TP}$ komið strákur]]]

I know that there has come a boy

The structure (28) consists of one CP whose head is occupied by *daß* 'that'. If *es* appeared in [Spec, TP] as illustrated here, we had no way to explain the ill-formedness of (28) (=(22)). On the other hand, the structure (29) has the recursion of CP, which allows the cooccurence of *það* and complementizer *að* located in the upper C. In this way, the contrast between (22) and (23) naturally follows if we assume that '*there*' occupies [Spec, CP].

The last argument that '*there*' occupies a position other than [Spec, TP] concerns ECM constructions. Jonas (1996) points out that Icelandic *það* 'there' cannot appear as a subject of the infinitival complement selected by ECM verbs, as shown in (30).

(30) *Icelandic*

??/* Ég tel **það** vera villu í þessu handriti.

I believe there be.INF error in this manuscript

(Jonas (1996: 74))

cf. Ég tel vera villu í þessu handriti.

I believe be.INF error in this manuscript

'I believe there to be an error in this manuscript.' (ibid.)

It is generally agreed that the infinitival complement of ECM verbs is TP, not CP (Chomsky (1981), Bošković (1997), and works cited therein). If *það* occupied [Spec,TP], we would wrongly predict (30) to be grammatical just like the English counterpart in (31).

(31) I believe $[_{TP}$ there $[_{T'}$ to $[_{VP}$ be an error in this manuscript]]]

In order to explain the contrast between (30) and (31), we should assume that *það* is not located in [Spec, TP].

It is, therefore, reasonable to assume that the surface position of '*there*' is [Spec, CP], not [Spec, TP], in such V2 languages as Icelandic and German. Essentially following Maling and Zaenen (1990), Sigurðsson (1991) and Thráinsson (1979), I postulate that it is an expletive topic, rather than a syntactic subject, and is inserted into or moves to [Spec, CP] in order to eliminate the

strong EPP feature of predicational C when no other constituent is topicalized.

2.3.2. *UECs and PECs*

2.3.2.1. Optional Subject Raising

As described above, some Germanic languages optionally allow overt subject raising in UECs and PECs. The following examples are from Icelandic.

(32) *Icelandic*

a. Það hafa **margiir menn**$_i$ komið t_i hingað í dag.
there have many men come here today

b. Það hafa komið **margiir menn** hingað í dag.
there have come many men here today

(Koeneman and Neeleman (1998: 14))

(33) *Icelandic*

a. Það hafa **margir bílar**$_i$ verið seldir t_i á þessu uppboði.
there have many cars been sold at this auction

b. *Það hafa verið **margir bílar**$_i$ seldir t_i á þessu uppboði.
there have been many cars sold at this auction

c. Það hafa verið seldir **margir bílar** á þessu uppboði.
there have been sold many cars at this auction

(Jonas (1996: 11-12))

The (a) examples of (32) and (33) show that the subjects may precede unaccusative verbs and *been*+passive participles in these ECs. I assume with Chomsky (1995: 316) that unaccusative verbs lack vP which involves the assignment of Agent θ-role (cf. Chomsky (1999), Collins (1997)). The same point might be made with respect to passive constructions; passive verbs cannot take an agentive subject, so that they also lack [Spec, vP] to which Agent θ-role is assigned (Basilico (1998), Ura (2000); cf. Radford (1997), Watanabe (1996)). Given this, the structures of (32a) and (33a) can be as in (34) and (35), respectively.

(34) [$_{CP}$ Það hafa [$_{TP}$ margiir menn$_i$ [$_{VP}$ komið t_i hingað í dag]]]
there have many men come here today

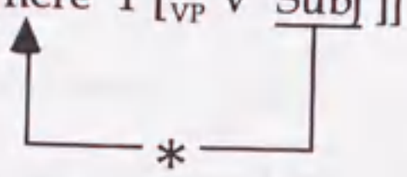
(35) [$_{CP}$ Það hafa [$_{TP}$ margir bílar$_i$ [$_{VP}$ verið seldir t_i á þessu uppboði]]]
there have many cars been sold at this auction

Here, the subjects are originated in the complement position of unaccusative and passive verbs for θ-marking, and then undergo overt movement to [Spec, TP].

Now, the question is what invokes this subject raising. Note that we cannot explain this movement as far as we stick to Chomsky's (1995, 1998, 1999) system. Given that the costfree operation *Merge* takes precedence overt

Move/Attract in terms of economy principles, there is no motivation for subject movement. The strong D feature of T is checked by virtue of '*there*'-insertion, and hence T no longer has a strong feature to attract the subject to its specifier, as illustrated in (36).

(36) $[_{TP}$ There T $[_{VP}$ V Subj]]



Additionally, recall that the movement in question takes place optionally. The subjects may stay in their original positions, as in (32b) and (33c) which are repeated below.

(37) $[_{CP}$ Það hafa $[_{TP}$ $[_{VP}$ komið **margiir menn** hingað í dag]]]

there have come many men here today

(38) $[_{CP}$ Það hafa $[_{TP}$ $[_{VP}$ verið seldir **margir bílar** á þessu uppboði]]]

there have been sold many cars at this auction

How should such optional raising be explained under the feature checking theory? One might argue that this optionality could be accounted for if we assumed that some feature of T is strong in one case, but not in the other case. Needless to say, however, this kind of optionality in feature strength is not theoretically preferable.

In what follows, I will attempt to derive the optionality of overt subject movement in these ECs from the hypothesis that (i) merger of '*there*' into [Spec, CP] makes possible overt subject movement to [Spec, TP], and that (ii) '*there*'-insertion is equal to movement/attraction in cost.

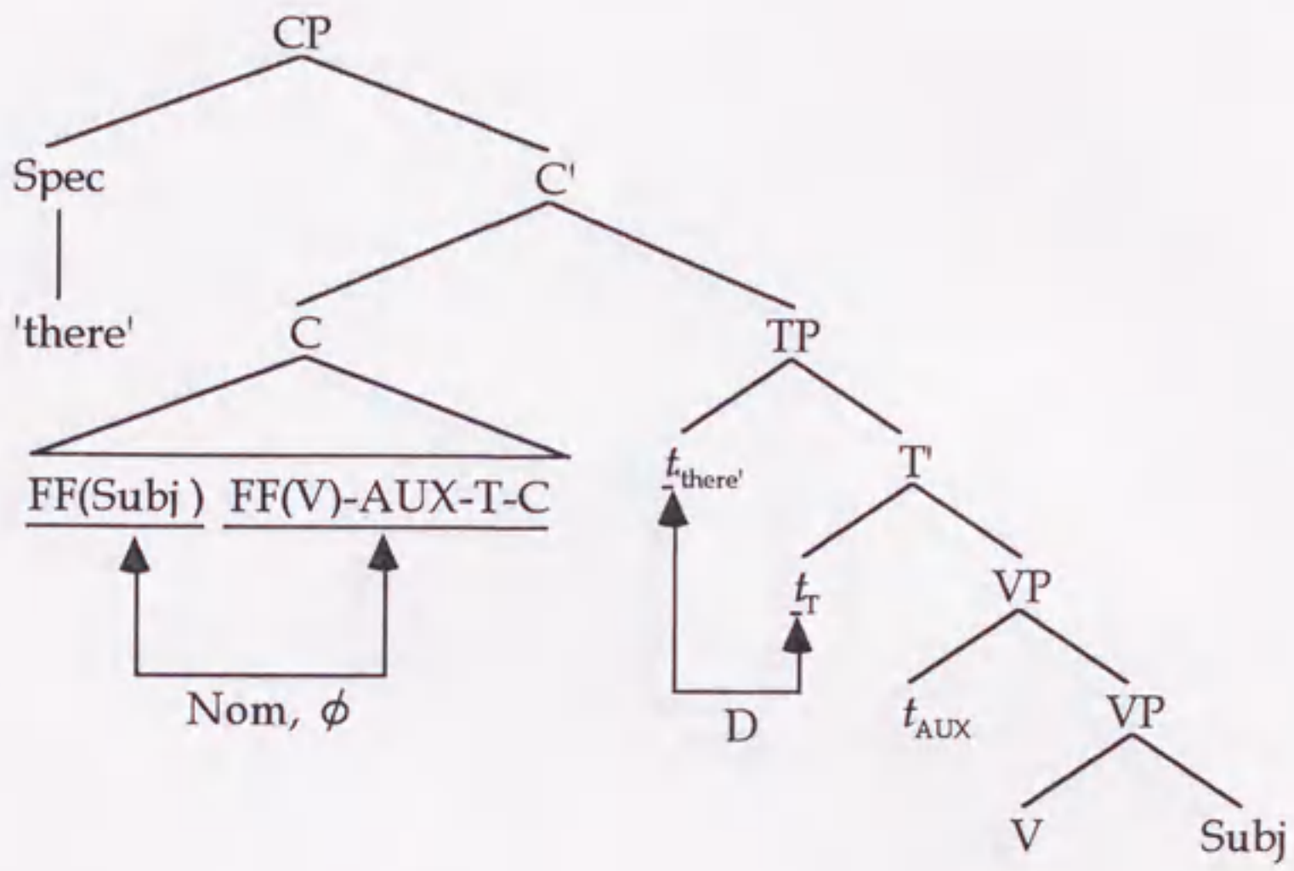
2.3.2.2. UECs and PECs with Auxiliary Verbs

On the basis of the above theoretical assumptions, let us consider the derivation of UECs and PECs with auxiliary verbs. Suppose that the derivation has reached the stage of (39), where T is introduced by *Merge* with the strong categorial D feature.

(39) $[_{TP}\ T\ [_{VP}\ AUX\ [_{VP}\ V\ Subj\ ]]]$

Assuming that lexical insertion into a non-θ-position is equal to *Move/Attract* in cost, we have two options to eliminate the strong D feature of T in ECs: '*there*'-insertion and overt subject raising. If we select the former operation, the situation is as in (40).

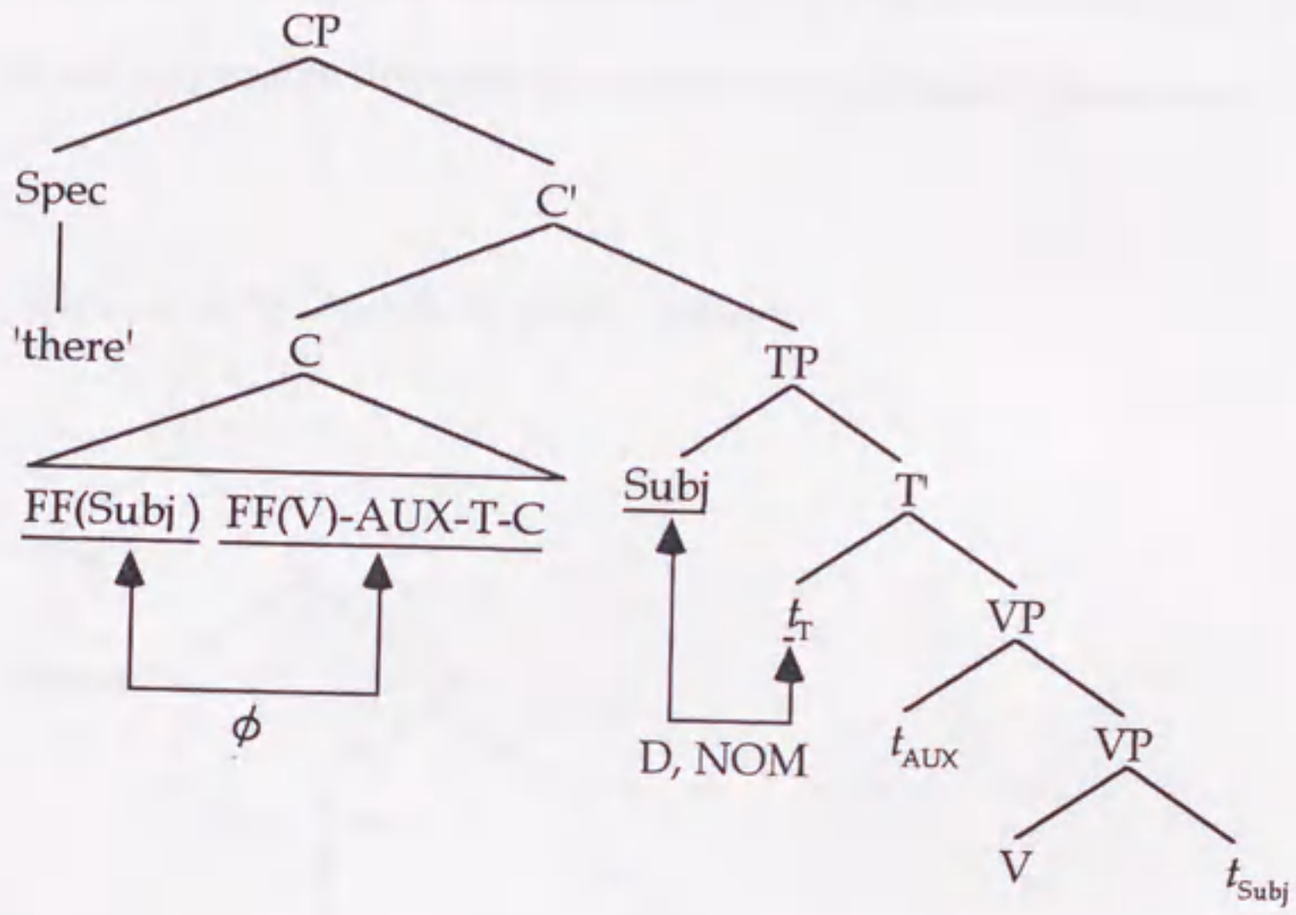
(40) UECs and PECs with an *in-situ* subject



Here, '*there*' is inserted into [Spec, TP] and then raised to [Spec, CP] for V2 requirement. '*There*'-insertion into [Spec, TP] results in checking of the strong D feature of T, because it serves to satisfy the EPP due to its categorial status. Therefore, the subject has no motivation to move overtly to [Spec, TP], and hence its FFs undergo covert movement onto the complex [FF(V)-AUX-T-C] to have the nominative Case feature and ϕ-features checked. As a consequence, the derivation converges with all −Interpretable features properly checked off.

(41) below shows another derivation of UECs and PECs with auxiliary verbs in which the EPP is satisfied by virtue of overt subject raising, rather than '*there*'-insertion.

(41) UECs and PECs with a raised subject

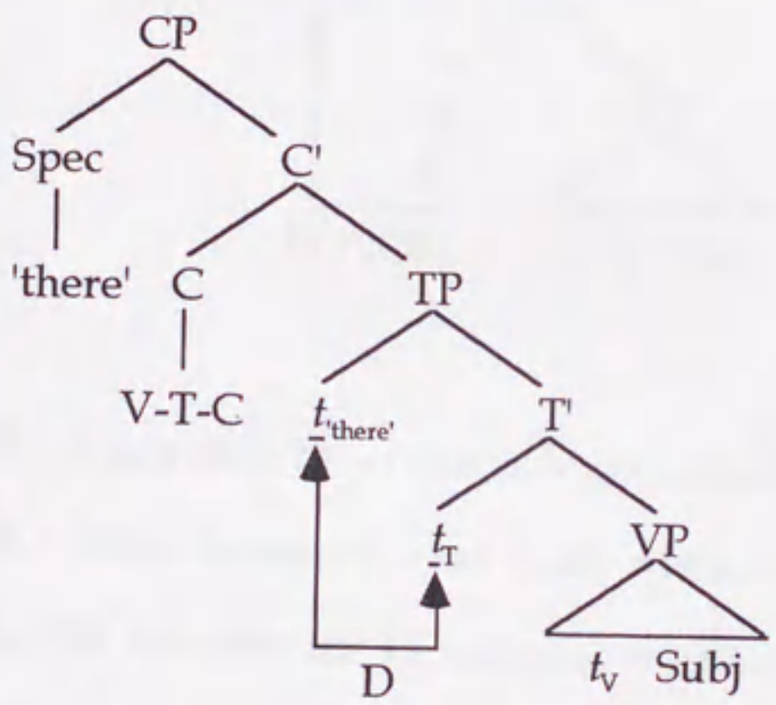


What is crucial here is that '*there*'-insertion into [Spec, CP] enables the subject to undergo overt movement to [Spec, TP]. This subject raising results in the simultaneous deletion of the strong D feature and the nominative Case feature of T. As for ϕ-features of the subject, they further move up to C and enter into a checking relation with the complex [FF(V)-AUX-T-C] which is formed by covert V-to-C raising. As a consequence, the derivation converges without violating any constraints on *Attract/Move*, and we straightforwardly obtain the otherwise problematic order: *there*-AUX-Subj-V.

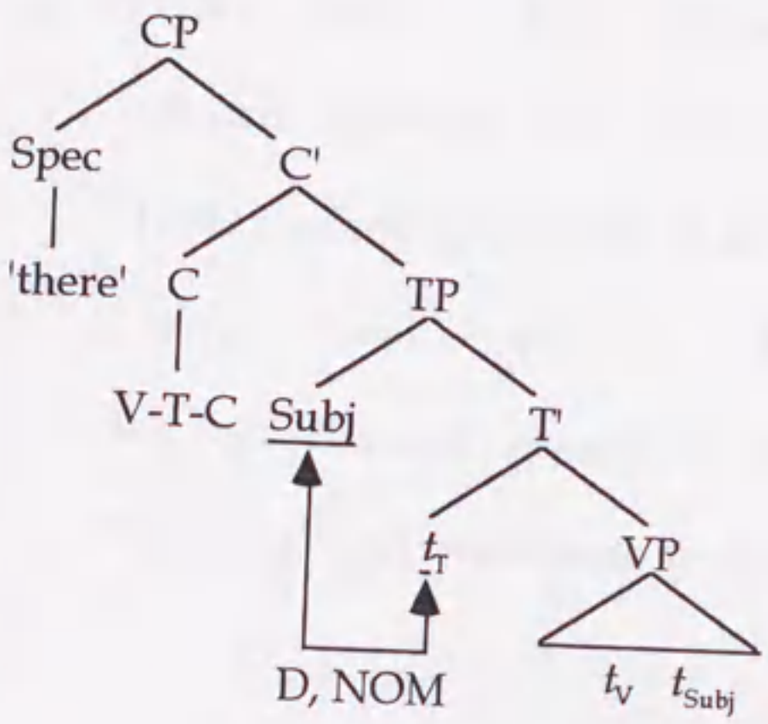
2.3.2.3. UECs and PECs without Auxiliary Verbs: Vacous Movement?

Now, how about the derivation of UECs and PECs without auxiliary verbs? Under our approach, the derivation proceeds in either of two ways, (42) or (43).

(42) UECs and PECs with an *in-situ* subject



(43) UECs and PECs with a raised subject



The EPP is satisfied by virtue of '*there*'-insertion in (42) and overt subject raising in (43). Note, however, that both derivations yield the '*there*'-V-Subj order. That is, (43) involves the PF vacuous overt subject movement. One might argue that such movement should be prohibited in terms of economy consideration, given that phonologically vacuous movement operations should not be applied unless it has some effects on interpretation. Now, the question is; does the relevant movement have any effects on interpretation of the constructions?

Bobaljik and Jonas (1996), Bobaljik and Thráinsson (1998), Sigurðsson (2000) and Vangsnes (1995, 2000) suggest that the distribution of subjects has nothing to do with feature checking, but rather is closely related to information structure. Let us consider (44).

(44) *Icelandic*

a. Í fyrra luku **þrír stúdentar** víst öllum prófunum.
last year finished three students apparently all the exams
'Three students apparently finished all the exams last year.'

b. Í fyrra luku víst **þrír stúdentar** öllum prófunum.
last year finished apparently three students all the exams
'Last year, there were three students who finished all the exams.'

(Bobaljik and Thráinsson (1998: 57))

The contrast in (44) strongly suggests that there are at least two subject positions available to indefinite subjects and that each position correlates with a different reading: generic or specific reading in (44a), and with existential reading in (44b). Vangsnes (1995) further notes that bare indefinites and definites can occur in the lower subject position only if they receive a contrastive reading. Based on these facts, I suggest that overt subject movement in (43) might have some semantic effect and thus satisfy economy conditions, though phonologically vacuous.

To sum up the discussion above, it has been argued that the optionality of overt subject movement naturally follows if we hypothesize that (i) merger of '*there*' is equal to subject raising in cost, and that (ii) '*there*' is inserted into either of two positions, [Spec, TP] or [Spec, CP]. The direct '*there*'-insertion into [Spec, CP] is a necessary condition on overt subject movement to [Spec, TP].

The claim that '*there*'-insertion is equal to overt subject movement in cost is also theoretically motivated. As we saw far, movement operations are always induced by some strong feature of a head H, that is, it necessarily involves feature checking. Hence, it will follow that overt subject movement involves a sequence of three operations: *Copy, Merge* and *Checking*. Now, how about '*there*'-insertion? As described in 1.3.3, lexical insertion can be classified into two groups: lexical insertion into a θ-position and lexical insertion into a non-θ-position. Needless to say, '*there*'-insertion belongs to the latter case. It is assumed in this thesis that lexical insertion into a non-θ-position is motivated by feature checking and hence involves an extra operation *Checking* in addition to *Copy* and *Merge*. Therefore, we can conclude that overt subject raising and '*there*'-insertion involve the same steps, *Copy* + *Merge* + *Checking*, and thus are equal in cost.

2.3.3. *TECs*

2.3.3.1. Previous Analyses

Let us next turn to the issue (I); how does overt subject raising affect the acceptability of TECs?

Various kinds of study have been put forth about the constructions, and it is generally argued that TECs might correlate with a range of other phenomena, including object shift and V-to-I movement (Alexiadou and Anagnostopoulou (1998), Bobaljik (1995), Bobaljik and Jonas (1996), Bobaljik and Thráinsson (1998), Bures (1992), Chomsky (1995), Christensen (1991), Jonas (1996), Koster and Zwart

(2000), Koeneman (2000), Koeneman and Neeleman (1998), Ndayiragije (1999), Thráinsson (1996), Vikner (1995), Zwart (1992, 1997), inter alia). For example, Bures (1992) observes a correlation between TECs and object shift, as in (45).

(45) The languages that allow object shift of full NPs are the same ones that have transitive existential sentences. (Bures (1992: 15))

Building on this generalization, Bobaljik and Jonas (1996), Bures (1992) and Zwart (1992) analyze TECs in terms of the availability of [Spec, TP]; the languages with TECs have two subject position outside VP, [Spec, AgrSP] and [Spec, TP], whereas [Spec, TP] is not available for subjects in the languages without TECs.

However, there are a number of empirical and theoretical problems with the observation in (45). First, as Bobaljik and Jonas (1996: fn. 20) themself point out, one dialect of Faroese (Faroese I in Table 1) allows TECs but not object shift of full nominals, and Afrikaans allows object shift of full nominals but not TECs (see Bobaljik (1995)). Second, the Mainland Scandinavian languages usually exclude TECs, but have object shift of weak pronouns. It is problematic whether pronoun shift is analyzed as A-movement or cliticization. If it is A-movement justlike full DP object shift, then Bures' (1992) observation would predict, contrary to fact, that TECs were attested in Mainland Scandinavian languages like Swedish and Danish. Third, their [Spec, TP] analysis does not explain why [Spec, TP] is available in some languages, but not in the other languages. It is obvious from these empirical and theoretical problems that the generalization in (45) cannot

satisfactorily capture the distribution of TECs.

Alternatively, Chomsky (1995) proposes a different analysis of TECs by assuming multiple specifiers. Arguing that AgrP should be dispensed with on conceptual grounds, he proposes that both '*there*' and the subject appear in the multiple specifier positions inside TP, as schematized in (46).

(46) $[_{TP}$ Það $[_{T'}$ margir Íslendingar $[_{T'}$ byggðu $[_{VP}$ hús í Þórshöfn]]]]
there many Icelanders built houses in Tórshavn

Chomsky claims that T is assumed to have a parameterized property that allows the D feature to escape deletion after checking. Therefore, if T is set with such property in a given language, '*there*' can be merged into the outer specifier of TP even after T's strong D feature attracts the subject from [Spec, *v*P] to the inner specifier of TP. He further suggests that the observed '*there*'-V-Subj order results from some phonological operation to satisfy V2 property, though the '*there*'-Subj-V order in (46) is maintained throughout the computation which proceeds to LF (see note 1). However, we have a simple question; why is the D feature of T so parametrized? In addition, this analysis fails to explain the word order contrast between TECs with auxiliary verbs and those without auxiliaries, which we will see in the next section. Thus, there are a number of serious problems even in Chomsky's approach.

2.3.3.2. TECs and Overt Subject Movement

In this section, I will provide an alternative account of TECs by analyzing them in connection with overt subject movement out of vP. This analysis is originally based on Bobaljik and Jonas' (1996) claim that the subjects are always raised to [Spec, TP] in the constructions.[10] With this in mind, we will start by making a closer look at the distribution of the subjects in TECs, and reveal that the relevant movement is applied optionally in some cases, but obligatorily in the other cases.

Let us first examine the position of the subjects in TECs with auxiliary verbs. The claim that the subjects are raised outside vP is usually based on certain facts about the placement of the subjects relative to sentential adverbs, VP-adverbs and the shifted objects. (47) below shows that the subjects must occur to the left side of the VP-adverb *aldrei* 'never' in these TECs.[11]

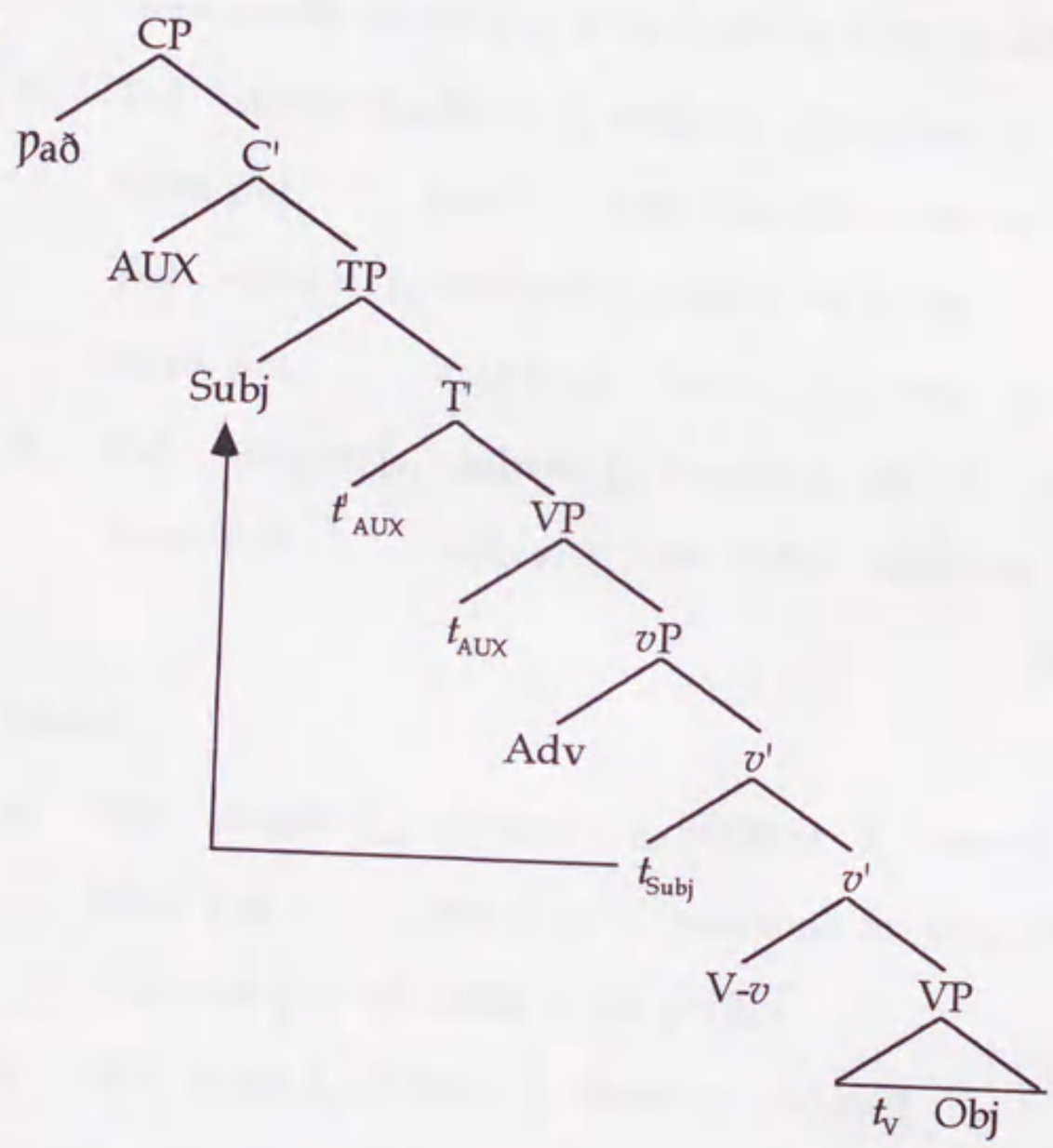
(47) *Icelandic*

a. Það hafa [$_{TP}$ **neinir stúdentar** [$_{vP}$ aldrei stungu smjörinu í
there have any students never put the butter in
vasann]]
the pocket

b. *Það hafa [$_{vP}$ aldrei **neinir stúdentar** stungu smjörinu í
there have never any students put the butter in
vasann]
the pocket

Given that Icelandic exhibits V2 effect and that VP adverbs mark the left hedge of *v*P, we claim that the structure of (47a) is as in (48).[12]

(48)



The subject undergoes overt movement to [Spec, TP] passing over the VP adverb merged into the outer specifier of *v*P.

Now, how about TECs without auxiliary verbs? Consider the following Icelandic examples.

(49) *Icelandic*

a. Það stingur [$_{vP}$ smjörinu [$_{v'}$ aldrei **einhver** í vasann]]
there put the butter never someone in the pocket
'Some students never put the butter in their pockets.'

b. Það stingur [$_{vP}$ aldrei [$_{v'}$ **einhver** smjörinu í vasann]]
there put never someone the butter in the pocket

c. Það stingur [$_{TP}$ **einhver** [$_{vP}$ aldrei smjörinu í vasann]]
there put someone never the butter in the pocket

d. Það stingur [$_{TP}$ **einhver** [$_{vP}$ smjörinu aldrei í vasann]]
there put someone the butter never in the pocket

(a. Jonas (1996: 38))

(50) *Icelandic*

a. Það stingur [$_{vP}$ smjörinu [$_{v'}$ **einhver** í vasann]]
there put the butter someone in the pocket
'Someone put the butter in the pocket.'

b. Það sagði [$_{vP}$ Sveini [$_{v'}$ **einhver** sögu]]
there told Sveinn somebody a story
'Somebody told Sveinn a story,'

(Jonas and Bobaljik (1993: 93))

(49a, b) and (50) are the apparent counterexamples to Bobaljik and Jonas' (1996) observation that the subjects obligatorily undergo overt movement to [Spec, TP] in TECs; the subjects follow the VP adverb *aldrei* 'never' in (49a, b) and the

shifted objects in (50), respectively. Given that VP adverbs and the shifted objects are located inside vP, it will follow that the subjects remain within vP in these sentences. In (49c, d), on the other hand, the subjects move outside vP and precedes the VP adverb and the shifted object, as roughly illustrated in (51).

(51) a. $[_{CP}$ Það Vfn $[_{TP}$ **Subj** $[_{vP}$ VP adverb $[_{v'}$ t_{Subj} $[_{v'}$ t_v Obj PP]]]]]

b. $[_{CP}$ Það Vfn $[_{TP}$ **Subj** $[_{vP}$ Obj $[_{v'}$ VP adverb $[_{v'}$ t_{Subj} $[_{v'}$ t_v t_{Obj} PP]]]]]]

One might argue, however, that the structures of (49c, d) could be (52) in which the subject is merged into the outer specifier of vP.

(52) a. $[_{CP}$ Það Vfn $[_{vP}$ **Subj** $[_{v'}$ VP adverb $[_{v'}$ t_v Obj PP]]]]

b. $[_{CP}$ Það Vfn $[_{vP}$ **Subj** $[_{v'}$ Obj $[_{v'}$ VP adverb $[_{v'}$ t_v t_{Obj} PP]]]]]

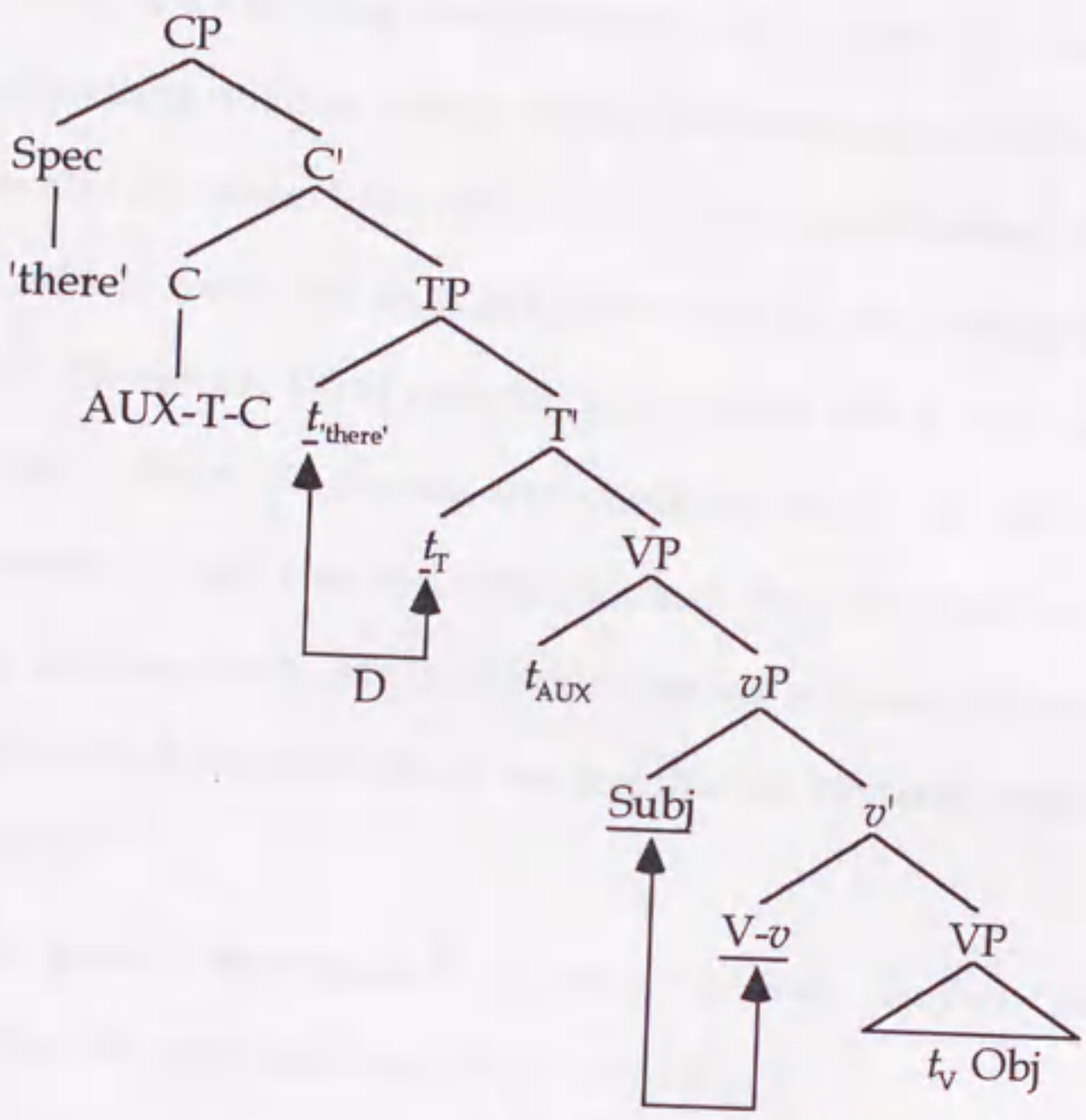
It is controversial that object shift precedes merger of a subject or not. Note, however, that the former operation involves feature checking while the latter does not; object shift is induced by a strong D feature of v whereas lexical insertion into a θ-position is purely motivated by θ-marking. Under our analysis, merger of a subject into [Spec, vP] can be simply defined as a sequence of *Copy* plus *Merge*. On the other hand, object shift obligatorily involves an extra operation *Checking* in addition to *Move/Attract* (= *Copy* + *Merge*). Therefore,

comparing lexical insertion into a θ-position with object shift in terms of the number of their subcomponents, we conclude that merger of a subject must be applied prior to object shift in accordance with economy conditions since the former is less costly than the latter. Thus, the structures of (49c, d) should be (51) with overt subject raising.[13]

2.3.3.3. Why Obligatory? Why Optional?

Based on the observation above, one question will immediately arise; why is overt subject raising obligatory in TECs with auxiliary verbs, but optional in TECs without auxiliary verbs? What blocks the subject from raising to [Spec, TP] in TECs containing auxiliary verbs? An important point here is whether the subject keeps a local relation with V at LF. Given that '*there*'-insertion is equal to subject movement in cost, the derivation of TECs containing auxiliary verbs proceeds in the following two ways. The structure in (53) shows the derivation where the EPP is satisfied by '*there*'-insertion.

(53) TECs with an *in-situ* subject



Feature Mismatch ⇒ *Crash*

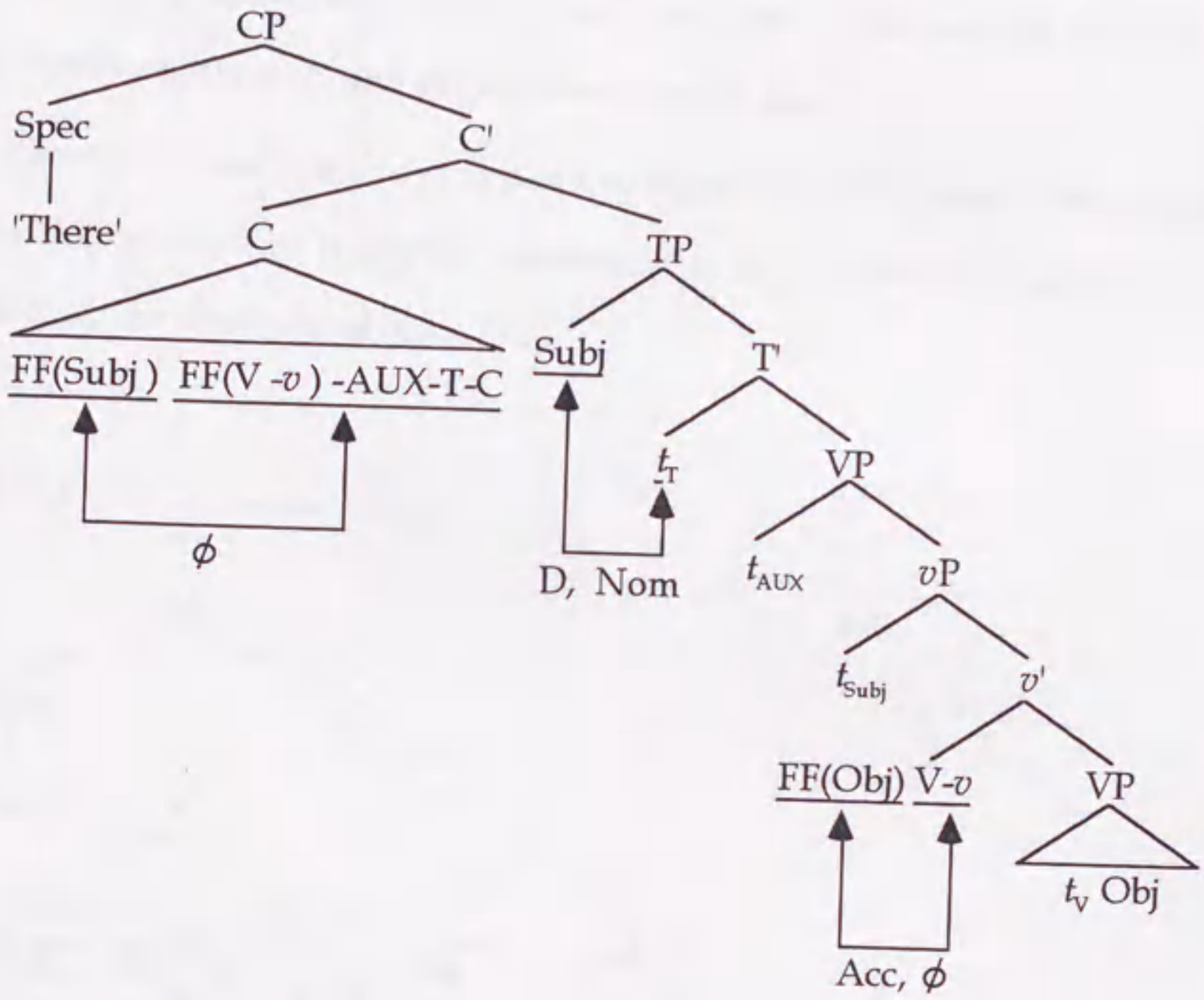
The subject has no motivation for overt raising since T does not have any strong features after *there*-insertion. Thus, it remains in [Spec, vP] still bearing its FFs in overt syntax. At this point of the derivation, there occur no problems which will lead the derivation to crash.

Now, how about the derivation at LF? Assuming that LF movement is applied cyclically, the first step at LF is feature checking of [V-v]. It must enter into a checking relation with the closest DP to have its −Interpretable Case feature and ϕ-features checked. As described in 1.3.2.1, I hypothesis with Ura

(2000) that *Checking* is an independent syntactic operation and that, when a head H is in a checking configuration with some XP, H automatically enters into a checking relation with it without attracting some other features. Note that [V-*v*] is still in a spec-head relation with the subject after Spell-Out in (53). The object, which would be an appropriate checkee, is outside the minimal domain of [V-*v*]. Therefore, [V-*v*] automatically enters into a checking relation with the FFs of the subject. However, this checking results in feature mismatch; [V-*v*], an accusative Case checker, cannot check the nominative Case feature of the subject. Consequently, the derivation crashes because the configuration contains the mismatched features which are illegitimate syntactic objects at LF (Chomsky (1995: 309)).[14]

The second derivation is illustrated in (54). In this case, the EPP of T is satisfied by the application of subject raising.

(54) TECs with a raised subject

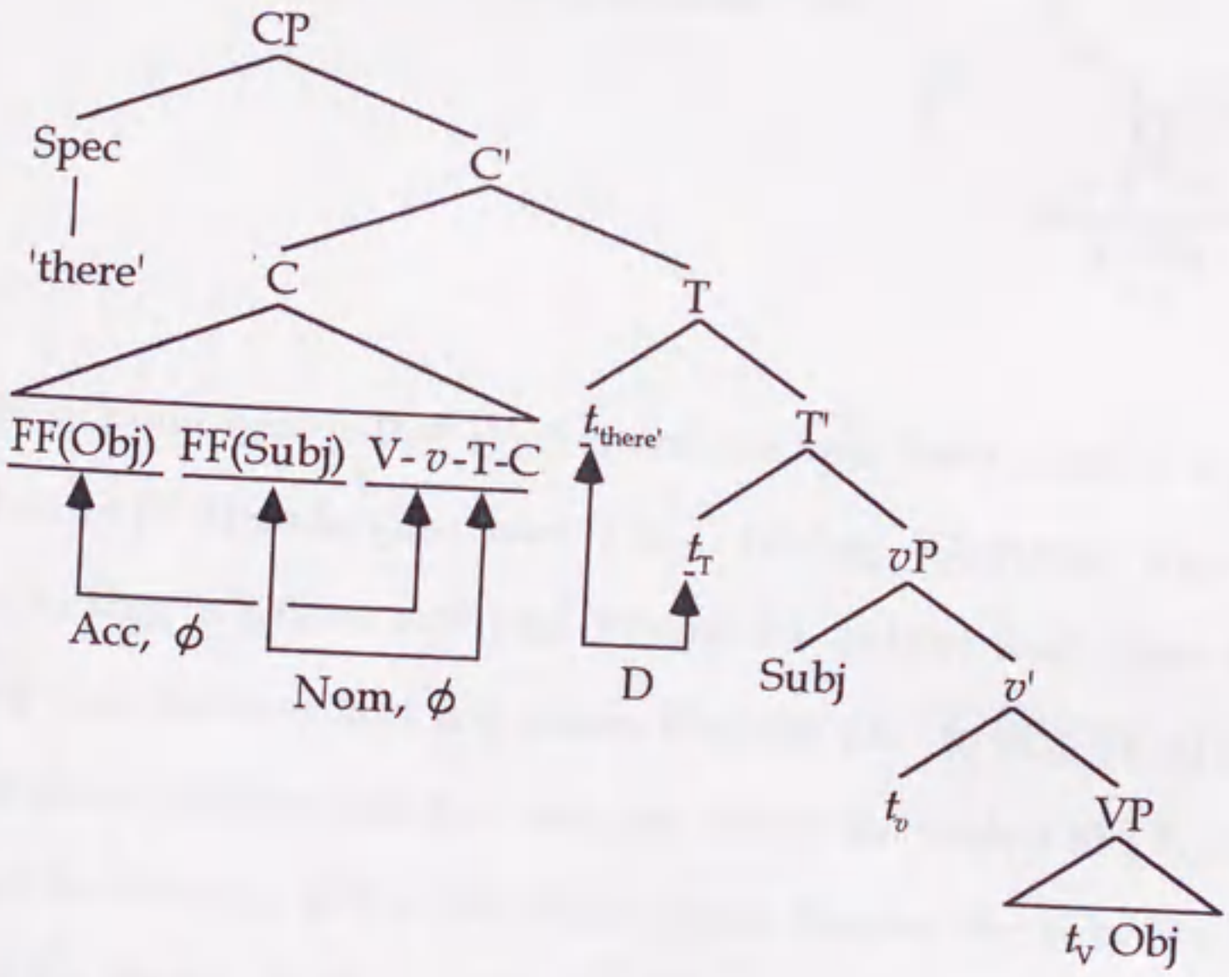


The derivation proceeds as follows. First, the subject is attracted by T due to the strong D feature of T. In this checking relation, it simultaneously checks the D feature and the nominative Case feature against T. Second, *there* is inserted into [Spec, CP] to eliminate the strong EPP feature of predicational C, thereby deriving V2 word order. Third, the FFs of the object is covertly raised to enter into a checking relation with the verbal complex [V-*v*]. In this case, the object is in the closest position to the target [V-*v*]; the subject overtly moves out of *v*P pied-piping its all FFs, and hence no unchecked FFs intervene between [V-*v*]

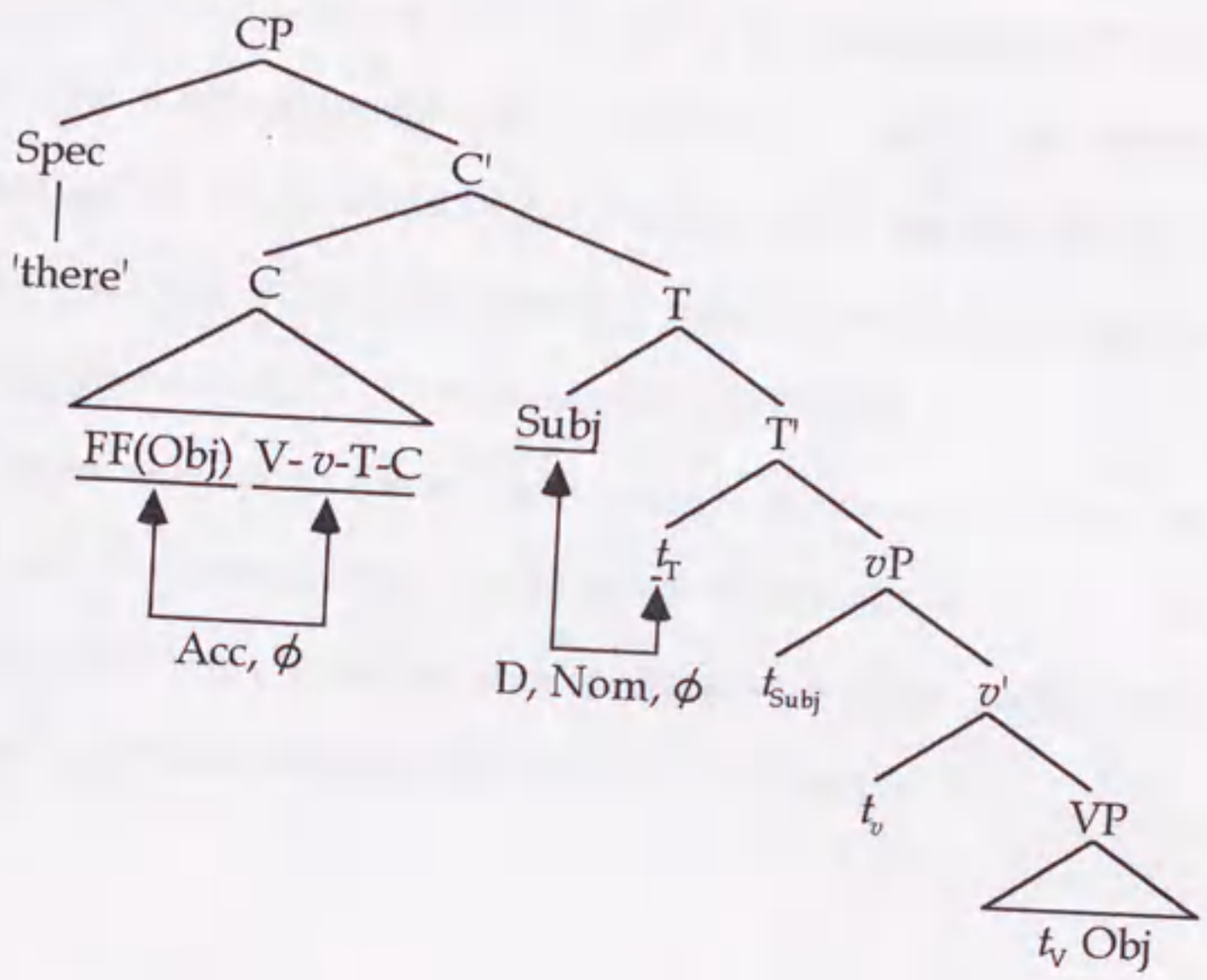
and the object. Finally, ϕ-features of the subject are checked against those of [V-*v*] which is adjoined to C. As a consequence, all −Interpretable features are satisfactorily checked off and the derivation converges.

The current analysis also provides a straightforward account of the question why subject movement is applied optionally in TECs without auxiliaries. (55) and (56) are the structure of these ECs.

(55) TECs with an *in-situ* subject



(56) TECs with a raised subject



A crucial point here is that [V-*v*] is not in a spec-head relation with the subject at LF since [V-*v*] undergoes overt T-to-C raising. Therefore, it cyclically enters into checking relations with the FFs of the subject and those of the object, having Case features and ϕ-features checked off. In (55), [V-*v*] adjoined to C enters into a checking relation with the FFs of the subject at LF. This checking is prior to attraction of the FFs of the object, because the subject is closer to the C than the object. In (56), on the other hand, the subject satisfies the D feature of T, and at the same time it enters into a checking relation with the nominative Case feature and ϕ-features of T. As for the object, its FFs are covertly attracted by [V-*v*] in C for the accusative Case feature and ϕ-features checking.

Summarizing this section: I have demonstrated in this section that the

analysis proposed in 2.3.2 properly captures the fact that overt subject raising is optional in TECs without auxiliary verbs, but obligatory in TECs with auxiliaries. When the constructions involve overt V-to-C raising, the derivation converges regardless of the position of the subject since the FFs of the subject and the object cyclically enter into checking relations with their appropriate checkers overtly raised onto C. In contrast, the derivation of TECs with auxiliary verbs converges only when the subject undergo overt raising out of *v*P. If the subject remaines *in-situ* and keeps a spec-head relation with [V-*v*] at LF, the FFs of the subject automatically enters into a checking relation with [V-v]; consequently, the derivation crashes because of feature mismatch.

2.4. Languages without TECs

2.4.1. 'There' *as a Syntactic Subject*

It has been argued in section 2.3 that the availability of [Spec, CP] for *'there'*-insertion is responsible for overt subject raising to [Spec, TP]. If this analysis is on the right track, we would expect that ECs with a raised subject and TECs were attested in the Mainland Scandinavian languages because these languages also display V2 word order in main clauses, as shown in (57).

(57) *Swedish*

Som utrikesminister förbjöd han kommunister att resa in i
as foreign minister forbade he communists to travel into
landet.
the country (Bobaljik and Thráinsson (1998: 47))

Unfortunately, however, this is not the case. The following sentences indicate that TECs and UECs/PECs with a raised subject are completely excluded in these languages.

TECs

(58) *Swedish*

*Det har några gäster brutit radioen.
There have some guests broken the radio (Jonas (1996: 60))

UECs

(59) *Swedish*

a. Det har kommit tre studenter.
there have come three students

b. *Det har tre studenter kommit.
there have three students come

PECs

(60) *Swedish*

a. *Det har många böcker blivit lästa.
there have many books been read
'Many books have been read.'

b. Det har blivit lästa många böcker
there have been read many books (a. Holmberg (2000: 45))

This poses the question why the acceptability of TECs and ECs with a raised subject varies among V2 languages. What prevents convergence of these constructions in the Mainland Scandinavian languages?

Christensen (1991), Maling (1980), Vikner (1995) and Holmberg (2000) point out that the Mainland Scandinavian languages are different from Icelandic and German in that '*there*' functions as a syntactic subject rather than an expletive topic. Let us compare Swedish (61) with Icelandic (62).

(61) *Swedish*

Idag har det kommit många lingvister hit.
today have there come many linguists here

(Koeneman (2000: 187))

(62) *Icelandic*

Í dag hafa (*það) komið málvísindamenn hingað.
today has there come linguists here

(Christensen (1991: 141))

(62) indicates that Icelandic *það* 'there' is in a complementary distribution with a topicalized element. On the other hand, Swedich *det* can cooccur with a topic XP which we assume is located in [Spec, CP]. This contrast strongly suggests that *det* does not have the same syntactic status as Icelandic *það*.

Let us next consider the following sentences.

(63) *Swedish*

a. Fanns det papper, bläck och pennor på bordet?
Were there papers, ink and pens on the table?

b. Finns det mös i badkaret?
Are there mice in the bathtub

(64) *Icelandic*

a. Voru (*það) blöð, blek, og pennar á borðinnu?
Were there papers, ink and pens on the table

b. Eru (*það) mys í baðkerinu?

Are there mice in the bathtub

(a. Breivik (1983: 373), b. Thráinsson (1979: 478))

Swedich *det*, unlike Icelandic *það*, can undergo subject-auxiliary inversion in interrogative sentences. Given that an auxiliary verb moves up to C passing over a subject in [Spec, TP] in *yes-no* questions, it follows that the surface position of *det* is the canonical subject position [Spec, TP], rather than [Spec, CP].

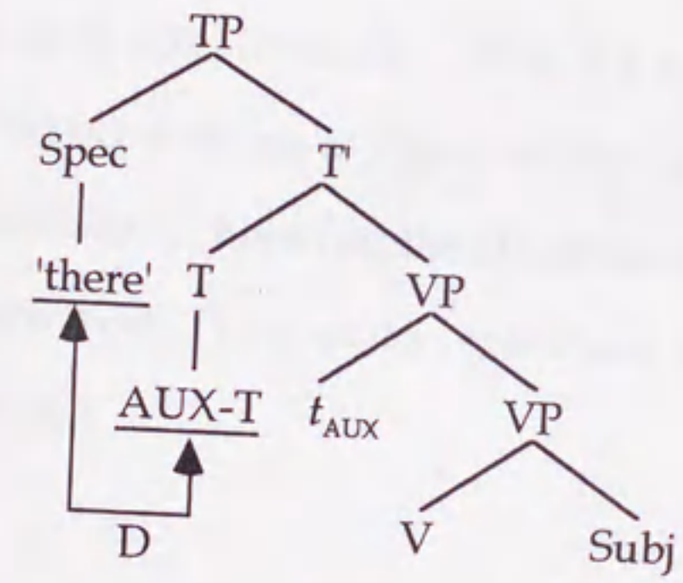
Based on these observations, I agree with Christensen (1991) and Holmberg (2000) in that '*there*' in the Mainland Scandinavian languages functions as a syntactic subject just like English *there*, rather than an expletive topic. It is problematic, however, how its subjecthood can be expressed under the current feature-based theory. Holmberg (2000) argues that it is merged into the canonical subject position [Spec, TP] for the EPP and then moves up to [Spec, CP] for V2 effect. However, this fails to account for its behavior as a syntactic subject observed above. Therefore, I tentatively assume that, unlike the expletive topic '*there*' in the other class of V2 languages, the syntactic subject '*there*' is intrinsically incapable of checking the strong EPP feature of predicational C. It is obligatorily merged into [Spec, TP] for the requirement of the EPP and stays there throughout the derivation.

2.4.2. *UECs, PECs and TECs*

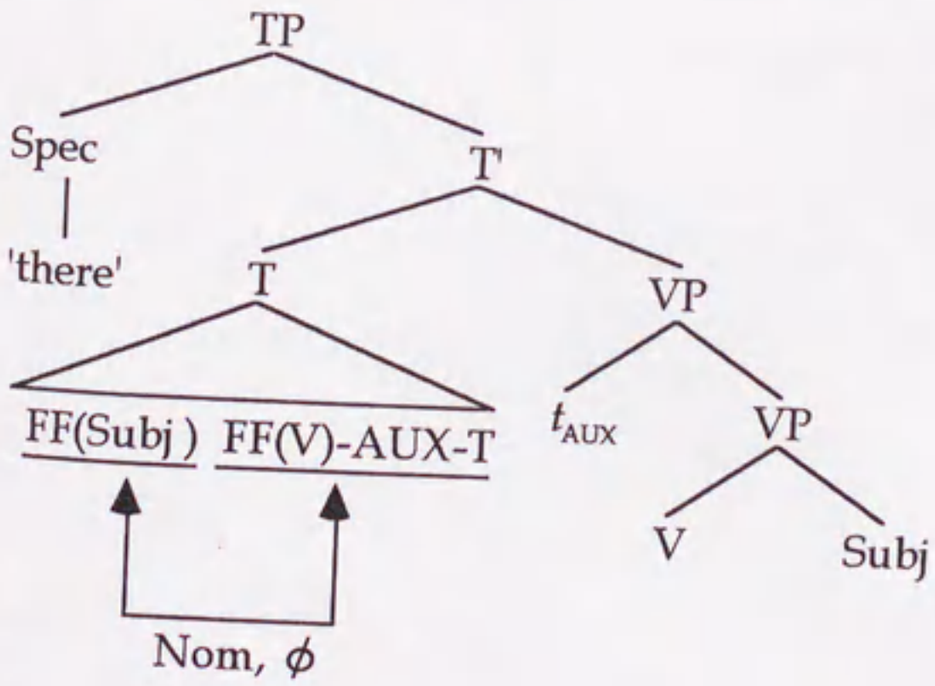
Given the discussion above, we claim that the derivation of UECs and PECs proceed as in (65).

(65) UECs and PECs with an *in-situ* subject

[Overt]



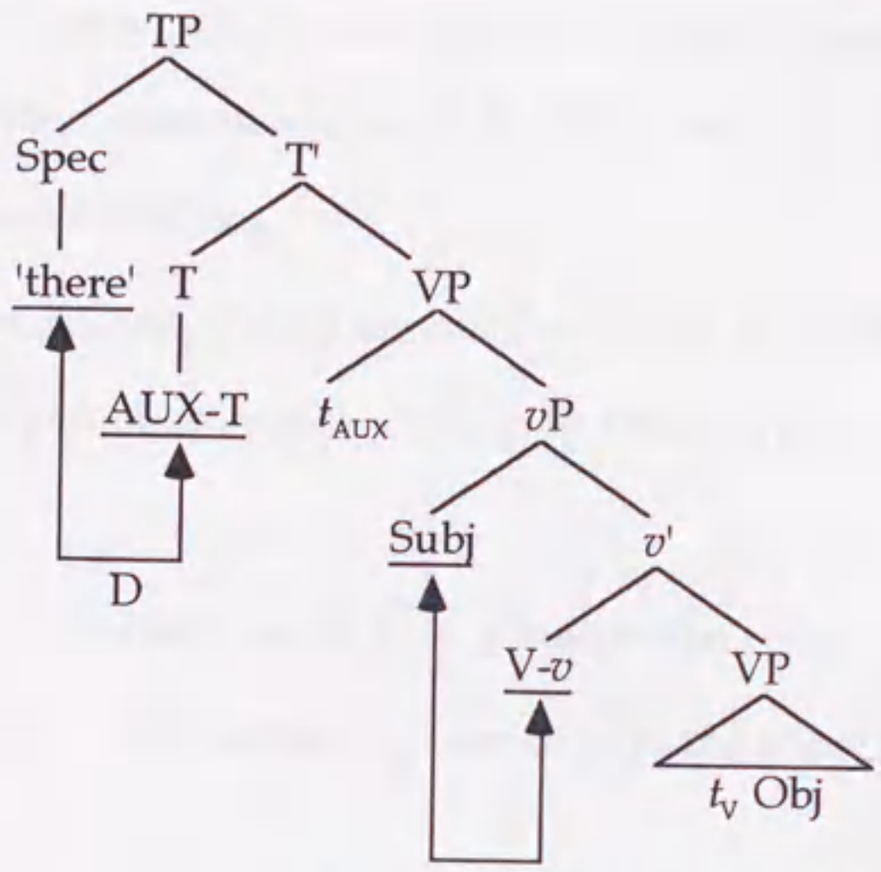
[LF]



The EPP of T is satisfied by '*there*'. Accordingly, feature checking of the subject takes place at LF; the FFs of the subject is covertly attracted by the [FF(V)-AUX-T] complex against which it checks the nominative Case feature and ϕ-features. In this way, the obligatory '*there*'-insertion into [Spec, TP] always prevents the subject from moving up to [Spec, TP]. Hence, we cannot derive the '*there*'-AUX-Subj-V order in these languages.

As for TECs, the situation is the same as TECs with an *in-situ* subject in languages like Icelandic. With the obligatory '*there*'-insertion into [Spec, TP], the subject remains in [Spec, *v*P] by LF since T has its strong D feature checked against '*there*'. Therefore, the FFs of the subject automatically enters into a checking relation with [V-*v*] under spec-head relation at LF, which results in feature mismatch.

(66) TECs



Feature Mismatch ⇒ *Crash*

Consequently, the derivation crashes because the configuration contains the mismatched features which are illegitimate syntactic objects at LF.

To sum up the discussion, we argued that the parametric difference concerning TECs and ECs with a raised subject can be explained in terms of the syntactic properties of '*there*'. In languages like Icelandic, there are two positions available for '*there*'-insertion: [Spec, TP] and [Spec, CP]. Hence, the subject can be raised to the *v*P-external [Spec, TP] position when '*there*' is directly inserted to [Spec, CP]. In languages like Swedish and Danish, on the contrary, '*there*' functions as the syntactic subject and is obligatorily merged into the canonical subject position [Spec, TP], which prevents overt subject raising in ECs.

2.5. *Merge* vs. *Move*

Finally, this section presents a piece of empirical evidence for the claim that '*there*'-insertion is equal to *Move / Attract* in cost, a crucial assumption in the proposed analysis.

Chomsky (1995) argues that *Merge* is costless and hence is not subject to principles of economy. Assuming this, he rules out (67b) as follows.

(67) a. There seems to be a man in the room.

b. *There seems a man to be in the room.

Suppose that the derivation has reached the stage of (68) where the embedded T is merged at the root with the strong D feature.

(68) $[_{TP}$ to $[_{VP}$ be a man in the room]]

Given that *Merge* is costless, the strong D feature of T is eliminated by the costless *there*-insertion, rather than overt subject raising. At a later stage in the derivation, *there* undergoes further movement to the matrix [Spec, TP] for the requirement of the EPP. This yields the structure in (69).

(69) $[_{TP}$ There$_i$ seems $[_{TP}$ t_i to $[_{VP}$ be a man in the room]]]

Chomsky thus claims that economy considerations favor (67a) over (67b).

However, there are some cases where *there*-insertion does not block subject raising. For example, let us consider the following examples from Icelandic.

(70) *Icelandic*

a. [$_{CP}$ Það mundu [$_{TP}$ **margir menn** virðast [$_{TP}$ hafa verið hér]]]
there would many men seem have.INF been here
'There would seem to have been many men here.'

b. [$_{CP}$ Það mundu [$_{TP}$ virðast [$_{TP}$ **margir menn** hafa verið hér]]]
there would seem many men have.INF been here

c. [$_{CP}$ Það mundu [$_{TP}$ virðast [$_{TP}$ hafa verið **margir menn** hér]]]
there would seem have.INF been many men here

(a, b. Jonas (1996: 79))

(70) shows that there are potentially three positions for the subject: the matrix [Spec, TP], the embedded [Spec, TP] and its original position. Under Chomsky's (1995) analysis, we can predict the order in (70c); the costless *það*-insertion prevents the subject from raising to the embedded [Spec, TP]. However, how about (70a) and (70b)? Obviously, *það*-insertion does not block subject raising in these cases.

This problem can be overcome if we assume that the cost of '*there*'-insertion is equal to that of overt subject movement. (71) is an intermediate structure of

(70).

(71) [$_{TP}$ hafa [$_{VP}$ verið margir menn hér]]

have.INF been many men here

Given that '*there*'-insertion is equal to *Move/Attract* in cost, we have two options to satisfy the EPP of the embedded T: *það*-insertion and subject movement. With the latter operation, we can successfully derive (70a) and (70b). The derivation of (70a) proceeds as in (72).

(72) a. [$_{TP}$ margir menn$_i$ hafa-T [$_{VP}$ verið t_i hér]]

D

b. [$_{TP}$ margir menn$_i$ virðast-T [$_{TP}$ t_i' hafa [$_{VP}$ verið t_i hér]]]

D

c. [$_{CP}$ það mund-C [$_{TP}$ margir menn$_i$ virðast [$_{TP}$ t_i hafa [$_{VP}$ verið t_i hér]]]]

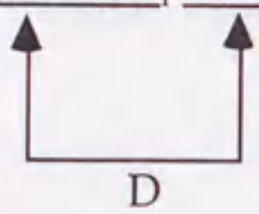
EPP

First, the subject *margir menn* 'many men' is attracted to [Spec, TP] due to the strong D feature of T in (72a). Second, the subject further moves up to the

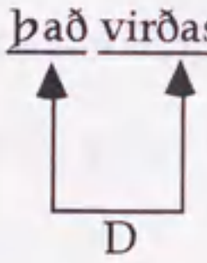
matrix [Spec, TP] for the EPP in (72b). Finally, *það* is inserted into the root [Spec, CP] for the requirement of V2 effect in (72c).[15]

(73) shows the derivation of (70b) where the embedded EPP and the matrix EPP are satisfied by virtue of subject raising and *það*-insertion, respectively. *Það* finally moves up to [Spec, CP] for V2 effect, resulting in the order in (70b).

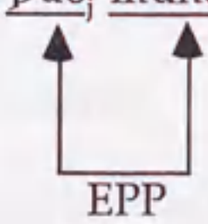
(73) a. $[_{TP}$ <u>margir menn$_i$</u> <u>hafa-T</u> $[_{VP}$ verið t_i hér]]



b. $[_{TP}$ <u>það</u> <u>virðast-T</u> $[_{TP}$ margir menn$_i$ hafa $[_{VP}$ verið t_i hér]]]



b. $[_{CP}$ <u>það$_j$</u> <u>mund-C</u> $[_{TP}$ t_j virðast $[_{TP}$ margir menn$_i$ hafa $[_{VP}$ verið t_i hér]]]]



Given the above discussion, it seems that our assumption concerning the cost of *Merge* and *Move/ Attract* is empirically preferable to Chomsky's (1995).

The proposed analysis, however, poses two questions. First, how should we explain the ungrammaticality of (74)? Second, why does the acceptability of (74) vary among languages?

(74) *There seems a man to be in the room.

(75) *Icelandic*

a. [$_{CP}$ Það mund [$_{TP}$ **margir menn** virðast [$_{TP}$ hafa verið hér]]]
there would many men seem have.INF been here

b. [$_{CP}$ Það mund [$_{TP}$ virðast [$_{TP}$ **margir menn** hafa verið hér]]
there would seem many men have.INF been here

We will return to these problems in section 3.5, arguing that this parametric difference between English and Icelandic can be naturally accounted for in terms of syntactic properties of English *there* and Icelandic *það*.

2.6. Conclusion

In this chapter, we have examined ECs from a comparative point of view, focusing on the following three issues. Firstly, we offered an explanation for the question how the optionality of overt subject raising in ECs should be captured within the minimalist framework. It has been argued that (i) '*there*' can be merged into either [Spec, CP] or [Spec, TP] in such languages as Icelandic and German, and that (ii) '*there*'-insertion, an instance of lexical insertion into a non-θ-position, is equal to *Move/Attract* in cost.

Secondly, we concentrate our attention on the correlation between overt

subject raising and TECs. As examined by Bobaljik and Jonas (1996), the subjects must move out of *v*P in TECs containing auxiliary verbs. However, our investigation of TECs revealed that the subjects may remain *in-situ* in TECs without auxiliary verbs. Based on these facts, this chapter provided a new account of TECs by proposing that it is crucial for convergence of TECs whether the subject is in a spec-head relation with [V-*v*] even at LF. If such local relation is established at LF, the subject automatically enters into a checking relation with an inappropriate checker [V-*v*]; consequently, the derivation crashes because of feature mismatch. If the constructions involve overt V-to-C raising or overt subject movement, the derivation converges since the FFs of the subject and the object cyclically enter into checking relations with their appropriate checkers.

Finally, we discussed the issue why the acceptability of TECs and ECs with a raised subject varies among languages. We answered to this question in terms of syntactic properties of '*there*'. In languages like Icelandic and German, '*there*' functions as the expletive topic and can be inserted into either [Spec, CP] or [Spec, TP]. Hence, the subject can be raised to [Spec, TP] when '*there*' is directly merged into [Spec, CP], deriving the '*there*'-AUX-Subj-V order. In languages like Swedish and Danish, on the other hand, '*there*' exhibits the subject-like behavior. Therefore, it is inserted in the canonical subject position [Spec, TP] and stays there throughout the derivation. This obligatory '*there*'-insertion into [Spec, TP] blocks overt subject raising in ECs.

Notes to Chapter 2

* Part of this chapter was presented at the 49th General Meeting of the English Literary Society of Japan, Chubu, held at Chukyo University on October 11, 1997, and at the 72nd General Meeting of the English Literary Society of Japan held at Rikkyo University on May 20-21, 2000, which were later published as Makita (1998, 2000c). I would like to thank Hirozo Nakano, Masachiyo Amano, Tomoyuki Tanaka, Takahiro Ono, Kazuhisa Ishikawa, Kozo Kato, Naoshi Nakagawa, Hiroyuki Nawata, Eiko Mizuno, Masayuki Ohkado, Mitsuhiro Ohmura, Satoko Osawa, Hiroshi Terada, Masayuki Wakayama, Tomohiro Yanagi, and anonymous reviewers of *English Linguistics* for their helpful comments and suggestions on earlier versions of this chapter.

[1] Chomsky (1995: 289) alternatively mentions that V2 word order results from an operation within the phonological component, given that there is no ordering in the computation from numeration to LF. However, this assumption fails to explain the root/non-root asymmetry of V2 order found in German and Dutch, and a parametric variation of embedded V2 after complementizers (see section 2.3.1). Hence, I will stick to the traditional position that V2 phenomenon should be treated as a syntactic phenomenon.

[2] The structure in (11) indicates that subjects appear either in the *v*P-internal position or in the *v*P-external position. The displacement of subjects, as well as object shift, is to a large extent semantically or informationally driven (see Bobaljik and Jonas (1996), Bobaljik and Thráinsson (1998), Jonas and Bobaljik

(1993), Rosengren (2000), Sigurðsson (2000), Vangsnes (1995, 2000)).

[3] The presence of complementizers does not always block V2 phenomenon. In Icelandic and Yiddish, finite verbs normally occur in the second position in subordinate clauses with complementizers. We will briefly discuss embedded V2 in section 2.3.1.

[4] See also deHaan and Weerman (1986), Tomaselli (1990), Holmberg and Platzack (1995), Vikner (1995) for V-raising to C.

[5] Following a standard assumption, I assume that auxiliary verbs have their own projection VP.

[6] See Birner (1994) for the interaction between discourse context and syntactic form.

[7] The same holds true with German *es* and Dutch *er*. See Vikner (1995), Zwart (1992), and the works cited therein.

[8] Vikner (1995) and Bobaljik and Thráinsson (1998) note that there is one environment where embedded topicalization is excluded in Icelandic. The relevant examples are given in (i).

(i) *Icelandic*

a. Ég veit ekki hvar kýrin hefur staðið í gær.
I know not where the cow has stood yesterday

b. *Ég veit ekki hvar í gær hefur kýrin staðið.
I know not where yesterday has the cow stood

(Bobaljik and Thráinsson (1998: 48))

According to Vikner (1995), topicalization in embedded questions is generally impossible in Germanic languages, with the exception of Yiddish embedded questions with *far vos* 'why'. See Vikner (1995: 73ff).

[9] See Authier (1992), Nawata (1999a, 1999b), Watanabe (1993a, 1993b, 1996) for the CP-recursion analysis.

[10] Bobaljik and Jonas (1996) suggest that overt subject raising in TECs is supported from the fact that the subjects must precede such VP adverbs as *alveg* 'completely', as in (i) and (ii).

(i) *Icelandic*

a. Það lauk einhver verkefninu alveg.
there finished someone the assignment completely
'Someone completely finished the assignment.'

b. *Það lauk verkefninu (alveg) einhver.
there finished the assignment completely someone

(Bobaljik and Jonas (1996: 213))

(ii) *Icelandic*

a. Það hefur einhver lauk verkefninu alveg.
there has someone finished the assignment completely

b. *Það hefur lauk verkefninu alveg einhver.
there has finished the assignment completely someone

On the traditional assumption that VP adverbs mark the left hedge of *v*P (or VP), it would be concluded that *einhver* 'someone' is raised outside *v*P in (ia). However, as Jonas (1996) argues, these manner adverbs preffer to be placed in the sentence final position, as in (iii).

(iii) *Icelandic*

Margir stúdentar hafa lokið verkefninu alveg.
many students have finished the assignment completely

(Jonas (1996: 36))

Moreover, Vangsnes (2000: fn 3) reports that several speakers of Icelandic find (ia) to be highly deviant. Thus, we should not count (i) and (ii) as strong evidence for overt subject raising in TECs.

[11] According to Holmberg (1986), overt verb raising is a necessary condition for object shift in the Scandinavian languages, which is usually referred to as *Holmberg's Generalization*. Hence, we cannot obtain the Obj-V order in TECs with auxiliary verbs since overt V-to-C raising is not applied in the presence of auxiliaries. See Holmberg (1986, 1997) and Collins and Thráinsson (1996) for much more discussion about Holmberg's Generalization.

[12] See Chomsky (1995: 329ff) for the placement of adverbs.

[13] This analysis is contrary to Koizumi's (1993) claim that the object shift position is lower than the base position of the subject. As Jonas (1996) suggests, however, (49a) and (50) obviously show that the base position of subjects is indeed below the position of the shifted objects (see Jonas and Bobaljik (1993), Jonas (1996), among others).

[14] One might argue that the FFs of [V-v] should enter into a checking relation with those of the subject when the subject is merged into [Spec, vP]. However, I strictly follow Chomsky (1995) in assuming that lexical insertion into a θ-position is purely induced for θ-marking. Furthermore, the FFs of [V-v] are all weak and thus is not required to be checked off before Spell-Out. Given these assumptions, the FFs of the subject are invisible for checking at the point of its insertion, though it establishes a spec-head configuration with [V-v].

[15] One might argue that the subject *margir menn* could be the candidate for attraction by C in (72c). We assumed in section 2.2, however, that the subject is invisible to XP-movement to [Spec, CP] unless it is understood as a topicalized or a focused element. Furthermore, if the EPP of predicational C is satisfied by means of subject raising, we end up with *það*-less sentences.